How Do We See?

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How do we see? And how do we learn to see? These two questions, despite being highly similar, are far from identical. An increasing number of mid-Victorian commentators, who considered the act of looking from the entwined perspectives of science and culture, investigated them. They explored and explained connections between the physiology and psychology of vision; the relationship between looking, attention, and ocular selection; and the variations in modes of seeing that come about through occupation, environment, and the spaces of sight. These, too, are the issues at the heart of the stimulating essays in this issue of *Victorian Network.*

In 1871, the journalist Richard Hengist Horne brought out a strangely hybrid volume: *The Poor Artist; or, Seven Eye-Sights and One Object*. The narrative of a struggling painter, first published in 1850, was now prefaced by a 'Preliminary Essay. On Varieties of Vision in Man.' Horne acknowledges that the passages strung together into the essay 'have been jotted down at various intervals, and in various parts of the globe'.[1] Indeed, they constitute a collection of musings on the subject rather than a sustained argument, as though Horne's own attention was incapable of resting steadily on a designated object. But he also recognizes that the variety of examples and exceptions he discusses precludes arriving at any firm generalizations concerning the act of visualization – apart from the fact that we may extend the principle of variety in vision to the other senses. Just as we all see differently, so 'neither, perhaps, do we taste, feel, hear, or smell exactly alike, and that the external sense, while they have each a common ground of generality in their action, have at the same time a special variety peculiar to each individual'.[2]

So what causes individuals to see so differently from one another? For Horne, some people are, quite simply, exceptionally gifted at looking. He cites his experience of taking a walk with Charles Dickens, who appeared to see things at a glance or with 'half an eye' – he never 'looked hard at anything. He had no need, His was one of those gifted visions, upon which objects photographed themselves on the retina in rapid succession'.[3] Horne's remark is, of course, notable for naturalizing the vocabulary of technology: part of the reason for the increased self-consciousness around the act of looking in the mid and late nineteenth centuries lay in the increased use and availability of lens-based instruments, from cameras to microscopes.

[1] R. H. Horne, *The Poor Artist; or, Seven Eye-Sights and One Object*, 2nd edition. (London: John Van Voorst, 1871), p. xlvi.
[2] Horne, *Poor Artist*, xxxix.
[3] Horne, *Poor Artist*, v-vi.

In other cases, differences in the make-up of the eye itself result in different types of vision. Colour-blindness provides an obvious case in point, and as a phenomenon, causes Horne to speculate whether or not we can ever say with confidence that we see exactly the same colour as someone else. Varieties in physiology also account for some people being unable to distinguish perspective as precisely as others, or failing to see gradations of light and shade. And this range in visual abilities doesn't even take on board non-human capacities: Horne reminds us of the far-off sight possessed by eagles and pigeons and seabirds; the rapidity with which a robin or swallow can make out the tiniest of moving objects; the power that felines have to see in the dark; the tendency of horses to '*vividly* imagine preternatural phantoms'.

Benjamin Morgan, in his important recent study *The Outward Mind: Materialistic Aesthetics in Victorian Science and Literature* (2017), does a terrific job of drawing connections between the nineteenth-century interest in the connections between body and mind, and the neuroaesthetics of today.[4] He emphasizes corporeality and materiality, as distinct from abstract theories of perception and cognition that float free of actual bodies and their worldly experiences. In his historical account, he stresses the influence of Grant Allen – that relentlessly productive popularizer – and his *Physiological Aesthetics* (1877) when it came to disseminating the physiological psychology of Alexander Bain and others.[5] Horne, likewise, was notable as a popularizer of theories of vision. But he was also important in disseminating the idea that even if we start off as what we might term *lazy* lookers, we may learn to see better. Some professions demand and foster particular types of looking: a sailor can make out, through experience as well as long sight, a particular type of ship on the ocean that might seem just a speck, a blur, to most of us. Certain types of cultural consumption, too, make their own demands: 'The eye must learn to see pictures, as well as the ear to hear music'[6] – although not everyone will be able to train their vision and mind to the same degree. And Horne's essay is significant, too, not just because he recognizes the eye and mind as embodied, but because he lays stress on the importance of *where* one does one's looking – in other words, on the locational, spatial, and social aspects of vision. That same 'sailor who can distinguish a minute speck on the remote horizon (quite invisible to a landsman), and determine that it is a ship of two or three masts, and with certain sails set, might easily be run over at a noisy street-crossing'.[7]

[4] Benjamin Morgan, *The Outward Mind: Materialistic Aesthetics in Victorian Science and Literature*, (Chicago, IL: University of Chicago Press, 2017).
[5] Grant Allen, *Physiological Aesthetics,* (London: Henry S. King & Co, 1877).
[6] Horne, *Poor Artist*, xxvi.
[7] Horne, *Poor Artist*, ix

Professional looking

One sees what one needs to see; what one expects to see; what one is trained to see; what grabs one's attention in the most pragmatic of ways. In the introductory essay to *The Poor Artist*, Horne lamented how people, 'for the most part, see very little of what is before their eyes […] the great majority of our race make but a poor, or quite a limited, use of the wonderful organ of sight […] they only, in general, see what concerns their own interests, purposes, and ordinary being'.[8] It's tempting to speculate what the connoisseurs about whom Alison Clarke writes in her essay 'In a Better Light: Vision, Spatiality and the Connoisseurial Practices of the National Gallery, c. 1875-1916' *saw* when they exited their central London workplace. Imagine them emerging into the streetscape depicted by William Logsdail in his *St Martin-in-the-Fields*, 1888, Tate Gallery.[9] Would they, like Logsdail, have noticed the acute contrasts between rich and poor; the sellers of oranges and flowers; the newspaper vendor; the milk churn and beer barrels being transported on different carts; the central presence of the police, both mounted and on foot – a direct reminder that Trafalgar Square, home both to the National Gallery and the church of St Martin-in-the-Fields, had very recently been the site of the so-called 'Bloody Sunday' protests that were the occasion for a significant display of police brutality? Would they, like Logsdail, have been struck by the greasy shine on the wet paving, the rust stains below the lamps on the church's pillars, the gleam on the mounted policeman's polished sabre? In a twist on this question – what did the public, as opposed to specialists, notice when exiting the National Gallery? Numerous street artists, whose income depended on their skill at chalking pictures on pavements, knew the rewards of replicating images from the gallery on the sidewalk slabs immediately outside, where they would be likely to be noticed by those who had just seen the originals on the gallery's walls.

But most of those visitors had, most probably, not 'seen' the Botticelli or the Raphael inside in the same way that the Gallery's curatorial staff had learned to look at them. Clarke's essay explores how a connoisseur learns to 'see'; that is, to arrive at judgements about attribution and authenticity, and to assess qualities like 'beauty'. Such a visual education happens over time: it entails developing a mental card catalogue that expands and adds details as a result of an individual's exposure to different images. This storage of information in the long-term memory allows for the development of connoisseurial sight as a diagnostic tool. Since it improves over time and with practice, it is not something that can be *taught*: expertise comes through repeated viewing of art works.

On the surface, if it is accurate that one learns to 'appreciate' art through a process of constant exposure and comparison, anyone could learn to be a

[8] Horne, *Poor Artist*, i-ii
[9] William Logsdail, *St Martin-in-the-Fields,* 1888, Tate Gallery, London. <https://www.tate.org.uk/art/artworks/logsdail-st-martin-in-the-fields-n01621>.

connoisseur. But what needs to be underscored is the means by which this knowledge is conveyed and passes into what Clarke terms 'a complex trust network'. Instantly, of course, this raises questions about institutional access and privilege, whether the institutions at stake are state or civic affairs, like museums; or commercial galleries; or circles of friends who also happen to be collectors of paintings or porcelain. And here, the connection between connoisseurial activity and assessing the 'value' of art is inescapable: this assessment rarely stops with the artwork having achieved some notional benchmark – demonstrating 'beauty', say. The professional judgements made by museum professionals, dealers, auction rooms, and insurance agents are directly linked to the evaluation of art in monetaristic terms. 'Seeing', in such a context, is inescapably tied to cultural conditions and conditioning: there is no space for the affective, subjective, individualistic dimension of aesthetics. Nor does the Victorian interest in the capacity for art to give pleasure, and the possible somatic basis for this pleasure, come into play.[10]

Clarke valuably brings home, too, how looking at art works is linked to the material conditions of viewing. One cannot fully understand the circumstances in which Victorians, or people in any period, reached aesthetic judgements without considering *where* such evaluations were made. The development of the connoisseurial gaze Clarke describes was only possible if different works of art could be seen side by side, with lighting that allowed one to look carefully, and with proximity to a reference library containing photographs and engravings of other images. Mobility mattered, too – the railway played its part in the establishment of this gaze, since it enabled museum professionals to travel and view other works in both private and public collections, deepening their knowledge database and improving their powers of comparison.

'[C]onsidering the space in which a connoisseurial decision was reached', as Clarke puts it, gives one a fuller understanding of the practices of connoisseurship itself. It also highlights the difference between the viewing conditions enjoyed by museum professionals and those encountered the art-consuming public more broadly. The former have the privilege of being able to take something off a wall to examine it carefully; of handling it, thus adding touch to sight, and by the very end of the century, requisitioning scientific tests, like pigment analysis and radiography, that could make the invisible visible. For a member of the viewing public, however, they had to contend with paintings that might be hung far above the line of sight – a frequent complaint of critics visiting the Royal Academy exhibitions; or with the shadows, reflections, and unevenness caused by the artificial lighting in galleries, or by a canvas poorly situated in

[10] Morgan, *The Outward Mind.* Drawing my examples from Morgan, I have in mind here such things as the researches of paint manufacturer George Field and the interior designer David Ramsay Hay, and their modeling of color harmonies and form; or John Addington Symonds Sr.'s research on the aesthetic pleasures that can result from particular movements of the eye; or Vernon Lee and Kit Anstruther-Thomson's investigations into how somatic responses to form, pattern, and rhythm play a role in how we relate to art.

relation to the prevailing direction of natural light. All of these variables bring home, too, the difference between the training of a museum professional, and that of a critic for the press.

Object lessons

Alison Clarke's essay offers an exemplary case study of Richard Horne's point that people who occupy certain professions learn to see in particular ways. Andrea Korda's piece 'Looking and Learning in the Victorian Classroom' approaches the issue of how someone might develop the facility of sight in a very different, and far less specialized way – albeit, likewise, in a designated space. Korda's interest is in vernacular ideas about vision and visuality, and how they circulated within the growing fields of educational theory and educational psychology. As she rightly points out, what she offers is evidence of adult beliefs and anxieties concerning visuality: we have minimal evidence of children's *experience* in learning according to the pedagogical methods that she outlines.

Korda directs our attention to the 'object lesson', a pedagogical method developed by Johann Heinrich Pestalozzi at the turn of the nineteenth century, which involved the first-hand observation of common objects with the aim of cultivating habits of attentive observation and inquiry. In other words, young students were encouraged to use observation to ask questions, rather than to obtain information. Such object lessons were deliberately, and clearly, distinguished from 'information lessons', forms of mind-numbing rote learning that, by the late nineteenth century, became central to the school curriculum.

What did the Victorians who followed this instructional model think that such taught observation could accomplish? First, looking to cultivate their students' perceptual abilities, they hoped to develop active, not passive, minds. Second, they underscored the fact that visual perception does not exist in isolation but as part of an embodied process: seeing is accompanied by the sense of touch, of taste, of smell – and to become aware of this is to develop one's curiosity about how the senses operate, and how one's own thought processes respond. The insights generated may well reach beyond the visible world. One of the best known of object lesson texts books was Elizabeth Mayo's *Lessons on Objects* (1831), which was frequently reprinted on both sides of the Atlantic: for her, to look attentively and at length on a common object found in the natural world was to learn of God's suffusing presence.[11] On the other hand, as Korda points out, labour tends to be considered invisible – there is no mention of who gathered the sugar that the student is encouraged to observe. Reflection, for Mayo, appeared to have its limits.

The aim was not to encourage subjectivity: there's nothing here of Walter Pater's aesthetic imperative in the Preface to *The Renaissance* (1873) that the end

[11] Elizabeth Mayo, *Lessons on Objects*, (London: R. B. Seeley and W. Burnside, 1831).

of criticism 'is to know one's own impression as it really is'.[12] But additionally, and importantly, this cultivation of objectivity through close and curious scrutiny had another purpose: one that resonates strongly with today's concerns about learning in conditions of constant distraction. To observe carefully was to master the onslaught of perceptions; and to cultivate the powers of sustained, and voluntary attention. And yet, as Korda explains, such ideas about the importance of disciplining the attention – articulated, for example, by one of the most influential of Britain's psychologists, James Sully – clashed with the views of those who emphasized the importance of capturing spontaneous attention, especially when it came to very young children. The more eye-catching materials were put in front of them; the more visual and other sensory surprises were made part of the learning process, the more their curiosity was piqued.

Fictional Sightlines

The other two essays in this issue shift the terrain. From discussing what goes on in actual spaces inhabited by factual human beings, we move to fiction: to representations of knowable locations, like London streets and theatres; imaginary settings; and invented characters. New questions are raised; how does fiction invite and instruct one to see? Does it reproduce prevalent conventions? What viewing positions are privileged? Does it offer the opportunity to interrogate and critique theories of vision? And how does it navigate imaginary space traversed by the gazes and glances of imagined viewers?

James Green's '"The Value of an Opera Glass": Spectacle, Surveillance, and Modern Visuality in M. E. Braddon's *The Trail of the Serpent*' argues that popular fiction offers a site in which a contested complex of visual theories and practices are played out – theories that have been developed in our own time, but that hark back to the concerns of Victorian thinkers. He reads Braddon's sensation-cum-detective novel, that was first published in 1860 as *Three Times Dead*, then condensed into a less sprawling form in 1864, as one in which the distinction between spectacle and surveillance is often blurred. It reproduces the conditions of modern, metropolitan visuality in both Paris and London; it makes the reader the spectator of visual entertainments from the opera to Punch and Judy shows; it implicitly references the new forms of urban visibility made possible by gas lighting; it shows how the eye may readily be deceived – the plot of the novel depends on impersonation and disguise, and the manipulation of visual expectations. Suspense is sensation fiction's hallmark, and it frequently depends on the narrator temporarily concealing things from the reader, just as it does on characters' disguises and doubled identities. In this way, pleasure and villainy are stylistically linked.

Categories are also disrupted in this particular novel when the lingering tourist gaze, mediated through methods of looking encouraged through

[12] Walter Pater, *Studies in the History of The Renaissance* (1873), ed. by Matthew Beaumont. (Oxford: Oxford University Press, 2010), p.3.

guidebooks, suddenly mutates into investigative scrutiny and identification. We are made to ask whether the difference between tourist spectatorship and detective surveillance – both modes of viewing involving a heightened awareness of the visual – simply rests in the ends to which they are put, since one individual may occupy both roles.

The Trail of the Serpent explores the positions of both looker and looked-at. In considering both London's crowded streets and the sight lines of Her Majesty's Theatre, Green productively calls upon Chris Otter's concept of 'oligoptic space', that is, space that 'lacks a central, dominant viewpoint', or that consists, rather, of a multiplicity of interconnected visual spaces.[13] To be sure, sightlines may be constructed to encourage certain type of spectatorship – in Her Majesty's, viewing is ostensibly far more controlled than in the crowded streets outside, since the building is designed so that the stage can be seen from a whole range of angles, and so that the spectators, especially those in the tiered boxes, can scrutinize each other. With gazes traveling in different directions, the interior architecture encourages rhizomatic vision – augmented, when necessary, with opera glasses.

But this novel dramatizes, and makes the reader self-conscious about, the complicated dynamics that exist between viewer and viewed, and demonstrates how they are by no means reciprocal. A detective can watch a suspect apparently undetected himself, because he is a member of the undifferentiated masses in the crowd – and he can continue this observation from a crowded theatre pit, looking up at the upper-class patrons in elevated seats. As Green points out, this is a pleasing inversion of conventional power relations, and one that might particularly have resonated with the readers of the *Half-Penny Journal*, in which the novel was serialized in 1864.

The Trail of the Serpent encourages the reader to regard looking as connecting entertainment and work, enjoyment and analysis: we take pleasure from the 'foregrounding', as Green puts it, 'of the indeterminacies that inhabit modern visuality'. Recognizing and acknowledging these indeterminacies is something that imaginative fiction, especially fiction that pivots on disguise and concealment and detection, is particularly well placed to bring out. If institutional practice and classroom teaching encourage clarity of vision and certitude of interpretation – focused, purposeful, pragmatic looking – this novel is representative of the many mid-Victorian texts that allow us to take pleasure in the suspense that *uncertain* vision can produce.

[13] Chris Otter, *The Victorian Eye: A Political History of Light and Vision in Britain, 1800-1910* (Chicago, IL: University of Chicago Press, 2008), p.74. This concept is derived, in turn, from Bruno Latour's development of the term 'oligoptica' sites of vision that are both localized and concentrated, offering 'sturdy but extremely narrow views of the (connected) whole'. Bruno Latour, *Reassembling the Social. An Introduction to Actor-Network Theory* (Oxford: Oxford University Press, 2005), p.181.

Looking Past the Surface

Surfaces, as we all know, can be deceptive. As Green reminds us when writing about *The Trail of the Serpent*, nothing brings this home like the waxwork of the villainous Jabez that is put on display after his death in Madame Tussaud's, where young girls think he must surely have been the victim of false evidence: he is too beautiful to have been so cruel. This incident succinctly demolishes the whole science of physiognomy – of judging character by outward appearance. George Eliot had made much the same point the previous year in *Adam Bede* (1859), when Adam disastrously misreads Hetty Sorrel's pretty face – as Ariane de Waal recalls in 'Looking Both Ways: *Middlemarch*, True Skin, and the Dermatological Gaze'.

This essay does a wonderful job of complicating any simple belief in a visible/invisible, or surface/depth binary distinction that we, or the Victorians, might be tempted to hold. Rather, the microscopic visualization practiced by dermatologists allows us to see the skin itself not so much as a container with only the outer side visible, but as something layered, three-dimensional, and porous. Such a visualization of the skin's properties was not just found in specialist manuals, but in nineteenth-century periodicals: part of the wonder that readers were invited to find in the visible world revealed by optical instruments. What's truly innovatory about this piece, however, is how De Waal expands the revelations displayed in a cross-section of skin to the narrative structures of *Middlemarch*, arguing that the standard, familiar visualization of 'the skin's three layers might have left its imprint on the literary construction of layered bodies and characters', and that 'Eliot's characters pry into one another's depth only to uncover more surfaces, for even "[s]ouls have complexions too"'.

For a Victorian dermatologist, skin was not a rigid boundary, but connected the outer layer of the body to every molecule within. Furthermore, the symptomatic flow worked in two directions. Rather than the skin's surface revealing the combination of humours (hot, cold, moist, dry – themselves a guide to character traits), as post-Hippocrates Western medical practitioners had believed until at least the early eighteenth century, outward manifestations reached within to glands, blood vessels, and nerves. Clogged pores, a phenomenon linked to the importance of skin cleanliness and sanitary reform, could have unwanted consequences. Casaubon's skin, in particular, expresses a complex set of unhealthy signs, which simultaneously tell us about his bodily health and his emotional discomforts. Yet even if he provides a conspicuously convincing case study in this respect, his physical tissues, and their relationship to the literal and figurative fibres of his being, are but one example of the sustained interplay of inner and outer self that characterizes this novel's weave.

Furthermore, as de Waal shows us, to look at the skin, whether through a microscope or with the unaided eye, is to fall into the trap of considering the senses individually, rather than as working in consort. For as Pamela Gilbert has explored so well in *Victorian Skin: Surface, Self, History* (2019), skin is not just something one observes, but it's the seat of the sense of touch, both literal and, in

the case of *Middlemarch*, wincingly metaphorical.[14] When Will Ladislaw speaks harshly to Rosamond, he assaults her sense of self. There is a 'sharp edge' to his voice like the lash of a whip, leaving her 'bruised'. Whether we see him as an angry horseman or a slave driver, this discomforting metaphor leaves a sequence of images of abuse in the reader's imaginative visualization. This visualization, like sight itself, will differ from individual to individual: one that depends on pre-existent patterns of looking and registering, of memory and knowledge storage, and of association. But we shouldn't underplay the fact that the metaphor is a shocking one. However much the self-centred Rosamond deserves to be jolted out of her complacency, this moment of verbal cruelty is described in violent terms that also shifts our sense of Will. We may not see him in quite the same way again.

And here lies one further theme that links all of these essays: we see what we expect to see, until something disrupts our visual habits. This set of expectations, these developing habits, may be connected to one's task, one's profession, one's education – as with the specialist, comparative knowledge that a Victorian museum professional might slowly and expertly accumulate; or that a child might be encouraged to develop in a classroom in order to view the world attentively and curiously. A detective's sharp eye might lead them to recognize a familiar face, even where they least expect to see it – or a lay person might borrow some of the techniques employed in a different professional field, as with what de Waal memorably terms the 'dermatological gaze'. All the modes of looking are predicated on the necessity of paying careful attention; banishing unnecessary information and visual and aural distractions. What's at play is something the French usefully term *deformation professionnelle*, which Alexandra Horowitz, in her compelling *On Looking. A Walker's Guide to the Art of Observation* (2014) defines as 'the tendency to look at every context from the point of view of one's profession'.[15] Her walks are transformed, and made differently purposeful, when she takes them with a geological expert, an etymologist, a scholar of advertisement signage: quite literally, she learns to see different things.

Johannes Müller's *Elements of Physiology* (1842), which James Green quotes in a different context, alerts us to the importance of selective attention. 'If we endeavoured to direct our attention to the whole field of vision at the same time', Müller writes, 'we should see nothing distinctly, but our mental activity is directed first to this, then to that part, and analyses the detail of the sensation, the part to which the mind is directed being perceived with more distinctness than the rest of the same sensation'.[16] In other words, for the sake of our mental focus, and the clarity of our observations, we should fix on a definite object for our

[14] Pamela Gilbert, *Victorian Skin: Surface, Self, History* (Ithaca, NY: Cornell University Press, 2019).
[15] Alexandra Horowitz, *On Looking. A Walker's Guide to the Art of Observation* (New York, NY: Scribner, 2014), p.3.
[16] Johannes Müller, *Elements of Physiology*, 1834-40, trans. by William Baly (London: Taylor and Walton, 1838-42), 2 vols. Vol II p.1085.

attention, in order to be better able to understand both it, and the process of our vision. But steadiness of attention is not the same as steadiness of sight, as Müller indicates. The former involves the interaction of eye and brain, and allows space for association, speculation, and mobility, albeit centred around one object or site or topic.

Yet by the end of the nineteenth century, in what was perceived to be a growing climate of distractions, anxiety mounted about our inability to sustain attention at all.[17] But much more recently, in our own media climate, the advantages of distraction are increasingly recognized, and are increasingly celebrated: a counter-blast to those who lament the sparrow-brain effects of digital diversions. Cathy Davidson remarks in the Introduction to her *Now You See It: How the Brain Science of Attention will Transform the Way we Live, Work, and Learn* (2011), that 'learning, unlearning, and relearning require cultivated distraction, because as long as we focus on the object we know, we will miss the new one we need to see'.[18] Marina van Zuylen, in *The Plenitude of Distraction* (2017), suggests that if we call the phenomenon by a different term – 'reverie, daydreaming, ruminating', say – we will recognize its creative potential rather than associating it with unproductiveness.[19] And Jenny Odell, in a book whose title, *How To Do Nothing* (2019), parodies advice-laden Victorian manuals, underscores the connection between demands for attentiveness, productivity, and modern capitalist systems. Whilst acknowledging that having the space and time to train one's attention differently is a privilege, she also suggests that the dismantling of the attention economy does not just mean pushing back against the 'addictive design of technology', and creating space for reflection, association, and inhabiting one's present space and moment, but involves 'environmental politics, labour rights, women's rights, indigenous rights, anti-racism initiatives, measures for parks and open spaces, and habitat restoration'.[20] Being able to stop, and look, and reflect, in other words, is not something that happens in splendid isolation, but in shared spaces. It also means, we might add, recognizing that the world, or for that matter, the particular space, that is being looked at from the point of view of one's particular priority, subjectivity, or, ocular ability, is going to be a distinct one, whose differences demand recognition.

From this perspective, Richard Horne's preliminary essay to *The Poor Artist* looks less like a miscellany of information and observations about eyes, eyesight and observation than it seems to be a prescient piece of writing: one that refuses argumentative coherence because the imposition of such a narrative

[17] See Jonathan Crary, *Suspensions of Perception: Attention, Spectacle, and Modern Culture* (Cambridge, MA and London: MIT Press, 1999).
[18] Cathy N. Davidson, *Now You See It: How the Brain Science of Attention will Transform the Way We Live, Work, and Learn* (New York, NY: Viking Penguin, 2011), p.19.
[19] Marina Van Zuylen, *The Plenitude of Distraction* (New York, NY: Sequence Press, 2017), p.25.
[20] Jenny Odell, *How To Do Nothing: Resisting the Attention Academy* (Brooklyn, NY and London: Melville House, 2019), p.199.

structure would work against the point that not only do we all see differently, but we can learn to see in yet other ways. This, too, is the overall message of this issue of *Victorian Network*: the exploration not just of different modes of seeing, but of different beliefs among Victorian commentators about *how* we do, and should, see. In the fable that follows the essay, Horne has his Poor Artist travel through an idyllic pastoral landscape, having it interpreted for him through the very different eyes of a robin, a bee, a fish, an ant, a spider, and a rather snooty cat that refuses to share *exactly* what he sees. The seventh pair of eyes belongs, of course, to the artist himself. And the one shiny object to which all their eyes are eventually drawn? It's a golden sovereign – relieving the artist from his financial precarity. It is, of course, a narrative pay-off, too: bringing home the message that although any of us might fall into the trap of thinking that ours is the one way, the true way, of looking – that all of us, for a whole range of reasons, see, and think about seeing, differently.

Bibliography

Allen, Grant, *Physiological Aesthetics,* (London: Henry S. King & Co, 1877)

Crary, Jonathan, *Suspensions of Perception: Attention, Spectacle, and Modern Culture* (Cambridge, MA and London: MIT Press, 1999)

Davidson, Cathy N., *Now You See It: How the Brain Science of Attention will Transform the Way We Live, Work, and Learn* (New York, NY: Viking Penguin, 2011)

Gilbert, Pamela, *Victorian Skin: Surface, Self, History* (Ithaca, NY: Cornell University Press, 2019)

Horne, R. H., *The Poor Artist; or, Seven Eye-Sights and One Object*, 2nd edition. (London: John Van Voorst, 1871)

Horowitz, Alexandra, *On Looking. A Walker's Guide to the Art of Observation* (New York, NY: Scribner, 2014)

Latour, Bruno, *Reassembling the Social. An Introduction to Actor-Network Theory* (Oxford: Oxford University Press, 2005)

Mayo, Elizabeth, *Lessons on Objects*, (London: R. B. Seeley and W. Burnside, 1831)

Morgan, Benjamin, *The Outward Mind: Materialistic Aesthetics in Victorian Science and Literature*, (Chicago, IL: University of Chicago Press, 2017)

Müller, Johannes, *Elements of Physiology*, 1834-40, trans. by William Baly (London: Taylor and Walton, 1838-42), 2 vols. Vol II

Odell, Jenny, *How To Do Nothing: Resisting the Attention Academy* (Brooklyn, NY and London: Melville House, 2019)

Otter, Chris, *The Victorian Eye: A Political History of Light and Vision in Britain, 1800-1910* (Chicago, IL: University of Chicago Press, 2008)

Pater, Walter, *Studies in the History of The Renaissance* (1873), ed. by Matthew Beaumont. (Oxford: Oxford University Press, 2010)

Van Zuylen, Marina, *The Plenitude of Distraction* (New York, NY: Sequence Press, 2017)

In a Better Light: Vision, Spatiality and the Connoisseurial Practices of the National Gallery, c. 1875–1916

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Abstract
Visual assessment was crucial to the judgement of artworks throughout the Victorian period and beyond, and yet our understanding of the practice of connoisseurship is too often limited to a largely theoretical approach. This article adopts a spatial methodology to study the practice of institutional connoisseurship of Old Master paintings in the late Victorian and Edwardian eras, thus highlighting the extent to which connoisseurship relied on visual analysis in this period. The concept of connoisseurship is widened to encompass not just issues of authenticity and attribution, but also equally important criteria such as condition and beauty that were similarly judged by eye.
This article opens with the description of a visual model of connoisseurship, drawing on current psychological theories on vision and expertise. This model posits the practice of connoisseurship as a series of swift judgements based on a visual mental canon built up over years of exposure to comparative images. I then go on to test this model with a case study centring on the professional practices of staff at London's National Gallery between the 1870s and 1910s. Making particular use of material from the National Gallery archives, my analysis relies far less than previous studies on written theories of connoisseurship, instead using a broad range of sources including museum minutes, private correspondence, photographs, and building plans to consider the physical conditions under which connoisseurial judgements were reached. Using these materials, I explore how the spaces in which connoisseurship was practised overwhelmingly predicated vision as an analytical tool, as opposed to alternatives such as technical examination.
There is strong potential for the translation of this approach from the context under review in this article to other periods in history, wider geographical areas, different historical actors, and the judgement of a much broader range of material culture artefacts beyond Old Master paintings. This will help to deepen our understanding of connoisseurship as a flexible practice with divergent aims and methods for different stakeholder groups, each adopting its own particular connoisseurial lens.

In early June 1845, the National Gallery invested in a painting that was to have far-reaching repercussions for the institution's management and reputation.[1] The

[1] The research for this article was made possible by funding from the Arts and Humanities Research Council in the form of a Collaborative Doctoral Partnership Award held between the University of Liverpool and the National Gallery (Collaborative Doctoral Partnership Award 1509057), and an International Placement Scheme Fellowship that allowed me to spend two months as a Fellow at the Harry Ransom Center at the University of Texas at Austin

portrait known as the 'mock Holbein' (NG195, Figure 1) was bought as an autograph work by the master but was within weeks stripped of this over-optimistic attribution.[2] When the picture was put on display, hung well above the eyeline, critics and visitors to the Gallery became sceptical of the reliability of the connoisseurship that had led to its purchase. The *Athenaeum* wrote that,

> Respecting its condition, we can furnish no precise details; for the Committee have, with suspicious prudence, hung it much too high. New acquisitions, we submit, should at first obtain place on the lowermost line, or eye-level, where their veritable qualities might challenge examination; otherwise, it will be thought they cannot bear the test of criticism.[3]

Within the month, the scandal had spread to Parliament, where National Gallery Trustee Sir Robert Peel was himself forced to admit to uncertainties regarding the work:

> It is difficult to say, in the case of a picture of the age of two or three hundred years, whether it can be justly attributed to the master or not. The picture in question was bought as a Holbein; and though there is no doubt that it is a contemporary painting, yet, as there had arisen a doubt as to its being a Holbein, it was withdrawn. […] No guarantee had been received as to the authenticity of the picture; but, indeed, in such cases, it was difficult to obtain a guarantee.[4]

The bad publicity generated by the revelation that this painting was, indeed, not by Holbein, is thought to have had a hand in the resignation of Charles Lock Eastlake (1793–1856) from his position as Keeper of the National Gallery in November 1847.[5] It was to continue to haunt Eastlake during his subsequent Directorship a decade later, when in 1857 MP and art collector William Coningham could still refer in a House of Commons speech to 'this daub, a libel

(International Placement Scheme Award AH/N000676/1). My work was also supported by a Research Support Grant from the Paul Mellon Centre for British Art.

[2] 'P.', 'The National Gallery', *The Times*, 2 July 1845; Susanna Avery-Quash and Julie Sheldon, *Art for the Nation: The Eastlakes and the Victorian Art World* (London: National Gallery Company, 2011), p. 46; Marjorie E. Wieseman, *A Closer Look: Deceptions and Discoveries* (London: National Gallery Company, 2010), pp. 50–51; Christopher Whitehead, 'Architectures of Display at the National Gallery: The Barry Rooms as Art Historiography and the Problems of Reconstructing Historical Gallery Space', *Journal of the History of Collections*, 17 (2005), 189–211 (p. 193); David Robertson, *Sir Charles Eastlake and the Victorian Art World* (Princeton, NJ: Princeton University Press, 1978), pp. 85–87.

[3] 'A Holbein…', *The Athenaeum*, 7 June 1845.

[4] United Kingdom, *Hansard Parliamentary Debates*, Commons, vol. 81, col. 1337 (1845).

[5] *Art for the Nation*, p. 47.

upon the great artist whose work it pretended to be' as part of his ongoing criticism of the National Gallery.[6]

More broadly, the case of the 'mock Holbein' highlights just how crucial visual assessment was to the judgement of paintings throughout the nineteenth century. The tide was starting to turn from the power of aesthetic criticism sitting with artists such as Sir Joshua Reynolds in the previous century, to the broader world of art critics, dealers and newly emerging museum professionals.[7] In particular, much has been written on the emergence of Italian art critic Giovanni Morelli's theories of connoisseurship from the mid-nineteenth century onwards — themselves strongly based on ideas of visual comparison — and on Morelli's influence on institutional collecting practice.[8] Indeed, even when alternative methods of attribution such as scientific examination began to emerge in the later Victorian and Edwardian periods, visual connoisseurship remained the key approach in the professional's arsenal of analytical methods.

This article focuses on the period from the 1870s onwards, exploring the strong links between vision, connoisseurship and space and arguing that connoisseurs continued to rely on their visual judgement alone because of the spaces in which pictures were available for inspection. For the first time, I adopt a spatial methodology to analyse the historical practice of connoisseurship, drawing on both textual descriptions of connoisseurship and spatial evidence. In particular, I put forward and test a model according to which connoisseurship as practised by the staff of the National Gallery in this period can be framed as a series of swift judgements, based on a visual mental canon built up over years of exposure to comparative images. Such an approach allows us to determine more clearly how connoisseurship was applied, as well as to articulate the reasons why visual judgment was so strongly prioritized. In short, connoisseurship should not be understood as a sterile, disembodied theory, but instead as a visual practice strongly affected and determined by the spaces in which it was performed.

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[6] United Kingdom, *Hansard Parliamentary Debates*, Commons, vol. 146, col. 828 (1857); Francis Haskell, 'William Coningham and His Collection of Old Masters', *The Burlington Magazine*, 133 (1991), no. 1063, 676–81.

[7] Claire Wildsmith, '"Candid and Earnest": The Rise of the Art Critic in the Early Nineteenth Century', in *Ruskin's Artists: Studies in the Victorian Visual Economy: Papers from the Ruskin Programme, Lancaster University*, ed. by Robert Hewison (Brookfield, CT: Ashgate, 2000), pp. 15–30.

[8] See, for example, Jaynie Anderson, 'The Political Power of Connoisseurship in Nineteenth-Century Europe: Wilhelm von Bode versus Giovanni Morelli', *Jahrbuch der Berliner Museen Jahrbuch der Berliner Museen,* 38 (1996), 107–19; Johanna Vakkari, 'Giovanni Morelli's "Scientific" Method of Attribution and its Reinterpretations from the 1960s until the 1990s', *Konsthistorisk tidskrift/Journal of Art History*, 70 (2001), 46–54; Donata Levi, 'Let Agents Be Sent to All the Cities of Italy': British Public Museums and the Italian Art Market in the Mid-Nineteenth Century', in *Victorian and Edwardian Responses to the Italian Renaissance*, ed. by John E. Law and Lene Østermark-Johansen (Aldershot and Burlington, VT: Ashgate, 2005), pp. 33–53; Luke Uglow, 'Giovanni Morelli and his Friend Giorgione: Connoisseurship, Science and Irony', *Journal of Art Historiography*, 11 (2014), 1–30.

Connoisseurship, following a fallow period during which it became unfashionable as the object of scholarly interest, is now once again the subject of critical discussion.[9] As a method of analysis, it is still heavily employed by modern galleries, auction houses and collectors alike; however, accusations of a lack of transparency also abound. In an ongoing series of blog posts entitled 'The Transparent Connoisseur', art historian Gary Schwartz has called for greater openness and consistency with regard to connoisseurship, arguing that 'sharp questioning' is necessary for a practice that is 'indispensable for the integrity' of the field.[10] This article engages in such questioning through its attempts to determine more clearly where and how connoisseurship has historically been performed. Indeed, even the concept of connoisseurship deserves a brief discussion: the terms 'connoisseurship' and 'attribution' have frequently been used interchangeably by art historians, while much recent scholarship has focused on the growing importance of attribution during the eighteenth century, especially in France.[11] However, my research has identified what can be termed a 'triumvirate of connoisseurship' as consistently representing the major criteria for the acquisition of paintings in this period: attribution, condition and beauty. While it may seem obvious that connoisseurs worked to judge aspects of artworks other than attribution, this fact has been largely overlooked by theorists of connoisseurship to date. Nevertheless, such criteria were, and remain, important factors in the judgements reached by artists, dealers, museum staff, and collectors.[12] In this article I therefore adopt a broad definition of the concept that takes into account not just issues of authorship, but also other important markers of artistic quality prized by connoisseurs. This is particularly important as far as

[9] As well as the papers and books cited throughout this article, connoisseurship has also been the subject of a range of conferences and exhibitions over the past decade, including 'CODART NEGENTIEN: Connoisseurship: Between Intuition and Science' (CODART, Madrid, 2016); 'The Educated Eye? Connoisseurship Now' (The Paul Mellon Centre, London, 2014); 'Close Examination: Fakes, Mistakes and Discoveries' (National Gallery, London, 2010).

[10] Gary Schwartz, '364. The Transparent Connoisseur 5: Keeping the Rembrandt Research Project to Its Word' (8 May 2018), <https://web.archive.org/web/20190305143520/http://www.garyschwartzarthistorian.nl/364-the-transparent-connoisseur-5-keeping-the-rembrandt-research-project-to-its-word/> [accessed 28 November 2018 and 5 March 2019].

[11] Carol Gibson-Wood, *Studies in the Theory of Connoisseurship from Vasari to Morelli* (New York, NY: Garland, 1988); Kristel Smentek, *Mariette and the Science of the Connoisseur in Eighteenth-Century Europe* (Farnham: Ashgate, 2014); David Pullins, 'The Individual's Triumph: The Eighteenth-Century Consolidation of Authorship and Art Historiography', *Journal of Art Historiography*, 16 (2017), 1–26.

[12] For an important recent exception concerning condition, see Paul Taylor, *Condition: The Ageing of Art* (London: Paul Holberton, 2015). A comprehensive discussion of the definition of connoisseurship can be found in Chapters 1 of Alison Clarke, 'The Spatial Aspects of Connoisseurship: Agnew's and the National Gallery, 1874–1916' (unpublished doctoral thesis, University of Liverpool, 2018) and Alison Clarke, *Spaces of Connoisseurship: Judging Old Masters at Agnew's and the National Gallery, c.1874-1916* (Leiden: Brill, forthcoming).

vision is concerned, given that visual examination is so integral to the judgements of particularly subjective criteria such as beauty.

A Visual Model for Connoisseurship

The evidence to be discussed below reveals multiple spatial and chronological factors that feed into a visual model for connoisseurship as practised by National Gallery personnel in the late Victorian and Edwardian periods. Because of the physical limitations often encountered in the spaces in which they had to examine works, staff needed to be confident of the reliability of their connoisseurship, potentially based on no more than the briefest of inspections, and not necessarily under the ideal conditions. Both at the Gallery itself, and in the other spaces in which connoisseurship was practised, the sources repeatedly show that visual criteria such as lighting and physical proximity to the artwork were considered of paramount importance. It can therefore be deduced that the major practical technique of connoisseurship for the National Gallery staff in this period must have been visual scrutiny. When a previously unknown artwork was encountered, it would be ranked against other paintings understood to be comparable in terms of attribution, beauty and condition, in order to reach a qualitative judgement of these categories.

This model tallies strongly with previous work on theories of connoisseurship: scholars have long recognized the comparative method as a connoisseurial technique. Hayden Maginnis has argued that Morelli's method can be summed up by the theory of the creation of a 'storehouse of memory' holding copies of the original experience; on encountering a new work, the connoisseur could simply call to mind the memory image for comparison.[13] Such a model of connoisseurship highlights the importance of direct visual contact with a range of objects in the development of visual expertise: a vital connoisseurial skill across the last three centuries. Meanwhile, John Brewer and others have rightly highlighted the similarities between the connoisseurial methods adopted by Morelli and his predecessors such as Cavalcaselle, drawing out the continued importance of the comparative method whether or not this was explicitly alluded to in the writings of the connoisseur.[14] However, the spatial aspects relating to the comparison of artworks have received insufficient critical attention, with much secondary work concentrating on theoretical writings rather than practical methods of connoisseurship. The adoption of the spatial approach as demonstrated here circumvents some of the problems of a traditional textual approach by highlighting the ways in which connoisseurs could access both

[13] Hayden B. J. Maginnis, 'The Role of Perceptual Learning in Connoisseurship: Morelli, Berenson, and Beyond', *Art History*, 13 (1990), no. 1, 104–17 (p. 107); David Ebitz, 'Connoisseurship as Practice', *Artibus et Historiae*, 18 (1988), no. 9, 207–12 (p. 208).

[14] John Brewer, *The American Leonardo: A 20th-Century Tale of Obsession, Art and Money* (London: Constable, 2009). Chapter 2.

potential acquisitions and comparable works. In fact, it becomes clear that the spaces in which connoisseurship was practised had a direct impact on the ways in which connoisseurship was carried out: in particular, the requirement for a swift judgement, often based on visual evidence alone, ensured that visual comparison was prioritized over alternative methods.

This type of swift, visual connoisseurship maps well onto a more general model of perceptual expertise as developed by cognitive psychologists Thomas J. Palmeri and Michael J. Tarr. As they outline, 'hybrid' image-based/structural-description theories describe how information is stored in long-term memory — thus allowing visual objects to be recognized, identified and categorized — by suggesting that these objects are broken down into parts: 'We can remember an object's colour, position, orientation, or size, and can use such dimensions to determine an object's identity or category if those dimensions prove diagnostic for […] perceptual decisions'.[15] Accepting this ability to separate visually perceived objects into categorizable parts, expertise is thus characterized as making 'fine perceptual discriminations with speeds that can astonish the novice observer': experts are able to reach decisions more quickly than the novice, and to distinguish between a greater number of narrow categories.[16] Given that expert perception is more highly developed than that of the novice, it is important to determine how the status of perceptual expert can be achieved. Palmeri and Tarr suggest that this development centres on achieving an understanding of the relevance of particular aspects of an object class for perceptual identification. However, this is made more difficult in the case of particular domains such as art history because 'verbal labels cannot adequately convey the diagnostic perceptual qualities for the novice'.[17] This problem has been recognized with specific respect to connoisseurship by Donata Levi, who has discussed the problems inherent in translating a visual experience into a verbal description.[18]

Instead of necessarily being taught, such perceptual expertise can be considered as the natural result of the normal learning trajectory, leading to the acquisition of vast perceptual memories over a long period of time.[19] This idea is

[15] Thomas J. Palmeri and Michael J. Tarr, 'Visual Object Perception and Long-Term Memory', in *Visual Memory*, ed. by Steven J. Luck and Andrew Hollingworth (New York, NY: Oxford University Press, 2008), pp. 163–208 (p. 179).
[16] Ibid., p. 173.
[17] Ibid., p. 194.
[18] Donata Levi, 'Connaisseurs français du milieu du XIXe siècle: tradition nationale et apports extérieurs', in *Histoire de l'histoire de l'art en France au XIXe siècle*, ed. by Roland Recht (Paris: Documentation française, 2008), pp. 197–214 (p. 206).
[19] The classic experiment into memory capacity and retrieval for multiple images is Lionel Standing, 'Learning 10,000 Pictures', *The Quarterly Journal of Experimental Psychology*, 25 (1973), no. 2, 207–22. More recently, studies have confirmed the extent to which long-term memory is capable of storing a huge number of objects in detail: see, for example, Timothy F.

supported by the fact that National Gallery staff would frequently visit both private and public collections, even when the artworks held in these did not necessarily relate directly to the acquisition at hand, in order to build up a personal 'mental canon' of comparative works for the future. In other words, as Maurizio Lorber has argued, connoisseurship is based on visual evidence as determined by the eye of the connoisseur. For Lorber, connoisseurship is the skill of learning how to recognize forms and separate these into discrete categories.[20] Connoisseurial expertise can be built up through repeated exposure to a wide range of paintings, and in learning to identify and classify such works. Instead of the 'connoisseurial eye' being restricted to a privileged elite, it is therefore possible for almost anyone to learn the skill of connoisseurship. Amongst others, museum professionals can certainly be considered as expert connoisseurs, as long as they have garnered the relevant visual experience.

Examining Practices at the National Gallery

In order to test this model and to explore the links between connoisseurship, space and vision, I have selected as a demonstrative case study the practice of staff at London's National Gallery in the late nineteenth and early twentieth centuries. This period covers the tenure of three successive directors of the institution: Frederic William Burton (in post 1874–94), Edward John Poynter (1894–1904), and Charles Holroyd (1906–1916).[21] The National Gallery is a fitting subject for close analysis because museum professionals were — and, indeed, are — so heavily involved in the selection, acquisition, and study of artworks throughout their careers.[22] As will be demonstrated, paintings were overwhelmingly judged

Brady et al., 'Visual Long-Term Memory Has a Massive Storage Capacity for Object Details', *Proceedings of the National Academy of Sciences*, 105 (2008), no. 38, 14325–29.

[20] Maurizio Lorber, 'Ipotesi visive: "paradigma indiziario" versus "paradigma ipotetico" nella connoisseurship ottocentesca', *Arte in Friuli, Arte a Trieste*, 24 (2005), 119–44.

[21] There was also an intervening period between January 1905 and June 1906 during which the Gallery was without a director and three of the Trustees were made acting directors: Andrea Geddes Poole, *Stewards of the Nation's Art: Contested Cultural Authority, 1890–1939* (Toronto: University of Toronto Press, 2010), p. 50. On Burton and Poynter, see in particular Charles Saumarez Smith, *The National Gallery: A Short History* (London: Frances Lincoln, 2009), Chapters 7–8. Burton is also the subject of a recent Ph.D thesis and article: Elena Greer, 'Sir Frederic William Burton and the Rosebery Minute: The Directorship of the National Gallery, London, in the Late Nineteenth Century' (unpublished doctoral thesis, University of Nottingham, 2017); Elena Greer, 'Sir Frederic Burton and the Controversy of Art-Historical Expertise at the National Gallery, London, in the Late Nineteenth Century', *Journal of Art Historiography*, 18 (2018), 1–20.

[22] Linda Sandino, 'A Curatocracy: Who and What Is a V&A Curator?', in *Museums and Biographies: Stories, Objects, Identities*, ed by Kate Hill (Woodbridge: Boydell and Brewer, 2012), pp. 87–100. Unfortunately there is little space here to discuss the interesting roles of players such as Keepers, Trustees and external agents in contributing to connoisseurship at the National Gallery. Because of the large number of people involved, the Directors' ultimate

for acquisition through first-hand, visual examination by National Gallery employees: this judgement process has therefore clearly helped to shape the national collection as it stands today. The public nature of the institution also means that a wide range of sources, particularly archival material, are available for scrutiny. While the National Gallery's extensive archives have been mined by a number of scholars, most notably Jonathan Conlin and Christopher Whitehead, much more material remains to be studied in any consistent fashion.[23] The extant Trafalgar Square building, home to the National Gallery since 1838, provides further important evidence for the location in which many paintings were investigated.

While there has been much recent analysis of the National Gallery's acquisition practices under Eastlake's directorship (1855–1865), less attention has been paid to the institution at the transitional point between the late nineteenth and early twentieth centuries.[24] And yet visual connoisseurship was one of the key markers of expertise for those operating in the British art world during this period. New theories of Old Master connoisseurship were beginning to emerge, traditionally seen as marking a shift from the mid-century, documentarybased approach of art critics like Joseph Crowe and Giovanni Battista Cavalcaselle to the supposedly 'scientific' approach of art historians Giovanni Morelli and Bernard Berenson.[25] More broadly, art history was starting to take on a disciplinary identity, supported by the launch of new critical periodicals such as *The Connoisseur* and *The Burlington Magazine*, and the development of new History of Art courses in the academy.[26] The National Gallery, with its active acquisitions policy and established mandate to build up a collection that

responsibility for purchases and the fact that much of the archival material relating to connoisseurial practice was authored by the Directors, the focus in this article remains largely on the Directors' connoisseurial practice.

[23] Jonathan Conlin, *The Nation's Mantelpiece: A History of the National Gallery* (London: Pallas Athene, 2006); Christopher Whitehead, *The Public Art Museum in Nineteenth Century Britain: The Development of the National Gallery* (Aldershot: Ashgate, 2005); Whitehead, 'Architectures of Display'.

[24] See, in particular, Avery-Quash and Sheldon; Susanna Avery-Quash, *The Travel Notebooks of Sir Charles Eastlake*, 2 vols (London: The Walpole Society, 2011); Susanna Avery-Quash, 'The Eastlake Library: Origins, History and Importance', *Studi di Memofonte*, 10 (2013), 3–45.

[25] Michael Hatt and Charlotte Klonk, *Art History: A Critical Introduction to Its Methods* (Manchester: Manchester University Press, 2006), Chapter 4.

[26] Pamela Fletcher and Anne Helmreich, 'The Periodical and the Art Market: Investigating the 'Dealer–Critic System' in Victorian England', *Victorian Periodicals Review*, 41 (2008), 323–51; Barbara Pezzini, 'The Burlington Magazine, The Burlington Gazette, and The Connoisseur: The Art Periodical and the Market for Old Master Paintings in Edwardian London', *Visual Resources*, 29 (2013): 154–83; Donald Preziosi, 'The Question of Art History', in *Questions of Evidence: Proof, Practice, and Persuasion across the Disciplines*, ed. by James K. Chandler, Arnold Ira Davidson and Harry D. Harootunian (Chicago, IL: The University of Chicago Press, 1994), pp. 203–26; John Summerson, *What Is a Professor of Fine Art? An Inaugural Lecture Delivered in the University of Hull on 17 November 1960* (Hull: University of Hull, 1961).

showcased the development of Western art, was situated at the very centre of this transformation.[27] Nevertheless, previous research has largely failed to recognize that despite this context of theoretical change, the practical connoisseurial methods applied by many art world professionals — including those at the National Gallery — remained essentially similar, strongly marked by the prioritisation of visual examination. That this remained the case throughout the forty-year period under scrutiny here demonstrates that such theoretical changes had little immediate impact upon the practice of connoisseurship.

To date, connoisseurship has too frequently been studied either through the analysis of these written theories, or by the comparison of historical with modern attributions.[28] Both of these approaches tend to focus strongly on the writings of emerging art historians or self-styled 'experts', resulting in a somewhat artificial categorisation of these connoisseurs as external to the workings of the art market. It is hard to believe that Berenson was not being disingenuous when he wrote late in his career that

> One can understand the dealers, the amateur merchants and collectors speculating [on attributions] for a rise; but why should art historians and gallery directors do the same? Surely they are not actuated by sordid motives of gain, nor to any extent by questions of prestige.[29]

Even if it can be assumed that the writings of such 'experts' are entirely reliable, it seems unlikely that these theories of connoisseurship translated easily into professional connoisseurial practice in spaces such as the auction room or dealer's gallery.[30] Furthermore, the decision taken here to adopt a broader definition of connoisseurship, encompassing such intrinsically subjective concepts such as beauty and condition, is fundamentally incompatible with any type of quantitative methodology that attempts to make a statistical comparison between historic and present-day attributions. Given my extensive use of written, archival sources as the basis for much of the discussion in this article, I do not intend to argue that texts are unimportant for the analysis of connoisseurship. However, it is when written sources are narrowly used as a basis for the discussion of the *practice* of connoisseurship — in order to determine how such judgements were reached — that they start to become inadequate.

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[27] *Select Committee on the National Gallery: Report from the Select Committee on the National Gallery* (HC 1853, 867), p. xvi. The complicated nature of this mandate, and the practical difficulties in fulfilling it, are explored more fully in *The Nation's* Mantelpiece, Chapter 5.

[28] For an example of the first approach, see Uglow, 'Giovanni Morelli and His Friend Giorgione'; for the second, see M. J. Ripps, 'A Faustian Bargain? Charles Sedelmeyer, Wilhelm Bode, and the Expansion of Rembrandt's Painted Corpus, 1883–1914', in *Cultural Clearings: The Object Transformed by the Art Market/Schnittstelle Kunsthandel: Das Objekt im Auge des Marktes* (Nuremburg: CIHA, 2015), pp. 745–47.

[29] Bernard Berenson, *Essays in Appreciation* (London: Chapman and Hall, 1958), p. 97.

[30] Levi, 'Connaisseurs français'.

In order to circumvent these difficulties, this article adopts an alternative spatial approach, drawing on both the written evidence that reveals the criteria upon which connoisseurial judgements were reached by National Gallery staff, and the physical conditions under which these decisions were made.[31] While the spatial turn has now begun to impact art history, a spatial approach has not previously been adopted for the study of connoisseurship and its practice; my research is therefore innovative in this respect.[32] It is important to note that there are artworks for which a spatial methodology is less useful, particularly those for which the acquisition details have been lost or were never recorded. Nevertheless, as this article demonstrates, such an approach is often valuable for bypassing the heavy reliance on descriptions of how connoisseurship was performed. In addition, considering the space in which a connoisseurial decision was reached does not merely fill in the lacunae left by missing or inadequate textual sources, but can also actively contribute to a more complete understanding of how connoisseurship was, and is, performed. For example, I will go on to draw strong parallels between the ways in which paintings were examined in a range of spaces, a comparison that reveals much about the visual methods of connoisseurship as practised by Gallery staff.

The Mobility of People and Artworks

The increasing mobility of both artworks and people from the midnineteenth century onwards strongly facilitated a comparative, visual style of connoisseurship. Before this point in history, it had been difficult to view a

[31] Although the spatial turn has been pivotal to a range of disciplines in the past few decades, space remains conceptually unstable, with a confusing plethora of terms applied and a variety of historical methodologies adopted under the umbrella concepts of space and place (see Leif Jerram, 'Space: A Useless Category for Historical Analysis?', *History and Theory*, 52 [2013], 400–19). In an attempt to avoid such confusion, here I adopt the definitions and terminology suggested in Michel de Certeau's *The Practice of Everyday Life*: 'place' is defined as a distinct, geometric location, while 'space' can be described as a 'practised place', activated by an actor within that place (Michel de Certeau, *The Practice of Everyday Life*, trans. by Steven Rendall [Berkeley: University of California Press, 2011], p. 117). This distinction between space and place allows for the importance of temporality and change within a place, as well as the multitude of functions that a place may perform for a variety of actors. In addition, it accounts for the way in which the power aspects of space can be exploited by actors for the creation of status and the reinforcement of expertise. This is especially important in the case of art and artistic institutions: as John Brewer has suggested, in galleries the artworks on display can be viewed with the confidence that their authenticity and importance is underwritten by the people who have chosen to display them (John Brewer, *The American Leonardo: A 20th-Century Tale of Obsession, Art and Money* [London: Constable, 2009], p. 2).

[32] See, for example, Jennifer L. Roberts, *Transporting Visions: The Movement of Images in Early America* (Berkeley, CA: University of California Press, 2014); Andrew Graciano (ed.), *Exhibiting Outside the Academy, Salon and Biennial, 1775–1999: Alternative Venues for Display* (Burlington, VT: Ashgate, 2015).

geographically disparate corpus of artworks in person because of the high costs and dedicated time required.[33] From the 1840s onwards, however, the rapid growth of the railway network brought about a shrinkage in the perception of geographical distance and travel time.[34] Even during the Victorian period, it was recognized that this expansion was having an impact on the practice of connoisseurship: in 1893, Berenson lauded the railways as having helped connoisseurship to overcome its previous status as 'more or less of a quack science'.[35] By 1900, British railways were at their fastest and most extensive in history, delivering travellers and goods to within just a few miles of even the most far-flung destinations, while a similar expansion was taking place in the European rail network.[36] As a result, it became far quicker and safer for both paintings and people to move around Britain and abroad.[37]

The ability to inspect a wide range of artworks in person made it easier than ever to perform connoisseurial comparison across artists, schools and eras. National Gallery personnel did not often travel within Britain for the purposes of acquiring new works for the collection from private sellers, although important exceptions were sometimes made: Director Frederic Burton, for example, made a special journey to inspect the Duke of Marlborough's collection at Blenheim Palace in 1884, as a significant number of the Duke's paintings were shortly to go up for auction.[38] However, a strong emphasis was placed on European travel for the sake of inspecting potential acquisitions and comparative collections. While this mobility has previously been recognized for the National Gallery's first director, Charles Lock Eastlake, it has been largely overlooked for the directors who followed him.[39] Nevertheless, letters and reports from the National Gallery archives reveal that Burton made at least eleven Continental journeys on Gallery business in the twenty years of his directorship, while Edward Poynter

[33] Charlotte Guichard, 'Connoisseurship and Artistic Expertise. London and Paris, 1600–1800', in *Fields of Expertise: A Comparative History of Expert Procedures in Paris and London, 1600 to Present*, ed. by Christelle Rabier (Newcastle: Cambridge Scholars Publishing, 2007), pp. 173–91.

[34] Wolfgang Schivelbusch, *The Railway Journey: The Industrialisation of Time and Space in the 19th Century* (Leamington Spa: Berg, 1986), Chapter 3.

[35] Berensen, 'Documents in the History of Visual Documentation: Bernard Berenson on Isochromatic Film', in *Art History Through the Camera's Lens*, ed. by Helene E. Roberts (Abingdon: Routledge, 2013), pp. 123–30 (p. 128).

[36] Colin G. Pooley, Jean Turnbull and Mags Adams, *A Mobile Century? Changes in Everyday Mobility in Britain in the Twentieth Century* (Aldershot: Ashgate, 2005), pp. 18–19; Paul Caruana-Galizia and Jordi Martí-Henneberg, 'European Regional Railways and Real Income, 1870–1910: A Preliminary Report', *Scandinavian Economic History Review*, 61 (2013), 167–96 (pp. 178–80).

[37] Katherine Manthorne, 'Remapping American Art', *American Art*, 22.3 (2008), 112–17.

[38] London, The National Gallery, National Gallery Archives (hereafter NGA), NG6/10/367, National Gallery to the Exchequer, 19 November 1884.

[39] See Avery-Quash and Sheldon; Avery-Quash, *The Travel Notebooks*.

travelled abroad at least thirteen times in ten years (see Appendix 1).[40] Given the expense and inconvenience of extended foreign travel in this period, it must have been seen as particularly important for directors to view potential acquisitions in person.

The new transport technologies led to increased mobility not just for connoisseurs, but also for the artworks that were their subjects of study. The railway had played a pivotal role in the facilitation of the Manchester Art Treasures Exhibition in 1857, characterized by Elizabeth Pergam as the first blockbuster exhibition because of the sheer number of works travelling on loan from private collections.[41] By the final decades of the nineteenth century, it became widely acceptable for paintings to be sent and received by rail. In the case of the National Gallery, this movement of artworks was particularly important because the institution placed such a strong emphasis on having works sent to London for direct inspection by the Director and Board of Trustees.

Spaces of Connoisseurship: At the National Gallery

National Gallery staff encountered paintings for sale in a variety of locations across the private and public spheres: in collectors' houses, dealers' premises, and gallery exhibitions, both in Britain and abroad. However, it is particularly notable that when negotiating with private sellers within Britain, the National Gallery placed a strong emphasis on having paintings sent to Trafalgar Square for inspection prior to acquisition. Because of its international prominence, the Gallery received frequent offers of paintings both for sale and as donations or bequests. From the archived correspondence and registers of offers, it is clear that many of these works were declined without being seen, especially if the description or photograph supplied did not meet the institution's standards.[42] In general, however, once a painting had piqued the Gallery's interest, sellers and donors were strongly encouraged to send their picture to Trafalgar Square for assessment. For example, of the 99 oil paintings left to the Gallery by collector John Henderson in 1878, 13 were selected by the Director following examination in Trafalgar Square (this number being reduced to eight after 'further

[40] Holroyd, in contrast, seems to have made only three foreign trips to inspect works during his ten-year tenure. This was presumably because he had to agree acquisitions with all Trustees following a more rigorous implementation of the so-called 'Rosebery Minute': Geddes Poole, pp. 79–91; 118–20.

[41] Elizabeth A. Pergam, *The Manchester Art Treasures Exhibition of 1857: Entrepreneurs, Connoisseurs and the Public* (Farnham: Ashgate, 2011), p. 21; Amy M. von Lintel, 'Art History as Spectacle: Blockbuster Exhibitions in 1850s England', in *Exhibiting Outside the Academy*, ed. by Andrew Graciano (Burlington, VT: Ashgate, 2015), pp. 131–68 (p. 138).

[42] The registers of offers can be found at NGA, NG9, and letters relating to rejected offers at NG40.

examination') (Figure 2).[43] Given that Henderson's house in Russell Square was readily accessible if the Director and Trustees had wished to visit, the decision to send the paintings to the National Gallery strongly foregrounds the importance of this space in the decisionmaking process.

There were a number of reasons why pictures needed to be examined at the National Gallery itself if at all possible. The building offered a convenient space for the Director, Keeper and Trustees to hold the board meetings at which paintings could be inspected and discussed. Given this strong emphasis on inspecting potential artworks at the National Gallery itself, it would be useful to determine the particular aspects of the room or rooms used for connoisseurship there. However, it has been difficult to distinguish the specific spaces in which paintings were examined once they had arrived at the Gallery. From the board minutes, it seems likely that paintings would first have been delivered to the Director's Office for his personal inspection; here, they would sometimes then undergo restoration or repair before being presented to the Trustees at boardroom meetings. Due to a lack of evidence, it has been difficult to determine exactly where the Director's Office or Boardroom were located in the late nineteenth and early twentieth centuries. However, a 1906 plan of the National Gallery drawn up by the Office of Works states that the Eastlake Library, Boardroom, and Keeper's Room were by this date on the ground floor of the west wing of the original Wilkins building (Figure 3), although the exact location of the Boardroom is not stated.[44] It seems likely that the Director's Office was at this point in the location marked on Figure 3 with a red square and close to the labelled 'Director's Entrance': this room features large windows on two elevations, providing excellent daylight for the examination of paintings. The Boardroom, meanwhile, may well have been in its modern location (marked with a blue rectangle on Figure 3) where, prior to the 1911 expansion of the building, the room would have benefited from three sizeable windows and an additional lightwell.[45] Despite this paucity of concrete evidence regarding the Boardroom and Director's Office, they remain important spaces of connoisseurship because of the significant connoisseurial discussions that took place there.

From a practical perspective, the Gallery's boardroom would have to have been physically large enough to accommodate the whole board: while the number of Trustees had previously been limited to six, this number was raised to eight in

[43] NGA, NG1/5, Minutes of the Board of Trustees, 15 Mar 1871–1 Feb 1886, p. 123; NGA, NG6/5/960, National Gallery to H. Critchfield, 10 March 1879. The paintings selected for the collection were NG1054–NG1061.

[44] London, The National Archives, Office of Works, WORK 33/1930, *National Gallery. Detail sections through floors showing construction*, 1906.

[45] Useful visual guides to the various extensions and changes to the Trafalgar Square building can be found in Alan Crookham, *The National Gallery: An Illustrated History* (London: National Gallery Company, 2009), p. 123 and Conlin, pp. 467–72.

1897 and again to ten in 1909.[46] This would have made it harder to coordinate painting inspections outside the National Gallery, with the domestic spaces in which many pictures were displayed being simply too small for convenient inspection. In addition, the rooms at the National Gallery would have offered the right conditions for the scrutiny of artworks, acting as a control factor that allowed for paintings to be judged in the same environment. Keeper Charles Locke Eastlake (confusingly, the nephew of first Director Charles Lock Eastlake) wrote to a Mr Macandrew in 1880 to ask whether 'you will kindly allow your picture to be sent to the National Gallery, where [Burton] can examine it more conveniently & by a better light than in its present place'.[47] 'More conveniently' can be interpreted in a number of ways: for example, the Director may have simply found it easier to find time in his schedule to examine the picture at the Gallery. However, the phrase is just as likely to have referred to spatial aspects of connoisseurship, such as the option of repeat viewings, or the ability to examine the work in closer physical proximity. The fact that the 'better light' of the National Gallery was specifically mentioned in this letter, and on other occasions, emphasizes the particular importance of the visual aspects of connoisseurship.

Examining paintings in the Boardroom further allowed for access to additional visual material in the form of library resources, comparative photographs, or similar artworks from the Gallery's own collection; such comparisons would have been impossible if examining a picture in a domestic or commercial setting. For example, in the case of a portrait attributed to Italian mannerist painter Agnolo Bronzino and offered for purchase in 1896, an argument broke out during a board meeting over the relative merits of the work. In order to settle the matter, the minutes record that the 'Portrait of a Lady by Bronzino already in the National Gallery (No. 650) was brought down to the Board Room and placed by the side of [the proffered] picture' in order to facilitate a direct comparison.[48] While Poynter believed the potential purchase to be better executed and a more representative example of Bronzino's work than the painting already in the Gallery's possession, the Trustees were split on the matter and the picture was ultimately not acquired. The Boardroom was therefore a valuable space of connoisseurship in many ways, offering Director and Trustees an

[46] NGA, NG7/209/1, Treasury to the National Gallery, 14 June 1897; NGA, NG7/365/1, the Treasury to the National Gallery (enclosing a Treasury Minute dated 17 July 1909), 27 July 1909.

[47] NGA, NG6/6/428, National Gallery to J. Macandrew, 22 March 1880.

[48] NGA, NG1/6, Minutes of the Board of Trustees, 1 March 1886–1 June 1897, p. 345. NG650 is now accepted as 'Italian, Florentine'. The portrait offered for acquisition by dealers Messrs. Laurie & Co. was reportedly from the collection of Prince Sciarra and may well be the 'unknown portrait' ('ritratto incognito') depicted in a photograph in this catalogue: Francesco Paolo Michetti and Leone Vicchi, *Dieci quadri della Galleria Sciarra* (Rome: Stab. tipografico della 'Tribuna', 1889). However, I have been unable to access a copy of the catalogue to confirm this.

opportunity to examine a painting at close quarters, draw comparisons with other works, and discuss its merits.

Spaces of Connoisseurship: Outside Trafalgar Square

When Gallery personnel were obliged by circumstance to inspect paintings outside the familiar settings of Trafalgar Square — whether this was in the Great Rooms at Christie's or in the home of a collector in Paris or Siena — a greater range of obstacles to connoisseurship was frequently encountered. Gaining initial permission to examine a work was itself not necessarily straightforward, although access was often easier for staff backed by the prestige of the National Gallery than for other connoisseurs. Charles Holmes noted ruefully in his autobiography that he had found when researching his book on Constable, before his elevation to National Gallery Director in 1916, that 'I could not do all that I wanted to do. It was not easy for a totally unknown clerk to get access to pictures in private collections'.[49] Even Burton, in his position as director, occasionally encountered such difficulties: he wrote to his friend, fellow artist and connoisseur Charles Fairfax Murray in 1879 that

> Your last letter, with the sketch of the Lotto, very much interests me. And I too, should like to compare it with the picture in the Bridgewater Collect[ion] which I do not recollect at all. But it is difficult to get into Bridgewater Ho[use] without knowing the owner, who is a man who cares for nothing but horses.[50]

The first hurdle to performing connoisseurship outside the Gallery premises was simply that of gaining access to view the works displayed within a particular space.

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[49] C. J. Holmes, *Self & Partners (Mostly Self): Being the Reminiscences of C. J. Holmes* (London: Rivington, 1936), p. 207; C. J. Holmes, *Constable and his Influence on Landscape Painting* (London: Archibald Constable, 1902).

[50] Austin, Texas, The Harry Ransom Center at the University of Texas at Austin (hereafter HRC), Manuscript Collection MS-0627, Frederic William Burton Collection, Frederic Burton to Charles Fairfax Murray, 18 December 1879. The owner of Bridgewater House was peer and racehorse enthusiast Francis Egerton, 3rd Earl of Ellesmere, while the Lotto referred to was potentially the artist's *Virgin and Child with Saints Jerome, Peter, Francis and an Unidentified Female Saint*, now NG2418 in the collection of National Galleries Scotland. The correspondence between Burton and Fairfax Murray has recently been published in Paul Tucker (ed.), *A Connoisseur and his Clients: The Correspondence of Charles Fairfax Murray with Frederic Burton, Wilhelm Bode and Julius Meyer (1867–1914)* (London: Walpole Society, 2017). On Fairfax Murray, see also David B. Elliott, *Charles Fairfax Murray: The Unknown Pre–Raphaelite* (Lewes: Book Guild, 2000); Paul Tucker, 'Eyesight, Knowledge, Argument: Charles Fairfax Murray on «Scientific» Connoisseurship', *Studi di Memofonte*, 12 (2014), 106–42.

Once a connoisseur was granted access to a particular building or room, other factors then came into play that could have a significant impact on the connoisseurial process. For example, the spaces in which paintings were displayed varied widely but were often not designed to suit the specific needs of the connoisseur. Inherited pictures might have been hung in the same position for decades, while collectors would often rearrange their collections to accommodate a new purchase.[51] Outside the houses of aristocrats and the very rich bourgeoisie, dedicated picture galleries were uncommon in the home and paintings might be hung throughout a range of rooms such as corridors or bedrooms; even where picture galleries did exist, additional pictures could still be scattered throughout the house. For example, in 1912, following the death in the previous year of her husband and National Gallery Trustee the Earl of Carlisle, Lady Rosalind Carlisle invited Director Charles Holroyd and the serving Trustees to visit her Yorkshire seat of Castle Howard and select 'six pictures, which they think it would be desirable for the nation to possess'.[52] These lists were then intended to inform her choice of which works to gift to the Gallery. Contemporary photographs of the stately home interior show just how densely packed pictures were into every room, hung behind furniture, in recesses and from floor to ceiling (Figure 4). Following his visit, Trustee Lord Ribblesdale noted in particular that one of the pictures that interested him was 'unluckily […] hung so high that I c[oul]d not make much of it'.[53] Lady Carlisle subsequently agreed to include this painting as part of a batch sent on approval to Trafalgar Square, where it could be examined at leisure and in better conditions.[54]

The episode at Castle Howard shows that proximity could be a particular issue when inspecting paintings outside the National Gallery, particularly if there was not enough physical space to get close to artworks, or if paintings were 'skied' and hung far above the viewer. In an 1877 letter written to Burton and describing a painting attributed to Filippo Lippi that he had seen in Venice, Fairfax Murray specifically linked the poor positioning of the work to his inability to judge its condition, writing that

> Casting a glance at it is sufficient to put [Lippi] out of the question but it is either a Verrocchio or Pollajuolo [sic] of the finest quality hung rather

[51] Francis Russell, 'The Hanging and Display of Pictures, 1700–1850', *Studies in the History of Art*, 25 (1989), 133–53 (p. 133).
[52] NGA, NG7/410/2, Lady Carlisle to Charles Holroyd, 14 August 1912.
[53] NGA, NG7/410/7, Lord Ribblesdale to Holroyd, October 1912. Thomas Lister, 4th Baron Ribblesdale, was a National Gallery Trustee between 1909 and 1925.
[54] NGA, NG7/426/6, Lady Carlisle to Holroyd, 3 June 1912. This painting (NG2929) was acquired by the Gallery as being by Pierre Mignard, but has since been reattributed to Gabriel Revel.

> above the eye & not in a good light I could only see that it was dirty with varnish but cannot speak as to its general preservation.[55]

In this case, the location of the work prevented Fairfax Murray from being able to judge either its attribution or its condition with any certainty. It was occasionally possible to overcome the proximity problem, if sufficiently enterprising: in 1884, Burton justified the outlay of a £1 gratuity to the butler at Blenheim Palace as being 'in consideration of services rendered during six hours, including the provision of two men with a stepladder to facilitate the examination of several large pictures, which could not have been accomplished without such assistance' (Figure 5).[56] Given that one of the pictures subsequently bought by the National Gallery was Anthony van Dyck's monumental *Equestrian Portrait of Charles I* (NG1172), which is well over three metres tall, a ladder was certainly called for in this instance. In many other cases, however, Director and Trustees were forced to examine paintings where they hung and from a distance.

Lighting was also of particular importance when passing connoisseurial judgement: as mentioned above, a 'better light' was one of the specific reasons why the National Gallery would request paintings to be sent to Trafalgar Square for inspection. Outside these controlled premises, however, lighting was much more variable. Throughout older or smaller houses, or in rooms such as corridors or bedrooms, there might be little natural light available in which to inspect a work. Burton wrote in 1884 of Pisanello's *Vision of Saint Eustace* (Figure 6), delivered from Ashburnham Place to the National Gallery for the purposes of being photographed, that,

> I have never properly seen it at its home. For it hangs in a bad light. But on getting it at the Gallery all its wonderful details came out. […] The picture is in a perfect state – and I am not acquainted with any easel work of Pisano's so fine as this one. It is crammed with birds, large & small, a bear, a hare & several deer – besides dogs of various breeds.[57]

In this case, the 'bad light' of the room where the painting usually hung had given Burton an erroneous impression of the work, which was modified on seeing it in the better light of the National Gallery. Indeed, the lighting was not always better

[55] NGA, NG54/2, Fairfax Murray to Burton, 21 April 1887. The painting referred to is cat. no. 162 in G. Nicoletti, *Pinacoteca Manfrin a Venezia* (Venice: Marco Visentini, 1872), p. 33.
[56] NGA, NG6/10/367, National Gallery to the Exchequer, 19 November 1884. For more on the background to and negotiations for the purchase of the Blenheim pictures, see Barbara Pezzini, 'Making a Market for Art: Agnew's and the National Gallery, 1850–1944' (unpublished doctoral thesis, University of Manchester, 2018), Chapter 3.
[57] HRC, MS-0627, Burton to Fairfax Murray, 11 September 1884. This painting, previously understood to depict the legend of St Hubert, was acquired for the National Gallery by Poynter in 1895 as NG1436.

in spaces that had been specifically designed for the display of art: Burton stated in 1883 that,

> I have been only once at the R[oyal]. Acad[em]y. for the weather is infamously dark – and even then it was too late in the day to discern much […] Amongst the Old Masters there are some fine things. But it was impossible in the murky light to form any proper judgement on any of them.[58]

On the other hand, Trustee J. P. Heseltine submitted a favourable report in 1905 of his inspection in Amsterdam of the collection formed by Dutch collector Jean Charles Joseph Drucker, writing that 'there are a considerable number of desirable pictures as to which I can now give the Trustees detailed information: they are shown together in a good room with a top light at the Riks Museum [sic]'.[59] These two contrasting cases show that the quality of lighting could determine whether or not connoisseurship was in fact possible at all.

Good lighting meant not only the strength of light available, but also the type of lighting: whether it was natural or artificial, and from which direction it was cast onto the painting. As can be seen from Heseltine's praise of the Rijksmuseum, top-lighting was favoured; if at all possible, the National Gallery connoisseurs also preferred to examine a work in daylight. Burton wrote to Fairfax Murray in 1876 that 'As soon as I can get up to [Edward Burne-Jones' house] the Grange for daylight I will ask to see the old pictures you left there. It was no use looking at them last night'.[60] The previous evening, Burton had admired a 'superb' Mantegna at the house, although the need for artificial lighting had somewhat impaired his judgement: 'It seemed to me (by candle light at least) to leave nothing to be wished for'. Good lighting was also particularly vital to the connoisseurial judgement of condition: for example, in 1902 Poynter visited Florence to view a panel offered to the National Gallery for purchase. The Director was confident enough after his first viewing to state that 'There can be no doubt as to the genuiness [sic] & the correct attribution to Lorenzo Monaco of the picture belonging to Mr. Galli-Dunn' (Figure 7).[61] However, Poynter wanted to examine the painting again, and, returning the next day, 'had the picture placed in a good light: it seemed to me, beyond a little rubbing of the old background at the borders, to be in an almost untouched condition'. The comparatively poor

[58] HRC, MS-0627, Burton to Fairfax Murray, 5 January 1883.
[59] NGA, NG/297/6, John Postle Hestletine, Report of the Drucker Collection in Amsterdam, 11 June 1905. On Drucker, see 'Explore Jean Charles Joseph Drucker', RKD, https://web.archive.org/web/20190305143942/https://rkd.nl/nl/explore/artists/428829 [accessed 5 March 2019].
[60] HRC, MS–0627, Burton to Fairfax Murray, 19 February 1876.
[61] NGA, NG7/261/1, Edward Poynter, Director's report of his journey to Italy, 9 February 1902. The picture was acquired as NG1897 and still bears the attribution to Lorenzo Monaco.

light in which the picture had first been viewed was therefore deemed sufficient to determine the attribution of the painting, but a better light was needed in order to judge its condition.

Connoisseurship as a Time-Bound Process

In addition to these major visual and spatial considerations of access, proximity and lighting, the chronological aspects of connoisseurship — themselves frequently dictated by space — also had a significant impact upon the methods used and the decisions reached by connoisseurs. Having the opportunity to spend more time examining a work, or carrying out additional research using archives and printed sources, could lead to a more indepth understanding of the painting, the circumstances of its production and its provenance. However, the space in which the painting was subject to inspection to a large extent determined whether such a lengthy consideration process was possible. This is one of the major ways in which connoisseurship differed across a range of private and public spaces: in the private confines of the Gallery's Boardroom, the Director and Trustees could take as long as reasonably required to examine a work, or carry out repeated inspections over multiple days. If the work being sent to the Gallery was a known one, and had been previously discussed in print, it would also be possible to carry out research in the Gallery's extensive Library (which was in fact moved into the Boardroom itself in 1906) before the picture itself arrived in Trafalgar Square.[62]

However, in many other spaces, such as private residences and dealers' premises, such sustained looking would have been neither permitted nor practical; in such spaces, therefore, connoisseurship was a significantly time-bound process. The National Gallery staff did their best to sidestep this constraint: Poynter, on visiting Madrid in 1899 to inspect a purported Murillo, wrote in his report to the Trustees that he had made 'one or two visits to make sure that I was not mistaken in my first impression' to advise against its purchase because of overcleaning and the poor condition of the head in the portrait (Figure 8).[63] The gap between examinations could also be used to make further investigations into a work, such as viewing comparative paintings in local galleries. Poynter, when arranging the purchase in Florence of the Lorenzo Monaco panel mentioned above, had been impressed with the work on his first viewing but 'arranged to return the next day after I had been to the Uffizi to look at the examples of

[62] *Return to an Order of the Honorable The House of Commons, Dated 5 March 1907;- for, Copy 'of the Report of the Trustees of the National Gallery, for the Year 1906, with Appendices.'* (London: Eyre and Spottiswoode, 1907), p. 7.

[63] NGA, NG7/236/1, Edward Poynter, Director's report of his recent journey to Madrid, 3 July 1899. Still attributed to Murillo, this painting is now in the collection of the Denver Art Museum (1961.67): 'Portrait of Don Diego Félix de Esquivel y Aldama', Denver Art Museum, <https://web.archive.org/web/20190304150940/https://denverartmuseum.org/object/1961.67> [accessed 3 March 2019].

Lorenzo Monaco in that gallery'.[64] In this case, Poynter's initially positive opinion of the proffered work was reinforced by the comparison drawn with the Uffizi paintings. Time pressure was also particularly pertinent where foreign acquisitions were concerned because of issues regarding competition; in many cases, if an immediate decision was not reached and the deal clinched, then the work could be lost to another buyer. Fairfax Murray wrote to warn Burton of this risk in 1887:

> Italy is dangerous in these money matters. Do you know the story of the Giorgione sold from the Manfrini Palace to Prince Fioranelli? It was bought I heard by the Berlin Gallery people only they had to get the money from Berlin failed to get it at the exact hour & the picture was lost.[65]

Furthermore, when travelling the National Gallery staff were often confronted with works that they had never seen before. Once abroad, word of mouth could lead to unplanned visits and the inspection of completely unfamiliar works in the homes of collectors with whom the visitor was not personally acquainted. For example, the purchase of Goya's portrait of Doña Isabel de Porcel (NG1473) only took place because Poynter, while attending the sale of the Duke of Osuna's pictures in Madrid in May 1896, 'was informed of some Goyas to be seen at the house of Don Isidro Urzaiz'.[66] Visiting this collection in response to this tip-off and finding 'two portraits far superior in style to those of the Osuna collection', Poynter congratulated himself on acquiring what he felt to be one of the best Goya portraits in Madrid 'at so reasonable a price (about £400)' (Figure 9).[67] While he had presumably carried out some research into the Spanish school before his visit, when visiting the Urzaiz residence Poynter was still expected to make an immediate decision with no prior knowledge of the works in that collection. In such cases, there would have been little or no opportunity to carry out provenance or other documentary research in a library or archive, or to compare the painting with photographs or engravings of other works. In any cases where connoisseurship was time-bound, therefore, visual inspection and judgement became ever more important.

Given these spatial and chronological constraints, the visual evidence offered by the front face of the artwork was frequently the only information

[64] Edward Poynter, Director's report of his journey to Italy, 9 February 1902, NG7/261/1, NGA.
[65] NGA, NG54/3, Fairfax Murray to Burton, 13 August 1877. The painting referred to by Fairfax Murray was Giorgione's *The Tempest*, now in the Gallerie dell'Accademia in Venice: Jaynie Anderson, 'The Political Power of Connoisseurship', pp. 113–14; Jaynie Anderson, *Giorgione : peintre de la 'Brièveté poétique' : catalogue raisonné* (Paris: Lagune, 1996), pp. 251–53; 359–60.
[66] NGA, NG7/195/1, Edward Poynter, Report of the Director's official journey to Madrid, 15 June 1896.
[67] The attribution of NG1473 to Goya has recently been questioned: see Xavier Bray, *Goya: The Portraits* (London: National Gallery Company, 2015), p. 209 (note 3).

available to determine whether or not a painting was worthy of acquisition. It has been difficult to determine to what extent the National Gallery staff were engaged in the physical connoisseurial examination of an object beyond a basic visual inspection: Fiona Candlin has noted the difficulties inherent in studying the use of touch to examine objects, ascribing this to the tacit knowledge of curatorial practice.[68] It is possible that artworks were commonly available for handling and physical investigation when being inspected in private spaces or such semi-private spaces as art dealers' premises, but that no records of such informal handling were kept. However, in many other cases handling would have been either taboo or explicitly prohibited. There were also few alternatives to visual examination available for the judgement of connoisseurial criteria other than attribution. With regard to condition, although newly developed scientific techniques such as pigment analysis and radiography started to be introduced from the late nineteenth century onwards, it remains to be explored to what extent such methods were employed in practice before an acquisition was made.[69] The visual analysis of beauty and style, meanwhile, remained as subjective as ever, vulnerable both to prevailing fashions and the personal preferences of the individual connoisseur.

Conclusion

In this article, I have suggested a visual model for artistic connoisseurship, centring on a strongly visual analysis that is characterized by its speed and reliance on comparison with previous visual knowledge, gleaned from repeated and long-term exposure to numerous artworks. I then went on to test this model through the application of a spatial approach as an alternative to the strongly textual analysis traditionally adopted for the study of connoisseurship. Applying this approach to the specific case study of the National Gallery has revealed previously hidden aspects of connoisseurial technique as practised by museum professionals in the late Victorian and early Edwardian period: particularly striking is an overwhelming emphasis on visual judgement and comparison, a technique that was highly dictated by the spaces in which connoisseurship was performed. The skill of connoisseurship is not applied in isolation, however: it is supported by a complex trust network in which the connoisseur needs to be

[68] Fiona Candlin, *Art, Museums and Touch* (Manchester: Manchester University Press, 2010), p. 91.

[69] One of the most thorough examinations of the subject to date, although it focuses only on published material and ends in 1880 is Jilleen Nadolny, 'The First Century of Published Scientific Analyses of the Materials of Historical Painting and Polychromy, circa 1780–1880', *Studies in Conservation*, 48 (2003), sup. 1, 39–51. My thanks to Marika Spring for bringing this paper to my attention.

recognized as possessing the requisite expertise.[70] Further research needs to consider the ways in which professional connoisseurs attempted to demonstrate their connoisseurial expertise to others, whether through writings, display or face-to-face discussion.

The innovative spatial approach demonstrated here additionally allows us to access the methods of those who have not necessarily left detailed written records justifying their connoisseurial practice, but whose activities are nevertheless vital to the understanding of how paintings are judged and the broader workings of the art market.[71] There is thus strong potential for the translation of this approach from the Victorian and Edwardian context under review in this article to other periods in history, wider geographical areas, different historical actors, and the judgement of a much broader range of material culture artefacts beyond Old Master paintings. This will help to deepen our understanding of connoisseurship as a flexible practice with divergent aims and methods for different stakeholder groups, each adopting its own particular connoisseurial lens.

[70] Steven Shapin, *A Social History of Truth: Civility and Science in Seventeenth-Century England* (Chicago, IL: University of Chicago Press, 1994); Eric H. Ash, 'Introduction: Expertise and the Early Modern State', *Osiris*, 25 (2010), no. 1, 1–24.

[71] See, for example, the application of this method to the activities of art dealers Thos. Agnew & Sons in Clarke, 'The Spatial Aspects of Connoisseurship'.

Bibliography

‘A Holbein…’, *The Athenaeum*, 7 June 1845

Anderson, Jaynie, *Giorgione : peintre de la ‘Brièveté poétique’: catalogue raisonné* (Paris: Lagune, 1996)

——‘The Political Power of Connoisseurship in Nineteenth-Century Europe: Wilhelm von Bode versus Giovanni Morelli’, *Jahrbuch der Berliner Museen Jahrbuch der Berliner Museen*, 38 (1996), 107–19

Ash, Eric H., ‘Introduction: Expertise and the Early Modern State’, *Osiris*, 25 (2010), no. 1, 1–24

Austin, Texas, The Harry Ransom Center at the University of Texas at Austin, Manuscript Collection MS-0627, Frederic William Burton Collection

Avery-Quash, Susanna, *The Travel Notebooks of Sir Charles Eastlake*, 2 vols (London: The Walpole Society, 2011)

——‘The Eastlake Library: Origins, History and Importance’, *Studi di Memofonte*, 10 (2013), 3–45

——, and Julie Sheldon, *Art for the Nation: The Eastlakes and the Victorian Art World,* (London: National Gallery Company, 2011)

Berenson, Bernard, *Essays in Appreciation,* (London: Chapman and Hall, 1958)

——‘Documents in the History of Visual Documentation: Bernard Berenson on Isochromatic Film’, in *Art History Through the Camera’s Lens*, ed. by Helene E. Roberts (Abingdon: Routledge, 2013), pp. 123–30

Brady, Timothy F., et al., ‘Visual Long-Term Memory Has a Massive Storage Capacity for Object Details’, *Proceedings of the National Academy of Sciences*, 105 (2008), no. 38, 14325–29

Bray, Xavier, *Goya: The Portraits,* (London: National Gallery Company, 2015)

Brewer, John, *The American Leonardo: A 20th Century Tale of Obsession, Art and Money* (London: Constable, 2009)

Candlin, Fiona, *Art, Museums and Touch,* (Manchester: Manchester University Press, 2010)

Caruana-Galizia, Paul, and Jordi Martí-Henneberg, ‘European Regional Railways and Real Income, 1870–1910: A Preliminary Report’, *Scandinavian Economic History Review*, 61 (2013), 167–96

de Certeau, Michel, *The Practice of Everyday Life*, trans. by Steven Rendall (Berkeley, CA: University of California Press, 2011)

Clarke, Alison, 'The Spatial Aspects of Connoisseurship: Agnew's and the National Gallery, 1874–1916' (unpublished doctoral thesis, University of Liverpool, 2018)

——*Spaces of Connoisseurship: Judging Old Masters at Agnew's and the National Gallery, c.1874-1916* (Leiden: Brill, forthcoming)

Conlin, Jonathan, *The Nation's Mantelpiece: A History of the National Gallery,* (London: Pallas Athene, 2006)

Crookham, Alan, *The National Gallery: An Illustrated History,* (London: National Gallery Company, 2009)

Elliott, David B., *Charles Fairfax Murray: The Unknown Pre–Raphaelite,* (Lewes: Book Guild, 2000)

Ebitz, David, 'Connoisseurship as Practice', *Artibus et Historiae*, 18 (1988), no. 9, 207–12

'Explore Jean Charles Joseph Drucker', RKD, <https://web.archive.org/web/20190305143942/https://rkd.nl/nl/explore/artists/428829> [accessed 5 March 2019]

Fletcher, Pamela, and Anne Helmreich, 'The Periodical and the Art Market: Investigating the 'Dealer–Critic System' in Victorian England', *Victorian Periodicals Review*, 41 (2008), 323–51

Geddes Poole, Andrea, *Stewards of the Nation's Art: Contested Cultural Authority, 1890–1939,* (Toronto: University of Toronto Press, 2010)

Gibson-Wood, Carol, *Studies in the Theory of Connoisseurship from Vasari to Morelli* (New York, NY: Garland, 1988)

Graciano, Andrew, (ed.), *Exhibiting Outside the Academy, Salon and Biennial, 1775–1999: Alternative Venues for Display,* (Burlington, VT: Ashgate, 2015)

Greer, Elena, 'Sir Frederic William Burton and the Rosebery Minute: The Directorship of the National Gallery, London, in the Late Nineteenth Century', (unpublished doctoral thesis, University of Nottingham, 2017)

——'Sir Frederic Burton and the Controversy of Art-Historical Expertise at the National Gallery, London, in the Late Nineteenth Century', *Journal of Art Historiography*, 18 (2018), 1–20

Guichard, Charlotte, 'Connoisseurship and Artistic Expertise. London and Paris, 1600–1800', in *Fields of Expertise: A Comparative History of Expert*

Procedures in Paris and London, 1600 to Present, ed. by Christelle Rabier (Newcastle: Cambridge Scholars Publishing, 2007), pp. 173–91

Haskell, Francis, 'William Coningham and His Collection of Old Masters', *The Burlington Magazine*, 133 (1991), no. 1063, 676–81

Hatt, Michael, and Charlotte Klonk, *Art History: A Critical Introduction to Its Methods* (Manchester: Manchester University Press, 2006).

Holmes, C. J., *Constable and his Influence on Landscape Painting,* (London: Archibald Constable, 1902)

——*Self & Partners (Mostly Self): Being the Reminiscences of C. J. Holmes,* (London: Rivington, 1936)

Jerram, Leif, 'Space: A Useless Category for Historical Analysis?', *History and Theory*, 52 (2013), 400–19

Levi, Donata, 'Let Agents Be Sent to All the Cities of Italy': British Public Museums and the Italian Art Market in the Mid-Nineteenth Century', in *Victorian and Edwardian Responses to the Italian Renaissance*, ed. by John E. Law and Lene Østermark-Johansen (Aldershot; Burlington, VT: Ashgate, 2005), pp. 33–53

——'Connaisseurs français du milieu du XIXe siècle : tradition nationale et apports extérieurs', in *Histoire de l'histoire de l'art en France au XIXe siècle*, ed. by Roland Recht (Paris: Documentation française, 2008), pp. 197–214

von Lintel, Amy M., 'Art History as Spectacle: Blockbuster Exhibitions in 1850s England', in *Exhibiting Outside the Academy, Salon and Biennial, 1775–1999: Alternative Venues for Display*, ed. by Andrew Graciano (Burlington, VT: Ashgate, 2015), pp. 131–68

London, The National Archives, Office of Works papers

London, The National Gallery, National Gallery Archives

Lorber, Maurizio, 'Ipotesi visive: "paradigma indiziario" versus "paradigma ipotetico" nella connoisseurship ottocentesca', *Arte in Friuli, Arte a Trieste*, 24, (2005), 119–44

Maginnis, Hayden B. J., 'The Role of Perceptual Learning in Connoisseurship: Morelli, Berenson, and Beyond', *Art History*, 13 (1990), no. 1, 104–17

Manthorne, Katherine, 'Remapping American Art', *American Art*, 22.3 (2008), 112–17

'P.', 'The National Gallery', *The Times*, 2 July 1845

Michetti, Francesco Paolo, and Leone Vicchi, *Dieci quadri della Galleria Sciarra,* (Rome: Stab. tipografico della 'Tribuna', 1889)

Nadolny, Jilleen, 'The First Century of Published Scientific Analyses of the Materials of Historical Painting and Polychromy, circa 1780–1880', *Studies in Conservation*, 48 (2003), sup. 1, 39–51

Nicoletti, G., *Pinacoteca Manfrin a Venezia,* (Venice: Marco Visentini, 1872)

Palmeri, Thomas J., and Michael J. Tarr, 'Visual Object Perception and Long-Term Memory', in *Visual Memory*, ed. by Steven J. Luck and Andrew Hollingworth (New York: Oxford University Press, 2008), pp. 163–208

Pergam, Elizabeth A., *The Manchester Art Treasures Exhibition of 1857: Entrepreneurs, Connoisseurs and the Public,* (Farnham: Ashgate, 2011)

Pezzini, Barbara, 'The Burlington Magazine, The Burlington Gazette, and The Connoisseur: The Art Periodical and the Market for Old Master Paintings in Edwardian London', *Visual Resources*, 29 (2013): 154–83

——'Making a Market for Art: Agnew's and the National Gallery, 1850–1944', (unpublished doctoral thesis, University of Manchester, 2018)

Pooley, Colin G., Jean Turnbull and Mags Adams, *A Mobile Century? Changes in Everyday Mobility in Britain in the Twentieth Century,* (Aldershot: Ashgate, 2005)

Preziosi, Donald, 'The Question of Art History', in *Questions of Evidence: Proof, Practice, and Persuasion across the Disciplines*, ed. by James K. Chandler, Arnold Ira Davidson and Harry D. Harootunian (Chicago, IL: The University of Chicago Press, 1994), pp. 203–26.

Pullins, David, 'The Individual's Triumph: The Eighteenth-Century Consolidation of Authorship and Art Historiography', *Journal of Art Historiography*, 16 (2017), 1–26

Return to an Order of the Honorable The House of Commons, Dated 5 March 1907;- for, Copy 'of the Report of the Trustees of the National Gallery, for the Year 1906, with Appendices.' (London: Eyre and Spottiswoode, 1907)

Ripps, M. J., 'A Faustian Bargain? Charles Sedelmeyer, Wilhelm Bode, and the Expansion of Rembrandt's Painted Corpus, 1883–1914', in *Cultural Clearings: The Object Transformed by the Art Market/Schnittstelle Kunsthandel: Das Objekt im Auge des Marktes,* (Nuremburg: CIHA, 2015), pp. 745–47

Roberts, Jennifer L., *Transporting Visions: The Movement of Images in Early America,* (Berkeley, CA: University of California Press, 2014)

Robertson, David, *Sir Charles Eastlake and the Victorian Art World,* (Princeton, NJ: Princeton University Press, 1978)

Russell, Francis, 'The Hanging and Display of Pictures, 1700–1850', *Studies in the History of Art*, 25 (1989), 133–53

Sandino, Linda, 'A Curatocracy: Who and What Is a V&A Curator?', in *Museums and Biographies: Stories, Objects, Identities*, ed by Kate Hill (Woodbridge: Boydell and Brewer, 2012), pp. 87–100

Schivelbusch, Wolfgang, *The Railway Journey: The Industrialisation of Time and Space in the 19th Century,* (Leamington Spa: Berg, 1986)

Schwartz, Gary, '364. The Transparent Connoisseur 5: Keeping the Rembrandt Research Project to Its Word' (8 May 2018) <https://web.archive.org/web/20190305143520/http://www.garyschwartzarthistorian.nl/364-the-transparent-connoisseur-5-keeping-the-rembrandt-research-project-to-its-word/> [accessed 28 November 2018 and 5 March 2019]

Select Committee on the National Gallery: Report from the Select Committee on the National Gallery, (HC 1853, 867)

Shapin, Steven, *A Social History of Truth: Civility and Science in Seventeenth-Century England,* (Chicago, IL: University of Chicago Press, 1994)

Smentek, Kristel, *Mariette and the Science of the Connoisseur in Eighteenth-Century Europe,* (Farnham: Ashgate, 2014)

Smith, Charles Saumarez, *The National Gallery: A Short History* (London: Frances Lincoln, 2009)

Standing, Lionel, 'Learning 10,000 Pictures', *The Quarterly Journal of Experimental Psychology*, 25 (1973), no. 2, 207–22

Summerson, John, *What Is a Professor of Fine Art? An Inaugural Lecture Delivered in the University of Hull on 17 November 1960* (Hull: University of Hull, 1961)

Taylor, Paul, *Condition: The Ageing of Art* (London: Paul Holberton, 2015).

Tucker, Paul, 'Eyesight, Knowledge, Argument: Charles Fairfax Murray on «Scientific» Connoisseurship', *Studi di Memofonte*, 12 (2014), pp. 106–42

——(ed.), *A Connoisseur and his Clients: The Correspondence of Charles Fairfax Murray with Frederic Burton, Wilhelm Bode and Julius Meyer (1867–1914)* (London: Walpole Society, 2017)

Uglow, Luke, 'Giovanni Morelli and His Friend Giorgione: Connoisseurship, Science and Irony', *Journal of Art Historiography*, 11 (2011), 1–30

United Kingdom, *Hansard Parliamentary Debates*, Commons, vol. 81, col. 1337 (1845)

United Kingdom, *Hansard Parliamentary Debates*, Commons, vol. 146, col. 828 (1857)

Vakkari, Johanna, 'Giovanni Morelli's "Scientific" Method of Attribution and its Reinterpretations from the 1960s until the 1990s', *Konsthistorisk tidskrift/Journal of Art History*, 70 (2001), 46–54

Whitehead, Christopher, 'Architectures of Display at the National Gallery: The Barry Rooms as Art Historiography and the Problems of Reconstructing Historical Gallery Space', *Journal of the History of Collections*, 17 (2005), 189–211

——*The Public Art Museum in Nineteenth Century Britain: The Development of the National Gallery,* (Aldershot: Ashgate, 2005)

Wieseman, Marjorie E., *A Closer Look: Deceptions and Discoveries* (London: National Gallery Company, 2010)

Wildsmith, Claire. '"Candid and Earnest": The Rise of the Art Critic in the Early Nineteenth Century', in *Ruskin's Artists: Studies in the Victorian Visual Economy: Papers from the Ruskin Programme, Lancaster University*, ed. by Robert Hewison (Brookfield, CT: Ashgate, 2000), pp. 15–30

Figures

Fig. 1. Michiel Coxcie, *A Man with a Skull*, about 1560 or later, oil on oak, 97 × 75.4 cm Collection National Gallery, London, NG195

<https://www.nationalgallery.org.uk/paintings/michiel-coxcie-a-man-with-a-skull>

Fig. 2. Canaletto, *Venice: S. Pietro in Castello*, 1730s, oil on canvas, 47.3 × 79.5 cm
Collection National Gallery, London, NG1059

<https://www.nationalgallery.org.uk/paintings/canaletto-venice-s-pietro-in-castello>

Caption: *'This Canaletto was one of the eight paintings ultimately selected for acquisition by the National Gallery from the Henderson bequest.'*

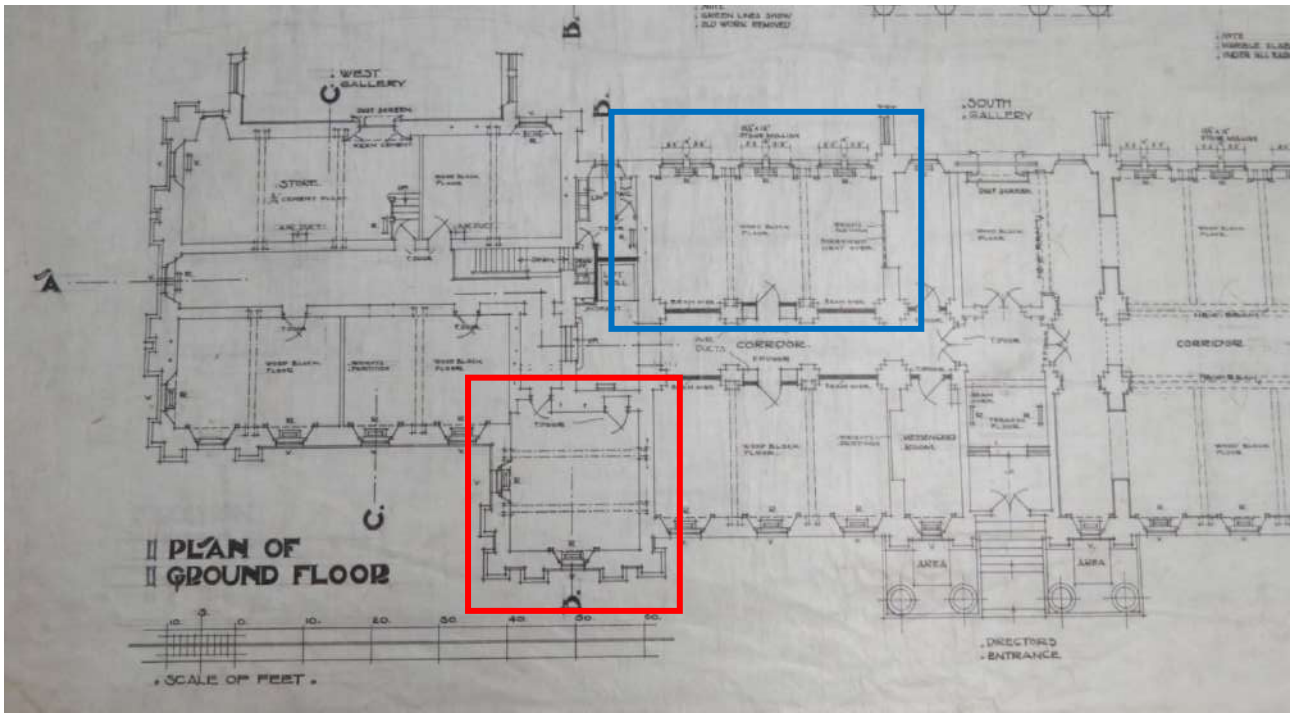

Fig. 3. Office of Works, National Gallery: West Wing. Plan of ground floor and gallery floor (number 2). Scale: 1 inch to 8 feet (detail), 9 August 1910
Collection: The National Archives, WORK 33/1860

Caption: '*The red square has been added to indicate the possible historic location of the Director's Office, and the blue rectangle the Boardroom*'

Fig. 4. Unknown photographer, ‘The Garden Hall’ in Anon., ‘Country Homes: Castle Howard, Yorkshire, the Seat of the Earl of Carlisle’, *Country Life* (13 February 1904), 234-242.

<http://www.countrylifeimages.co.uk/Image.aspx?id=7252e755-4a33-4a78-9cac-31f771e39043&rd=2|castle%20howard||1|20|113|150>

Fig. 5. Stefan Plogmann, *Red Drawing Room of Blenheim Palace*, 2015

<https://gallery.plogmann.net/c/1x1x446x32701ximg.html>

Caption: '***The van Dyck portrait of Charles I on horseback (NG1172) originally hung in what is now the Red Drawing Room at Blenheim Palace, in the company of the Joshua Reynolds portrait of the Fourth Duke of Marlborough and his family that can be seen here on the right.'***

Fig. 6. Pisanello, *The Vision of Saint Eustace*, about 1438-42, egg tempera on wood, 54.8 × 65.5 cm
Collection National Gallery, NG1436

<https://www.nationalgallery.org.uk/paintings/pisanello-the-vision-of-saint-eustace>

Fig. 7. Lorenzo Monaco, *The Coronation of the Virgin: Central Main Tier Panel*, 1407-9, egg tempera on wood, 220.5 × 115.2 cm
Collection National Gallery, NG1897

<https://www.nationalgallery.org.uk/paintings/lorenzo-monaco-the-coronation-of-the-virgin>

Fig. 8. Bartolomé Esteban Murillo, *Portrait of Don Diego Félix de Esquivel y Aldama*, about 1655-1660, oil paint on canvas, 204.5 × 106.7 cm
Collection Denver Art Museum, 1961.67

<https://denverartmuseum.org/object/1961.67>

Fig. 9. Francisco de Goya, *Doña Isabel de Porcel*, before 1805, oil on canvas, 82 × 54.6 cm Collection National Gallery, NG1473

<https://www.nationalgallery.org.uk/paintings/francisco-de-goya-dona-isabel-de-porcel>

Appendix: List of Foreign Journeys Undertaken by National Gallery Directors, 1876–1916

Sir Frederic Burton, National Gallery Director 1874–1894

Date	Places/collections visited	Archival source
1874, April	Mayence	NGA, NG5/191/1
1875, March (after)	The Giustiniani Barbarigo Collection at Padua	NGA, NG5/474/3
1876, June	Milan	NGA, NG5/491/2; NGA, NGA2/3/6/10
1879, April	Sale of the Reiset collection at Paris	The National Archives, T 1/16208
1879	Dresden and Brunswick	NGA, NG6/6/54
1880, February	The Demidoff collection at Florence	NGA, NG6/6/322
1880, October–December	Venice and Milan	Various letters following on from NGA, NG6/6/870
1881, Autumn	Italy	NGA, NG7/27/1 [missing as of December 2015]
1882, May	Brussels	NGA, NG8/5/11; NGA, NG6/8/25
1882, October–December	Milan and Venice	NGA, NG6/8/164; NGA, NG6/8/663; NGA, NG7/39/12

[A letter from the National Gallery to the Treasury dated 29 December 1888 reveals that the Director's 'official journey on the Continent' had been suspended for the last 'three or four years' because of the suspension of the Gallery's purchasing grant. However, the £100 travel provision was reinstated from the 1889–90 financial year onwards.]		NGA, NG6/13/862
1889, October–December	Italy	NGA, NG6/14/628; NGA, NG6/14/709
1891, May	Dr Habick's collection at Basel	NGA, NG1/6, 191-92

Sir Edward Poynter, National Gallery Director 1894–1904

Date	**Places/collections visited**	**Source**
1894, Spring	Milan, Venice, Florence, Rome 'and other cities'	NGA, NG1/6, 293
1895, December	Venice, Milan, Brussels, Padua	NGA, NG7/188/1
1896, May–June	Madrid, Seville, Toledo, Aranjuez, San Lorenzo de El Escorial, Granada	NGA, NG7/195/1
1898, May	Paris and Antwerp	NGA, NG7/223/1
1898, November	Turin, Brescia, Venice, Bologna, Modena, Brussels, Amsterdam, Berlin, Dresden	NGA, NG7/228/19
1899, May	Brussels and Ghent	NGA, NG7/235/12
1899, June	Madrid and Paris	NGA, NG7/236/1
1899, October–November	Antwerp, Brussels, Munich, Colmar, Verona, Ferrara, Bologna, Ravenna, Faenza, Perugia, Assisi, Rome, Siena, Florence, Brussels	NGA, NG7/238/2
1901, May–June	Venice, Rome, Naples, Florence, Milan	NGA, NG7/257/1
1902, January	Florence, Pisa, Siena, Rome, Milan	NGA, NG7/261/1
1902, August	Brussels and Bruges	NGA, NG7/267/3

1903, May	Paris, Avignon, Genova, Florence, Pistoia	NGA, NG7/273/1
1904, November	Berlin, Dusseldorf, Brussels	NGA, NG7/287/6

Sir Charles Holroyd, National Gallery Director 1906–1916

Date	**Places/collections visited**	**Source**
1907, June	Bruges, Vienna, Budapest, Venice, Florence, Perugia, Pisa, Bologna, Ancona, Milan, Paris	NGA, NG7/332/1
1910, December	Brussels	NGA, NG7/383/10
1914, spring	Paris (to view paintings bequeathed by John Murray Scott)	NGA, NG7/446/11

Looking and Learning in the Victorian Classroom

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Abstract:
Observation—what to observe and how to observe it—was a frequent topic of discussion in the public discourse around education in nineteenth-century Britain. But in the context of the schoolroom, what did 'observation' entail? What, exactly, were students supposed to be looking for? And how was the relationship between looking and learning understood and imagined? To answer these questions, this essay draws on British curricular codes, school inspectors' reports, schoolbooks, and texts in educational psychology in order to describe three ways that Victorian educators may have approached perception in the classroom. These three approaches to visual pedagogy offer possibilities within a spectrum of approaches to vision and visuals, ranging between: 1) a pedagogical approach that asserts the primacy and power of observation in the learning process; 2) an approach that employs vision and visuals as important accessories to learning; and 3) an approach that employs vision and visuals to secure student attention but does not make use of observation as an integral part of the learning process. Though the printed lessons, inspectors' reports and curricular codes surveyed here may or may not reveal how individual children were taught, or what they ended up learning, they have potential to tell us a great deal about adult anxieties around vision and visuals, and they offer examples of what some Victorians believed the powers of observation could accomplish. For this reason, Victorian practices of teaching and learning offer a valuable resource for understanding the ideals and anxieties that motivated Victorian aesthetes like John Ruskin and his followers—some of whom were also educationists.

> And now, reader, look round this English room of yours, about which you have been proud so often, because the work of it was so good and strong, and the ornaments of it so finished. Examine again all those accurate mouldings, and perfect polishings, and unerring adjustments of the seasoned wood and tempered steel. Many a time you have exulted over them, and thought how great England was, because her slightest work was done so thoroughly. Alas! If read rightly, these perfectnesses are signs of a slavery in our England a thousand times more bitter and more degrading than that of the scourged African, or helot Greek.[1]

John Ruskin's exhortation to readers to 'look round' their living rooms, from *Stones of Venice*, offers one of the most well-known object lessons of the Victorian period, and sums up two key principles of object lesson pedagogy: first, that one can learn from first-hand observation of objects, and second, that there

[1] John Ruskin, 'The Nature of Gothic', in *The Works of John Ruskin*, Vol. 10, ed. by E. T. Cook and Alexander Wedderburn, 39 vols (London: G. Allen, 1904), pp. 180-269 (p. 193).

are 'right' and 'wrong' ways to look. Today, the term 'object lesson' is used in general terms to describe any instance of a concrete example that illustrates an abstract concept, but in the nineteenth century, the object lesson was a specific pedagogical method, and it can tell us much about how Victorian educationists and psychologists understood the relationship between observation and learning. Introduced by the Swiss educator Pestalozzi around the turn of the nineteenth century, object lessons depended on first-hand observation of common objects, and the purpose was to cultivate habits of attentive observation and inquiry, rather than to impart information. Instead of organizing a lesson around facts to be learned, a teacher giving an object lesson would prompt students to make their own observations about an object—much in the way that Ruskin encourages his readers to look for themselves at their furnishings.

Ruskin's famous passage from *Stones of Venice* is not typically described as an 'object lesson'. Art historian Tim Barringer and literary scholar Dina Birch both provide extended readings of the chapter from which this passage originates, 'The Nature of Gothic', and point to its status as one of the 'founding texts of British socialism'.[2] But, as Barringer and Birch explain, 'The Nature of Gothic' also played a role in British education, and was adopted as a manifesto for the Working Men's College when it was founded in 1854.[3] 'The Nature of Gothic' also describes Ruskin's own pedagogical practices, many of which resemble object lesson pedagogies. As Sara Atwood and Kristin Mahoney have shown, the emphasis throughout Ruskin's drawing courses at the Working Men's College in the 1850s was on close observation; systematic instruction aimed at achieving 'perfectness' in a finished drawing was avoided entirely.[4] Much like the object lesson, the purpose of drawing in such classes was to promote attentive observation and inquiry, not to impart information. And as Atwood has documented, Ruskin frequently provided specimens to his students and to schools in order to facilitate a kind of learning that depended on first-hand observation.[5]

Though Ruskin's ideas about labour and education resonate with the theory and practice of the object lesson, the connection between the two has not been discussed in the literature on Ruskin.[6] This absence is not surprising, since far

[2] Tim Barringer, *Men at Work: Art and Labour in Victorian Britain* (New Haven, CT: Yale University Press, 2005), p. 255; and Dinah Birch, *Our Victorian Education* (Malden, MA: Blackwell, 2008), p. 140. Both Barringer and Birch use the same phrase.

[3] 'The Nature of Gothic' circulated as a pamphlet at the inaugural lecture for the Working Men's College. See Barringer, p. 255; Birch, pp. 68 and 140-45; Sara Atwood, *Ruskin's Educational*
Ideals (Burlington, VT: Ashgate, 2011), p. 52; and Kristin Mahoney, 'Work, Lack, and Longing: Rossetti's "The Blessed Damozel" and the Working Men's College', *Victorian Studies*, 52.2 (2010), pp. 219-48 (p. 223).

[4] Atwood, pp. 51-55; and Mahoney, pp. 226-27. See also Barringer, p. 143; and Birch, pp. 140-43.

[5] Atwood, pp. 36, 126-27, and 156-57.

[6] For example, in *Ruskin's Educational Ideals*, Atwood writes that Ruskin's approach was 'a far cry from the rote learning, mechanical catechisms, and object lessons that characterised all but the most progressive mid-Victorian schoolrooms', and thus pits Ruskin against one

less attention has been given to object lessons than to Ruskin in existing scholarship.[7] Furthermore, while Ruskin is typically treated as a unique figure, object lessons became standardized and pervasive over the course of the century. But putting these two areas of study together helps contextualize Ruskin's ideas within other discourses of his time, while also providing an expanded understanding of Victorian vision and visuality that moves beyond singular, exceptional, and exceptionally prolific figures like Ruskin. The aim of this essay is to do exactly that, by moving away from Ruskin's already well-known writings in order to consider a wealth of historical material describing the ways that vision and visuals were employed in the British educational system in the nineteenth century, when education was increasingly taken up as a public concern.

Within the context of this growing educational system, observation—what to observe and how to observe it—was a frequent topic of discussion. Among nineteenth-century educationists, individual observation seemed to offer an antidote to an apparently passive mode of rote learning,[8] but the emphasis on observation in educational discourse also raises questions about the visual practices of Victorian schoolteachers and schoolchildren. In the context of the schoolroom, what did 'observation' entail? What, exactly, were students supposed to be looking for? And how was the relationship between looking and learning understood and imagined?

My research shows that a range of answers to these questions circulated in the Victorian period, and thus contributes to scholarship on Victorian vision and visuality that has sought to move away from overarching, paradigmatic explanations of visual experience by paying attention to 'individual visual encounters' and seeking a more 'pluralistic understanding of polydynamic

version of the object lesson (p. 88). One study that has drawn connections between the object lesson and Ruskin's approach to observation is Melanie Judith Keene, 'Object Lessons: Sensory Science Education 1830-1870' (unpublished doctoral thesis, Darwin College, University of Cambridge, 2008), pp. 42-43, 91-92, and 255.

[7] Recent scholarship that focuses on object lessons includes Sarah Carter, *Object Lessons: How Nineteenth-Century Americans Learned to Make Sense of the Material World* (New York, NY: Oxford University Press, 2018); Keene, 'Object Lessons'; Andrea Korda, 'Object Lessons in Victorian Education: Text, Object, Image', *Journal of Victorian Culture*, forthcoming, <doi: 10.1093/jvcult/vcz064>; and Parna Sengupta, 'An Object Lesson in Colonial Pedagogy', *Comparative Studies in Society and History*, 45.1 (2003), pp. 96-121.

[8] For discussions of rote learning in Victorian education, see Birch, pp. 26-28; Sheila Cordner, *Education in Nineteenth-Century British Literature: Exclusion as Innovation* (New York, NY: Routledge, 2016), pp. 7-10; Henry Midgley, 'Payment by Results in Nineteenth-Century British Education: A Study in How Priorities Change', *The Journal of Policy History*, 28.4 (2016), pp. 680-706 (pp. 692–95); Catherine Robson, *Heart Beats: Everyday Life and the Memorized Poem* (Princeton, NJ: Princeton University Press, 2012), pp. 57–64; Janice Schroeder, 'Victorian Education and the Periodical Press', *Victorian Periodicals Review*, 40.1 (2017), pp. 679-85 (p. 683); and Sarah Winter, *The Pleasures of Memory: Learning to Read with Charles Dickens* (New York, NY: Fordham Press, 2011), pp. 243-54. The literature on Ruskin also discusses his criticism of rote learning, and particularly of the mechanical approach to drawing promoted at the South Kensington School of Art. See Atwood, pp. 46-47; Barringer, pp. 143-44; and Mahoney, pp. 225-28.

[visual] "experiences"'.[9] This article contributes to these efforts by taking up a different discursive context—that of the educational system—and examining the wide range of approaches to vision and visuals that circulated within that context. In contrast to scholarship that attends primarily to scientific, literary, or artistic contexts, a focus on educational contexts, especially at a time when the British educational system was expanding and thus reaching increasing proportions of the population, provides an opportunity to examine vernacular approaches to vision and visuality.

In what follows, I begin with an overview of Victorian visual pedagogies by concentrating on the introduction and codification of object lessons in Britain's curricular code, as described in annual codes and school inspectors' reports. Next I describe three ways that Victorian educators approached perception in the classroom: 'metaperception', 'voluntary perception', and 'spontaneous perception'. The names I've chosen for these approaches reflect the discourse of nineteenth-century educational psychology, an emerging field that developed alongside the growth of state-funded education in Britain. This is not an exhaustive account of how vision was deployed in nineteenth-century schools; we will never really know what happened in each and every classroom, nor will we know what individual students absorbed from their lessons. As Jacqueline Rose explains in *The Impossibility of Children's Literature*, we learn very little about children through stories intended for them. Instead, children's literature and, in this case, lessons intended for children tell us much about adult concerns and ideals.[10] While the lessons may or may not reveal how individual children were taught, or what they ended up learning, they tell us a great deal about adult anxieties around vision and visuals, and offer examples of what some Victorians believed the powers of observation could accomplish. For this reason, Victorian practices of teaching and learning offer a valuable resource for understanding the ideals and anxieties that motivated Victorian aesthetes like Ruskin and his followers—some of whom were also educationists.[11] I will return to this point in the final section of the essay, where I briefly return to Ruskin's writings to emphasise the connections between aesthetic and educational discourses, which

[9] Martin Willis, *Vision, Science, and Literature: 1870-1920: Ocular Horizons* (Pittsburgh, PA: University of Pittsburgh Press, 2016), p. 5; and Jonathan Potter, *Discourses of Vision in Nineteenth-Century Britain: Seeing, Thinking, Writing* (London: Palgrave Macmillan, 2018), p. 1.

[10] Jacqueline Rose, *The Case of Peter Pan, or, The Impossibility of Children's Fiction* (Philadelphia, MA: University of Pennsylvania Press, 1984), pp. 1-2.

[11] In referring to Victorian aesthetes, I follow Diana Maltz's use of the term 'aestheticism', which depends on the observation that 'British aestheticism was not one coherent movement, but actually encompassed several sub-movements with often contradictory agendas' (p. 20). Maltz focuses particularly on 'missionary aesthetes', who 'believed that to live an aesthetic life in a practical sense required a commitment to organized movements' (p. 2). Some of these aesthetes were involved in initiatives in education. See Diana Maltz, *British Aestheticism and the Urban Working Classes, 1870-1900: Beauty for the People* (London: Palgrave Macmillan, 2006).

both included concerns about an onslaught of visual distractions in the nineteenth-century visual environment.

Visual Pedagogies from 1839 to 1895

In 1839, Parliament formed the Committee of Council on Education to distribute government grants to schools and oversee the inspections that came along with funding.[12] Inspectors' reports, published annually along with the Minutes of the Committee of Council on Education, are instructive sources for considering the role of visuals and visuality in the Victorian schoolroom. Beginning with the first round of reports in the early 1840s, inspectors consistently expressed a concern about the mechanical, rote learning they observed in classrooms.[13] To address this apparent problem, inspectors frequently recommended the use of illustrations and student observation, which were understood to promote genuine comprehension and deep learning. For example, one inspector noted that 'to children, mere verbal explanations, as every one will perceive, are of no use whatever; but when practically illustrated before their eyes by experiment, they become not only one of the most pleasing sources of instruction, but absolutely one of the most useful'.[14] Inspectors also recommended the use of pictures, maps, and blackboard drawings, as well as object lessons.[15]

Object lesson pedagogy built on the principles of faculty psychology, which understood the mind as made up of individual faculties that must be strengthened through exercise. The faculties were envisioned in a hierarchy, with sense perception forming the first of the faculties and thus requiring cultivation in early education. Once the faculty of perception was mastered, students could rely on the materials gathered through their perception to fuel other intellectual faculties, moving on to cultivate memory, conception, analysis, abstraction, imagination, classification, judgment and reasoning.[16] In their earliest

[12] For details regarding the expenditure of grants, see James Kay-Shuttleworth, *Memorandum on the Present State of the Questions of Popular Education* (London: W. Clowes and Sons, 1868), p. 7-11.

[13] In the very first report to the committee, for example, one school inspector complained that 'a power of reading the Bible mechanically may be imparted, but there is often a want of adequate skill and competent knowledge to convey a due comprehension of meaning of what is read'. *Report of the Committee of Council on Education (England and Wales), 1839-40* (London, 1840), p. 178, in *Proquest U.K. Parliamentary Papers* [accessed 20 December 2018]. Yet concerns about rote learning were not particular either to England or to the nineteenth century. Seventeenth- and eighteenth-century critics of rote learning include Thomas Hobbes, John Locke, John Amos Comenius, Jean-Jacques Rousseau, and Maria Edgeworth. See Elspeth Jajdelska, 'Income, Ideology and Childhood Reading in the Late Seventeenth and Early Eighteenth Centuries', *History of Education* 33.1 (2004), pp. 55-73; and Winter, pp. 228-29.

[14] *Report of the Committee of Council on Education, 1847-48*, p. 17.

[15] For examples, see *Report of the Committee of Council on Education, 1844-45*, pp. 249-51; *Report of 1849-50*, pp. 270-75; and *Report of 1857-58*, pp. 556, 804, and 814.

[16] On the relationship between object lessons and the faculties, see Charles Mayo and Elizabeth Mayo, *Pestalozzi and his Principles*, 4th ed. (London: published for the Home and Colonial

incarnation, object lessons aimed entirely at developing students' faculties, starting with sense-perception and working up to judgment and reasoning. As the school inspector Joseph Fletcher described in 1845: 'the little one in the infant school is interested and delighted by the training of its faculties as they are successively developed, beginning with that of perception or observation […] In the hands of a good teacher, the familiar objects and events around it are the most valuable instruments of instruction.'[17] By 1857, another inspector reported that the 'teaching of "common things"' had 'of late obtained so firm a footing amongst English educationists', and explained that the practice 'connects the exercise of the understanding with familiar objects, and, in return, things the most simple become a source of inquiry and reflection'.[18]

In 1862, a revised curricular code streamlined the curriculum to focus on reading, writing and arithmetic, rather than on the power of observation. The system of grant-giving was also modified, so that funding was tied to the performance of each individual student on the day of inspection, and many educationists believed that the new system would lead to greater dependence on rote learning. James Kay-Shuttleworth, who served as Secretary of the Committee of Council on Education during its first decade, was a vocal opponent of the Revised Code of 1862, complaining that 'the Capitation Grant was so apportioned according to the results of [the school inspector's] examination as practically to discourage higher instruction' since 'the best means to attain this end were the concentration of the work of the school on a drill in these three rudiments'.[19]

Many school inspectors supported Kay-Shuttleworth's position. Inspector Joseph Bowstead suggested that 'the result [of the Revised Code] will be that these essential subjects will undoubtedly be taught more quickly and more effectually than heretofore; but there is the attendant danger that the teaching will be merely mechanical, and that in many schools no effort will be made to develope [sic.] the children's intelligence'.[20] Similarly, Inspector Joshua Girling Fitch wrote that he 'cannot resist the unwelcome conviction that the New Code

School Society 1890); Alexander Bain, *Education as a Science* (London: C. Kegan Paul & Co., 1879); and Adonijah Strong Welch, *The Teachers' Psychology: A Treatise on the Intellectual Faculties, the Order of Their Growth, and the Corresponding Series of Studies by Which They are Educated* (New York, NY: E.L. Kellogg & Co., 1889). On faculty psychology, see Vernon C. Hall, 'Educational Psychology from 1890 to 1920', in *Educational Psychology: A Century of Contributions*, ed. by Barry J. Zimmerman and Dale H. Schunk (Mahwah, NJ: Lawrence Erlbaum, 2003), pp. 10-13; Robert Hoeldtke, 'The History of Associationism and British Medical Psychology', *Medical History* 11.1 (January 1967), pp. 46-65; and Jenny Taylor and Sally Shuttleworth, *Embodied Selves: An Anthology of Psychological Texts, 1830–1890* (Oxford: Clarendon Press, 1998), pp. 67-69; and Helen Small, 'Subjectivity, psychology, and the imagination', in *The Cambridge History of Victorian Literature*, ed. by Kate Flint (Cambridge and New York, NY: Cambridge University Press, 2012), pp. 489-90.

[17] *Report of the Committee of Council on Education, 1844-45*, p. 247.

[18] *Report of the Committee of Council on Education, 1856-57*, pp. 556-557.

[19] Kay-Shuttleworth, p. 12. See also Birch, pp. 26-27.

[20] *Report of the Committee of Council on Education, 1864-65*, p. 161.

is also tending to formalize the work of the elementary schools, and to render it in some degree lifeless, inelastic, and mechanical'.[21] Of course object lessons could also be rendered lifeless and mechanical, as described by one inspector in 1863, who complained that 'it is no rare thing to see what are called "object-lessons" given to infants without any notice whatever being taken of the objects themselves, even when these are close at hand'. The result is that 'the poor bewildered infant [...] is effectually prevented from [learning] by the dry indigestible husks of classification with which the teacher tried to cram him'.[22]

Successive iterations of the educational code attempted to alleviate the apparent problem of mechanical learning by emphasising the utility of illustration and observation. In 1871, the Education Department advised that 'new plans may be proposed, by which children may be enabled to gain scientific ideas from the study of natural objects and from careful direction of their power of observation'.[23] By 1877, these new plans began to take shape, with a revised code warning that 'if these subjects [science subjects and physical geography] are taught to children by definition and verbal description, instead of by making them exercise their own powers of observation, they will be worthless as means of education'.[24]

The New Code of 1882 took this warning further by prescribing the use of object lessons as part of the optional class subject of elementary science. Borrowing from the language of object lessons to describe the requirements for elementary science, the code explained that the lessons should focus on 'familiar animals, plants, and substances employed in ordinary life' and must be 'adapted to cultivate habits of exact observation, statement, and reasoning'.[25] In 1895, further revisions to the educational code made object lessons compulsory for standards I through III, thereby making observation central to the curriculum. This change also made it necessary to provide further instructions as to appropriate delivery.[26] A circular addressed to Her Majesty's Inspectors on the topic of 'Object Teaching' provided such instruction, while also pointing out some of the ways that object lessons had gone wrong in the past, devolving, as the earlier inspector had put it, into 'dry indigestible husks of classification', or as the author of the circular suggested, into 'Information Lessons'.[27]

The distinction between 'object lessons' and 'information lessons' provides a helpful starting point for thinking about the ways in which observation was deployed in Victorian schoolrooms. According to the circular's author, G. W. Kekewicil, the primary purpose of object teaching was 'the cultivation of the faculty of observation', which must be accomplished through 'observation of the

[21] *Report of the Committee of Council on Education, 1864-65*, p. 171.
[22] *Report of the Committee of Council on Education, 1862-63*, p. 89.
[23] *Report of the Committee of Council on Education, 1870-71*, p. cxxiv.
[24] *Report of the Committee of Council on Education, 1876-77*, p. 28.
[25] *Report of the Committee of Council on Education, 1881-82*, p. 134.
[26] *Report of the Committee of Council on Education, 1894-95*, pp. xi-xii and 315.
[27] 'Circular to H.M. Inspectors, Circular 369', in *Report of the Committee of Council on Education, 1894-95*, p. 530.

Object itself'. For Kekewicil, 'the imparting of information is secondary'.[28] Although not explicitly articulated by the circular, a significant difference between object lessons and so-called information lessons is the power that each one invests in the visual. Object teaching in its ideal form depends on vision and visuals as the primary component of the learning process. For Kekewicil, the object lesson becomes an information lesson when teachers diverge from this model, treating vision and visuals as useful accessories or even as unnecessary diversions.

The three approaches to visual pedagogy I have identified are not cohesive models for teaching and learning. Rather, they are possibilities within a spectrum of approaches to vision and visuals, ranging between: 1) a pedagogical approach that asserts the primacy and power of observation in the learning process; 2) an approach that employs vision and visuals as important accessories to learning; and 3) an approach that employs vision and visuals to secure student attention but does not make use of observation as an integral part of the learning process.

Metaperception

I have called the first of these three pedagogical approaches to vision and visuality 'metaperception', to indicate its emphasis on the act of perception itself, and on cultivating students' perceptual abilities; what is perceived is, at least in theory, inconsequential. This is the ideal model of object teaching described in the 1895 Circular on 'Object Teaching', where Kekewicil explains that the aim of such teaching is to 'cultivate the habit of obtaining knowledge directly and at firsthand' and to 'develop the faculty of observation'.[29]

Some of the earliest and most popular books to promote this type of teaching were written by Elizabeth Mayo (1793-1865), a teacher and educational reformer based in London. Through her brother Charles Mayo, with whom she helped found the Home and Colonial School Society in 1836, Mayo was introduced to the ideas of the Swiss educator Johann Heinrich Pestalozzi (1746-1827). From 1819 to 1822, Charles lived with Pestalozzi at his school at Yverdon; upon his return to England, he brought with him the idea of the 'object lesson', which prompted students to learn from first-hand experiences with objects, with the purpose of developing the mental faculties.[30] The purpose was for students to exercise and improve their observational skills, thereby learning how to use their perception as a means of acquiring knowledge on their own.

In *Lessons on Objects*, first published in London in 1830 and reissued in subsequent editions throughout the century, Mayo begins by stating that 'the first step in the business of education' is 'to lead children to observe with attention the objects which surround them, and then to describe with accuracy the impressions

[28] 'Circular to H.M. Inspectors, Circular 369', p. 530.
[29] 'Circular to H.M. Inspectors, Circular 369', p. 530.
[30] Mayo, *Pestalozzi and his Principles*, p. 143; Carter, pp. 4-21 and 29-32.

they convey'.[31] In another schoolbook, *Lessons on Shells*, Mayo outlined her methods and aims in more explicit terms, explaining that the purpose of the book was not to teach the 'science of conchology', but 'to develop children's powers of observation, comparison and classification; and to cultivate habits and tastes, which may in after life lead to a more correct and scientific study of the subject'.[32]

While Mayo's first book of object lessons contained no images whatsoever, *Lessons on Shells* featured ten plates with engravings of shells (fig. 1). However, the pictures came with the warning that 'they are intended as an assistant to the teacher, but not as a substitute for the shells themselves in the instruction of pupils'.[33] Throughout her writings, Mayo is adamant that 'the object itself should be presented to the children; that their knowledge be acquired by themselves, instead of all being simply communicated by the teacher'.[34] The danger of 'simply communicating' information to pupils, for Mayo, was that 'though they may receive the information with pleasure, and appear to profit by it, yet under such a mode of instruction their minds remain passive, and they acquire a habit of receiving impressions from others, at a time when they ought to be gaining mental power by the exertion of their own faculties'.[35]

Mayo's distrust of pictures needs to be understood in terms of how she and other educators of the time understood 'observation'. For Mayo and other promoters of object lessons, observation did not rely solely on vision, or on what could be communicated through visual representations. Observation was an embodied process that depended on all of the senses. For example, in the very first lesson in Mayo's *Lessons on Objects*, students are instructed to feel a piece of glass in order to determine that it is both smooth and hard; later, students learn that water is both tasteless and inodorous.[36] Furthermore, the final set of lessons in Mayo's book treat the senses themselves. As Mayo explains: 'The children having already been exercised in determining by which of the senses they discover the presence of any quality, may now be led to consider more fully the senses themselves.'[37] It is in these lessons, where students are asked to consider 'how you have gained the knowledge of various qualities', that students engage most explicitly in what I have called 'metaperception', or what we might call metacognition, defined by the *Oxford English Dictionary* as 'awareness and understanding of one's own thought processes'.[38] Metaperception, then, is a

[31] Elizabeth Mayo, *Lessons on Objects*, 6th ed. (London: R. B. Seeley and W. Burnside, 1837), p. 1. The latest edition I have been able to locate is a 22nd edition published in London by Seeley and Burnside in 1876.
[32] Elizabeth Mayo, *Lessons on Shells* (London: R. B. Seeley and W. Burnside, 1838), p. xi.
[33] Mayo, *Lessons on Shells*, p. xi.
[34] Mayo, *Lessons on Shells*, p. 53.
[35] Mayo, *Lessons on Objects*, pp. 3-4.
[36] Mayo, *Lessons on Objects*, pp. 6 and 13-14.
[37] Mayo, *Lessons on Objects*, p. 198.
[38] Mayo, *Lessons on Objects*, p. 198; and "Metacognition, n.," *OED Online* (Oxford University Press, 2019) <www.oed.com/view/Entry/245252> [accessed 9 April 2019].

means of cultivating such awareness with the goal of heightening one's ability to perceive, and to make meaning out of one's perceptions.

Mayo's account of student observation accords with previous scholarship on nineteenth-century visuality that proposes a paradigmatic shift towards a more subjective understanding of vision.[39] Mayo's observers are embodied, corporeal observers, and it is precisely because of this corporeality that these observers must be trained to master their perceptions. In particular, Mayo's suspicion of images supports Lorraine Daston and Peter Galison's argument regarding nineteenth-century objectivity.[40] Much like the nineteenth -century scientists described by Daston and Galison who adhered to a discourse of mechanical objectivity, Mayo insisted that objects of study should not be filtered through the subjective interpretation of an artist. Daston and Galison argue that a concern to eliminate the artist's subjectivity resulted in the methods of mechanical objectivity in scientific image making, and shifted the onus of interpretation from the artist to the viewer.

However, paying attention to the particularities of Mayo's methods undercuts any easy application of Daston and Galison's framework. Rather than being motivated by the threat of subjective image-making, Mayo's schoolbooks suggest that her primary concern was to cultivate the perceptive and interpretive capacities of viewers, and that shifting the onus of interpretation to the viewer came first. When it came to the study of shells, for example, Mayo insisted that students wade through a full sensory experience of shells themselves not because she was concerned about their interpretations getting muddied by the bodily perceptions of those who created the representations; after all, the pictures were appropriate for teachers. Rather, Mayo insisted on actual objects because the point was for students to learn how to sort through and master an onslaught of perceptions on their own. The popularity of the object lesson, and its underlying concern with cultivating the faculty of perception, thus provides an additional factor to consider in explaining the development of the discourse of mechanical objectivity, and introduces a more polydynamic discussion of nineteenth-century visuality.

Yet object lessons did not always unfold in the classroom in the ideal ways Mayo had in mind, as demonstrated by the 1895 Circular. Aside from disjunctions between theory and actual practice, as when teachers neglected the use of actual objects in their lessons, there are also contradictions within the theory of object lessons—even when they are carried out in an ideal way. For instance, there is a tension between Mayo's insistence on a student's free exploration of an object in the one-to-one relationship between student and object, and her equally adamant insistence on the correct interpretation of the objects. By the third page of *Lessons on Shells*, students are already learning that 'when we are struck with the beauty and utility of any of God's works, we not merely admire the thing, but praise God

[39] For an overview of this scholarship, see Potter, p. 2 and Willis, pp. 1-5.

[40] Lorraine Daston and Peter Galison, *Objectivity* (New York, NY: Zone Books, 2007), pp. 115-90.

for his wisdom, and thank him for his goodness'.[41] This emphasis on a theological interpretation of the natural world continues throughout the volume, showing that what students were supposed to learn did not always inhere in the object itself, and could not be gleaned solely through observation, even when all of the senses were involved.

This mingling of the visible and invisible is also apparent in *Lessons on Objects*, where students are led through encounters with both raw materials and manufactured objects, and with both local English resources and resources imported from colonies. The lesson on brown sugar, for example, introduces students to the terms 'foreign' and 'imported', which are both included in the list of qualities to be observed, alongside perceptible qualities such as brown, granulous, sweet, soluble, opaque, and sticky.[42] Following this list of qualities, teachers are informed that brown sugar is 'obtained from the Sugar Cane, which is cultivated in the East and West Indies'.[43] Yet the bodies of the people who labour in the sugar fields go entirely unremarked. They are thereby removed from both the teacher's and the students' fields of vision, and thus rendered unknowable within the confines of the English schoolroom. In contrast, Ruskin's object lesson from *The Stones of Venice* sought to make labour visible, suggesting that slave labour could be made discernible by close looking.

These examples show that though metaperceptual approaches to teaching and learning emphasized each student's individual bodily perceptions, there was an equal emphasis on aspects, which were imperceptible to the senses. Ruskin's and Mayo's object lessons show us that perception alone was often inadequate for teaching students how to interpret their perceptions—how to move from a point of looking to a position of learning and knowing. With this in mind, the difference between 'object lessons' and 'information lessons' becomes increasingly difficult to discern.

Sustained Perception

This next approach to teaching and learning with visual materials muddies the line between 'object lessons' and 'information lessons' even further by emphasizing the information to be learned through object lessons or, more commonly, through picture lessons. In this model, visuals help secure and sustain the attention of students, and though such visuals play a role in training students' perceptive abilities, the final goal is to deliver information.

An American edition of Mayo's *Lessons on Objects* from 1835, titled *Lessons on Common Things*, provides an early example of this supposed adulteration of the object lesson. Though the editor, John Frost, reprinted Mayo's introductory remarks emphasizing the importance of developing the perceptive faculties, his version includes fifty-two wood engravings. Additionally, the stated

[41] Mayo, *Lessons on Shells*, p. 3.
[42] Mayo, *Lessons on Objects*, p. 50.
[43] Mayo, *Lessons on Objects*, p. 51.

purpose of the book is to help 'the pupil acquir[e] more definite ideas of the meaning of words, and the exact properties and qualities they indicate'.[44] The emphasis, then, is on developing knowledge through perception, rather than developing perception per se, and objects, pictures of objects, and texts can all contribute to this process. The 'Object Teaching' Circular from 1895 also promotes this approach by emphasizing the role that 'diagrams, pictures, models, or lantern slides' could play in illustrating lessons. The actual objects that were so important to Mayo, along with the training of senses other than sight, tend to fall by the wayside, so long as 'suitable appeal was made to the eye of the scholar'.[45]

These shifting priorities correspond to contemporary discourses within the emerging field of educational psychology. Over the course of the nineteenth century, faculty psychology lost much of its authority and began to appear outdated to a new crop of experimental psychologists. The psychologist William James, addressing teachers in 1899, wrote that 'the popular idea that… a general elementary faculty, can be improved by training, is a great mistake'.[46] Earlier, the educational psychologist James Sully explained that 'the hypothesis of faculties' leads to 'the false supposition that mental activity […] is a juxtaposition of totally distinct activities answering to a bundle of detached powers'.[47] Replacing the model of disparate faculties within the mind was a model that paid greater attention to external stimuli. Rather than treating sensory perception as a muscle that could be exercised and strengthened in isolation, sensory perception increasingly came to be understood as dependent on the materials to be perceived, and their ability to gain the interest of students.

Along with this understanding came an insistence on the value of visual materials to secure student interest and promote learning. In 1879, the Scottish psychologist Alexander Bain explained that 'pictures, images, or descriptions' make the strongest impression.[48] In his *Teacher's Handbook of Psychology* of 1886, Sully wrote that 'the permanence of an impression depends on the degree of interest excited by the object', and that since 'we appear to recall sights best of all', 'our knowledge of things is largely made up of visual pictures'.[49] These quotations show that visual materials were understood as important teaching aids due to their ability to secure student attention. The ultimate purpose of these visual materials was not to cultivate the senses, as it was with metaperception,

[44] *Lessons on Common Things*, ed. by J. Frost (Philadelphia, MA: Thomas T. Ash, 1835), p. 2. A second edition of Frost's version of the text was published in Philadelphia by J.B. Lippincott & Co. in 1857.
[45] 'Circular to H.M. Inspectors, Circular 369', p. 530.
[46] William James, *Talks to Teachers on Psychology: and to students on some of life's ideals* (New York, NY: Henry Holt and Company, 1899), 129-130.
[47]James Sully, *Outlines of Psychology with Special Reference to the Theory of Education* (London: Longmans, Green & Co., 1885), p. 37.
[48] Bain, pp. 179 and 216.
[49] James Sully, *The Teacher's Handbook of Psychology* (London: Longmans, Green, & Co., 1886), pp. 163 and 184.

but to secure a sustained attention in order to acquire knowledge about a particular topic. For teachers working to improve a student's ability to perceive in a sustained way, object lessons were also valued, but their purpose is somewhat transformed, leading Bain to complain that using the term 'object lesson' can be misleading.[50]

The contradictory ways that object lessons were enacted can already be seen in the methods advocated by Mayo, where much of the lessons depended on an ideological interpretation that is imperceptible. These contradictions grew increasingly insistent once object lessons were adopted by the New Code of 1882, when these lessons were increasingly standardized in schoolbooks and manuals offering aids to teachers. Such materials, frequently adopting the term 'object lesson' and assuring teachers that the lessons correspond to the updated curricular code, include visual materials in various ways.[51] Oliver and Boyd's *Object-Lesson Cards*, for example, consisted of three series, treating the Vegetable Kingdom, Animal Kingdom and Mineral Kingdom, respectively. Approximately one-third of each card is filled with visual and tactile materials, including wood-engraved images, raw materials and finished products, while the remaining two-thirds of each card is filled with informational text. The card on 'The Sheep', for instance, featured an engraving of three sheep in a rugged landscape. Surrounding the picture to the right and left are specimens of wool, thread, cloth, paper, roan (a type of leather), and catgut (used as strings in musical instruments), which are all products derived from sheep [Figure 2]. These tactile objects are attached to the card, offering students an opportunity to engage first-hand with the material itself. This combination of actual specimens with images and text may have been unique, since not many of examples of this kind survive in collections—although it is just as likely that the tactile nature of the specimens hastened the cards' destruction thus contributing to their seeming rarity. Either way, the cards help dramatize the tension between object lessons and information lessons, offering a physical embodiment of the way in which visual specimens were framed by information, and were often inextricable from that information.

Most of the educational materials that survive in library collections take the form of schoolbooks, and rely on two-dimensional, exclusively visual representations. Still, there was a tendency to combine different types of representations in order to offer different perspectives on the objects of study. *Blackie's Object-Lesson and Science Readers* included different types of pictures, some of which showed the objects of study in narrative pictures, others isolating the objects as specimens. In a lesson on 'The Horse', for example, a line drawing of a horse's skull faces a page featuring a lively image of a 'Herd of Wild Horses' [Figure 3]. The illustration of the 'Skull of a Horse' is scientific in tone

[50] Bain, p. 134.

[51] For examples, see *Blackie's Object-Lesson and Science Readers, No. I and II* (London: Blackie & Son, 1893); *The Graphic Object Reader* (London and Glasgow: William Collins, Sons & Co., 1898); *Object Lessons in Elementary Science* (London: Macmillan, 1894); and *The Avon Object Lesson Handbook* (London: Sir Isaac Pitman & Sons, 1897).

with numbers labelling features of the skull that identify 'cutting teeth' and 'grinding teeth'.[52] In contrast, the picture of wild horses is replete with shading and texture to indicate movement and variety. The horses' bodies are placed at conflicting angles and overlap one another, while the tightly framed composition and faded edges of the vignette suggest that we are witnessing a small part of a larger scene. Here, it is the chaos and frenzy communicated by the image's narrative that illustrates the lesson, rather than the clearly labelled component parts of a specimen drawing. In addition, the artist's initials can be seen in the bottom left-hand corner of 'Herd of Wild Horses', suggesting the importance of the hand of an artist in creating the representation, while no such signature appears alongside the 'Skull of a Horse'.[53]

A similar variety of illustrations are present side-by-side in *The Graphic Object Reader*, published by William Collins, Sons & Co. in London and Glasgow in 1898. The lesson on the horse features a picture of a horse with its foal set within an appropriately pastoral landscape [Figure 4]. The picture is most likely rendered with chromolithography, which was common by the end of the century, and the vibrant greens, muddy browns and blue sky help animate the picture so that it appears not just as a specimen of a horse and its foal, but also as a narrative picture set within the English countryside. Any number of lessons could be drawn out of this picture, from a discussion of the visible features of the horse, to a lesson on the horse and its environment, or even a consideration of the relationship between horse and foal, especially when paired with the similar picture of a donkey and its foal just beneath. The following pages feature pictures in black and white that focus more on the specific information to be communicated to students [Figure 5]. On the left-hand side is a picture of a horseshoe that takes on the appearance of an isolated specimen, much like the decontextualized horse's skull featured in *Blackie's Object-Lesson and Science Readers*. The facing page provides an example of a blackboard drawing that could be copied by the teacher or student. The drawing of the horse, with its emphasis on simplified lines that could be easily reproduced, eliminates superfluous information that might lead the lesson in various directions, and thus helps to also simplify and streamline the lesson.

The two books discussed here, with their varied examples and wealth of imagery, are typical of over 40 schoolbooks published between 1882 and 1905 currently in the collections of the British School Museum in Hitchin and the British Library in London. The variety of pictures found within such schoolbooks appear to celebrate the possibilities for illustration and the potential of up-to-date technologies to deliver powerful visuals to students. The primary purpose is not to train the senses or demonstrate the power of observation; notably, the only sense involved is that of sight. Rather, these materials deliver information effectively and comprehensively, and also show how different media could be used to advantage. Furthermore, characteristics of objects that remain

[52] *Blackie's Object-Lesson*, p. 24.
[53] *Blackie's Object-Lesson*, p. 25.

imperceptible in Mayo's and Ruskin's object lessons, such as the type of labour required to produce an object, are potentially rendered legible through the texts that frame each illustration.

Spontaneous Perception

Early psychologists attempted to explain the practice of attention by distinguishing between voluntary and non-voluntary attention. In his *Teacher's Handbook of Psychology*, Sully described voluntary attention as 'an act of will', in which 'we attend to a thing under the impulse of a desire, such as curiosity or a wish to know about a thing'.[54] In contrast, with non-voluntary attention, also known as reflex attention or spontaneous attention, 'the direction of the attention is determined for the mind, rather than by the mind'.[55] Sully goes on to describe how novelties and sudden changes attract this type of attention, since they stand out from 'our ordinary surroundings and experience'.[56] The schoolbooks discussed thus far seek to reduce the influence of non-voluntary attention by disciplining the senses through the cultivation of metaperception and through the use of rich visual materials that can sustain a student's interest. In contrast, the visual pedagogies promoted by some nineteenth-century educators sought to address undisciplined observers in ways that relied on spontaneous attention.

The difficulty of securing the attention of children in particular was often acknowledged; Bain explained that concentration in very young children 'lasts so long as enjoyment lasts and no longer', while the educationist and school inspector Joshua Girling Fitch, in a published lecture on 'The Art of Securing Attention in a Sunday School Class' asked his readers to 'first of all acknowledge to ourselves, that attention, such as we want to get from children, is a very hard thing to give'.[57] Fitch explained that students 'should feel that the subject claims attention for itself, not that you are claiming attention *for* the subject'.[58] But when it came to Sunday School teaching and 'the great truths of revealed religion', Fitch recognised that 'there is rarely any strong curiosity in a child's mind' and therefore 'you have to create it'.[59] He went on to offer strategies to help teachers claim student attention, and advocated especially for 'using good and striking illustrations' in order to 'appear to a child's imagination as if they were really present to him'.[60] In other words, visual materials can be used to capture the attention of children whose attentive capacities remain undisciplined. The lesson

[54] Sully, *The Teacher's Handbook of Psychology*, p. 86.
[55] Sully, *The Teacher's Handbook of Psychology*, p. 86.
[56] Sully, *The Teacher's Handbook of Psychology*, pp. 86-7.
[57] Bain, p. 179; Joshua Girling Fitch, *Fitch's Lectures to Sunday School Teachers* (London: Sunday School Union, 1869), p. 35. Fitch's lectures were published in both London and New York, with later versions addressing teaching more generally, without reference to Sunday School.
[58] Fitch, p. 39.
[59] Fitch, p. 37.
[60] Fitch, p. 50.

is clearly about information, delivered through novel visuals, rather than about vision or observation.

One educator who adopted a method of courting spontaneous perception through visual novelty was the American pastor Wilbur Fisk Crafts (1850-1922). Though much of my research focuses on the British context, this American example is worth examining due to its explicit dependence on spontaneous perception, a method that was usually not explicitly applauded. In a book of religious instruction published in 1873, entitled *Through the Eye to the Heart: Eye-Teaching in the Sunday-School*, Crafts explained that 'one marked characteristic of this age is an inclination to put things into the mind by a quick concentration on the eye'.[61] By way of example he lists:

> the increased amount of blackboard work in our day-school, to the large number of magazines and papers that have recently introduced illustrations into their heretofore unillustrated pages, to the inscriptions on rocks and fences, the great number of picture advertisements in our papers, and the increasing custom of illustrating lectures.[62]

Crafts proposed that all of these visual effects were intended to 'catch the public eye' and explains that the Sunday School teacher must adopt similarly eye-catching methods in order to instruct students successfully.[63] He suggests the use of a 'Picture Scrap-Book', which, according to one teacher, guarantees 'no trouble "to get the attention" of my scholars'.[64]

A second strategy is to use a blackboard in order 'to collect attention'.[65] As Crafts explains: 'When a pastor or superintendent lifts the chalk to the blackboard interest is awakened, attention is secured, and the mind is exercised in curiosity as to what is coming next, and what is to be the meaning of the completed work.'[66] Here, attention to the object to be perceived is directed from without by novelty and change in the environment. Most of the examples of blackboard illustrations included within the book are not pictures at all, but words arranged in novel ways [Figure 6]. As explained in the text: 'Various degrees of emphasis are indicated by the *size* and *position* of words. A word in large capitals or a word having a whole line is made especially emphatic.'[67] Elsewhere, Crafts explains how to make 'showy letters… in all sorts of irregular shapes'.[68] The illustrations

[61] Wilbur Fisk Crafts, *Through the Eye to the Heart: Eye-Teaching in the Sunday-School* (New York, NY: Nelson & Phillips, 1873), p. 20. Craft's volume was also published in England as *Through the Eye to the Hart; or, Plain Uses of the Blackboard, and other Visible and Verbal Illustrations in the Sunday School and Home* (London: Hodder and Stoughton, 1880).
[62] Crafts, pp. 19-20.
[63] Crafts, p. 57.
[64] Crafts, p. 50.
[65] Crafts, p. 57.
[66] Crafts, p. 58.
[67] Crafts, p. 64.
[68] Crafts, p. 73.

themselves therefore reinforce the notion that their purpose is to attract attention rather than to develop understanding.

Educators like Fitch and Crafts certainly hoped to hold their students' attention, in addition to attracting it, and to move from non-voluntary attention, based on a reflexive response, to a voluntary and sustained attention that would enable student learning. To depend solely on the spark of interest brought about by non-voluntary attention would amount to a reliance on a seemingly mechanical response, and would suggest that spontaneous perception stood as an adequate means of learning about the world. Such an approach also involved relying on visuals only tangentially, as a means of getting attention in order to deliver information, and this was the kind of teaching that prompted the Education Department and its school inspectors to warn teachers about the appropriate use of object lessons in the 'Object Teaching' circular of 1895. As dominant practices observed by school inspectors edged towards spontaneous perception, it became necessary to clarify and codify appropriate uses of object lessons, and to warn teachers that 'it should be always remembered that in Object Lessons the imparting of information is secondary to the cultivation of the faculty of observation'.[69]

Here we have come full circle, since it is partly the threat of spontaneous perception, and its associations with mechanism and rote learning, that reinforced the need for object lessons that could cultivate metaperception or sustained perception. This observation also brings us back to Ruskin's critique of observational practices. Spontaneous perception is precisely the type of undisciplined looking that Ruskin critiqued in his lectures on engraving published in 1873, where he complained of a 'bestial English mob' growing increasingly 'incapable of reading, of hearing, of thinking, of looking', and capable only 'of momentary curiosity'.[70]

Just beyond the section where Ruskin complains about the mob produced by the 'illustrative art industry of the modern press', he explains that 'to the general people, trained in the midst of the ugliest objects that vice can design, in houses, mills, and machinery, *all* beautiful form and colour is as invisible as the seventh heaven'.[71] Here, Ruskin makes it clear that the capacity to appreciate beauty—to look 'rightly' and aesthetically—is not merely a question of taste, but one of perception. As he explains: 'It is not a question of appreciation at all; the thing is physically invisible to them, as human speech is inaudible during a steam whistle.'[72] The last part of the sentence is significant, where it is the steam whistle—a loud noise resulting from a modern technology—that renders human speech inaudible. The analogy can be carried further. Just like the steam whistle overtakes human speech (possibly even civil discourse entirely in Ruskin's

[69] 'Circular to H.M. Inspectors, Circular 369', p. 530.
[70] John Ruskin, *Ariadne Florentina: Six Lectures on Wood and Metal Engraving* (London: George Allen, 1904), p. 267.
[71] Ruskin, *Ariadne Florentina*, pp. 267 and 273.
[72] Ruskin, *Ariadne Florentina*, p. 273.

estimation), a plethora of ugly visual materials, much of them printed *en masse* with the steam-driven printing press, crowds out beautiful form and colour.

The 'ugly objects' that Ruskin had in mind, produced by the 'illustrative art industry of the modern press', are exactly the same types of materials described by Crafts that were intended to 'catch the public eye': illustrations in magazines and papers, picture advertisements, and illustrated lectures. While Crafts proposed to compete for student attention by introducing similarly eye-catching methods into the classroom, Ruskin and many of the other educators discussed here proposed the methods of the object lesson as an antidote to spontaneous perception, and as a means of cultivating a more deliberate and thoughtful mode of looking. For Ruskin and other educators, what the so-called bestial mob was lacking were object lessons, rather than mere 'information lessons'—though, as we've seen, the line between these was always difficult to discern.

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Bibliography

Atwood, Sara, *Ruskin's Educational Ideals* (Burlington, VT: Ashgate, 2011)

Avon Object Lesson Handbook (London: Sir Isaac Pitman & Sons, 1897)

Bain, Alexander, *Education as a Science* (London: C. Kegan Paul & Co., 1879)

Barringer, Tim, *Men at Work: Art and Labour in Victorian Britain* (New Haven, CT: Yale University Press, 2005)

Birch, Dinah, *Our Victorian Education* (Malden, MA: Blackwell, 2008)

Cordner, Sheila, *Education in Nineteenth-Century British Literature: Exclusion as Innovation* (New York, NY: Routledge, 2016)

Blackie's Object-Lesson and Science Readers, No. I and II (London: Blackie & Son, 1893)

Carter, Sarah, *Object Lessons: How Nineteenth-Century Americans Learned to Make Sense of the Material World* (New York, NY: Oxford University Press, 2018)

'Circular to H.M. Inspectors, Circular 369', in *Report of the Committee of Council on Education (England and Wales), 1894-95* (London, 1895), pp. 530-43, in *Proquest U.K. Parliamentary Papers* <https://parlipapers.proquest.com> [accessed 20 December 2018]

Crafts, Wilbur Fisk, *Through the Eye to the Heart: Eye-Teaching in the Sunday-School* (New York, NY: Nelson & Phillips, 1873)

Daston, Lorraine and Peter Galison, *Objectivity* (New York, NY: Zone Books, 2007)

Fitch, Joshua Girling, *Fitch's Lectures to Sunday School Teachers* (London: Sunday School Union, 1869)

Frost, John, *Lessons on Common Things* (Philadelphia, MA: Thomas T. Ash, 1835)

Graphic Object Reader (London and Glasgow: William Collins, Sons & Co., 1898)

Hall, Vernon C., 'Educational Psychology from 1890 to 1920', in *Educational Psychology: A Century of Contributions*, ed. by Barry J. Zimmerman and Dale H. Schunk (Mahwah, NJ: Lawrence Erlbaum, 2003)

Hoeldtke, Robert, 'The History of Associationism and British Medical Psychology', *Medical History* 11.1 (January 1967), 46-65

Jajdelska, Elspeth, 'Income, Ideology and Childhood Reading in the Late Seventeenth and Early Eighteenth Centuries', *History of Education* 33.1 (2004), 55-73

James, William, *Talks to Teachers on Psychology: and to students on some of life's ideals* (New York, NY: Henry Holt and Company, 1899)

Kay-Shuttleworth, James, *Memorandum on the Present State of the Questions of Popular Education* (London: W. Clowes and Sons, 1868)

Keene, Melanie Judith, 'Object Lessons: Sensory Science Education 1830-1870' (unpublished doctoral thesis, Darwin College, University of Cambridge, 2008)

Korda, Andrea, 'Object Lessons in Victorian Education: Text, Object, Image', *Journal of Victorian Culture*, forthcoming, <doi: 10.1093/jvcult/vcz064>

Mahoney, Kristin, 'Work, Lack, and Longing: Rossetti's "The Blessed Damozel" and the Working Men's College', *Victorian Studies*, 52.2 (2010), 219-248.

Maltz, Diana, *British Aestheticism and the Urban Working Classes, 1870-1900: Beauty for the People* (London: Palgrave Macmillan, 2006)

Mayo, Charles and Elizabeth Mayo, *Pestalozzi and his Principles*, 4th ed. (London: published for the Home and Colonial School Society, 1890)

Mayo, Elizabeth, *Lessons on Objects*, 6th ed. (London: R. B. Seeley and W. Burnside, 1837)

Mayo, Elizabeth, *Lessons on Shells* (London: R. B. Seeley and W. Burnside, 1838)

'Metacognition, n.', *OED Online* (Oxford University Press, 2019) <www.oed.com/view/Entry/245252> [accessed 9 April 2019]

Midgley, Henry, 'Payment by Results in Nineteenth-Century British Education: A Study in How Priorities Change,' *The Journal of Policy History* 28.4 (2016), 692-695

Object Lessons in Elementary Science (London: Macmillan, 1894)

Potter, Jonathan, *Discourses of Vision in Nineteenth-Century Britain: Seeing, Thinking, Writing* (London: Palgrave Macmillan, 2018)

Report of the Committee of Council on Education (England and Wales), 1839-95 (London, 1840-95), in *Proquest U.K. Parliamentary Papers* <https://parlipapers.proquest.com> [accessed 20 December 2018]

Robson, Catherine, *Heart Beats: Everyday Life and the Memorized Poem* (Princeton, NJ: Princeton University Press, 2012)

Rose, Jacqueline, *The Case of Peter Pan, or, The Impossibility of Children's Fiction* (Philadelphia, MA: University of Pennsylvania Press, 1984)

Ruskin, John, *Ariadne Florentina: Six Lectures on Wood and Metal Engraving* (London: George Allen, 1904)

Ruskin, John, 'The Nature of Gothic', in *The Works of John Ruskin*, Vol. 10, ed. by E. T. Cook and Alexander Wedderburn, 39 vols (London: G. Allen, 1903–12), pp. 180-269

Schroeder, Janice, 'Victorian Education and the Periodical Press', *Victorian Periodicals Review* 40.1 (2017), 679-85

Sengupta, Parna, 'An Object Lesson in Colonial Pedagogy', *Comparative Studies in Society and History* 45.1 (January 2003), 96-121

Small, Helen, 'Subjectivity, psychology, and the imagination', in *The Cambridge History of Victorian Literature*, ed. by Kate Flint (Cambridge and New York, NY: Cambridge University Press, 2012), pp. 487-509

Sully, James, *Outlines of Psychology with Special Reference to the Theory of Education* (London: Longmans, Green & Co., 1885)

Sully, James, *The Teacher's Handbook of Psychology* (London: Longmans, Green, & Co., 1886)

Taylor, Jenny and Sally Shuttleworth, *Embodied Selves: An Anthology of Psychological Texts, 1830–1890* (Oxford: Clarendon Press, 1998)

Welch, Adonijah Strong, *The Teachers' Psychology: A Treatise on the Intellectual Faculties, the Order of Their Growth, and the Corresponding Series of Studies by Which They are Educated* (New York, NY: E.L. Kellogg & Co., 1889)

Willis, Martin, *Vision, Science, and Literature: 1870-1920: Ocular Horizons* (Pittsburgh, PA: University of Pittsburgh Press, 2016)

Winter, Sarah, *The Pleasures of Memory: Learning to Read with Charles Dickens* (New York, NY: Fordham Press, 2011)

Figures

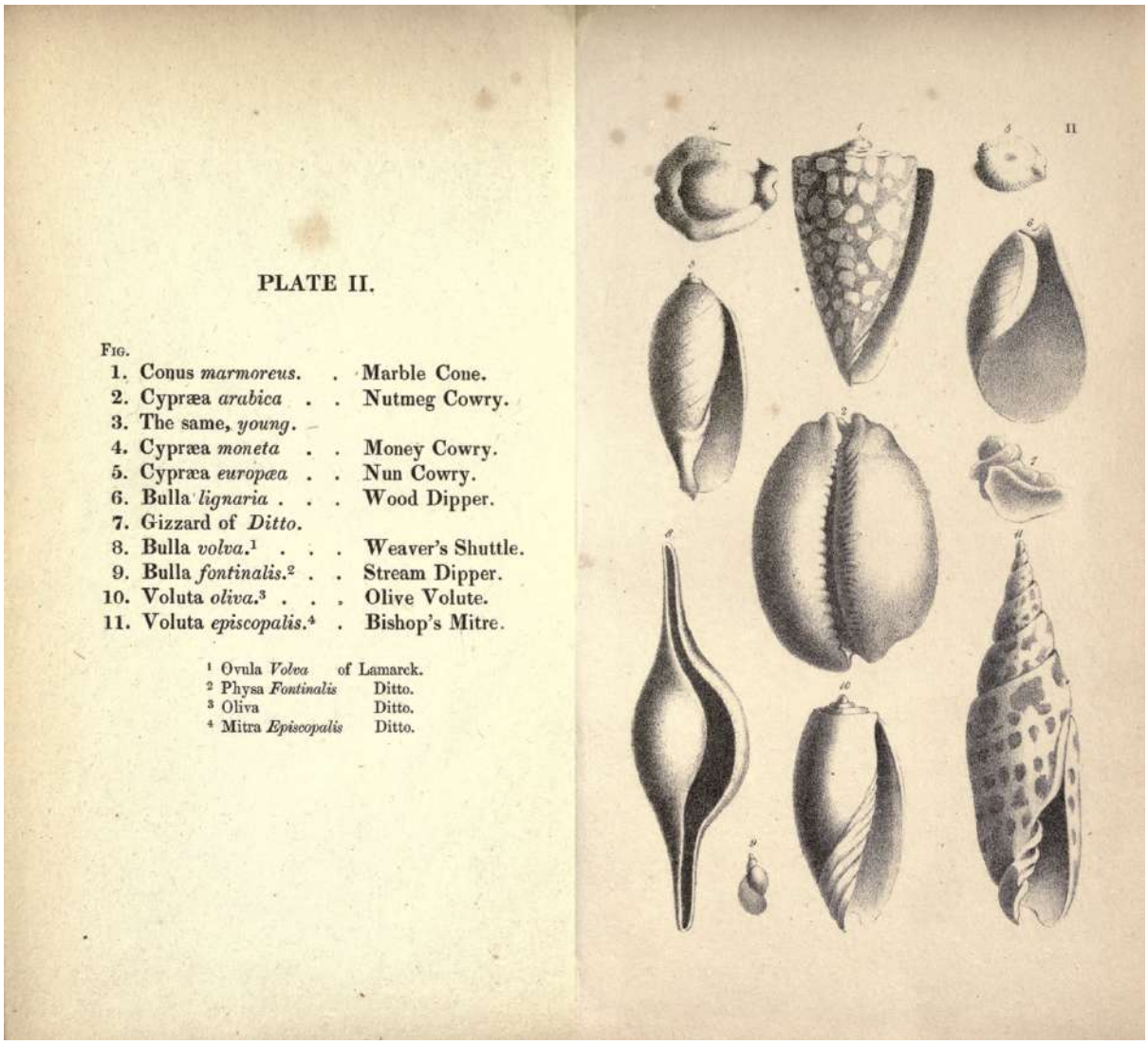


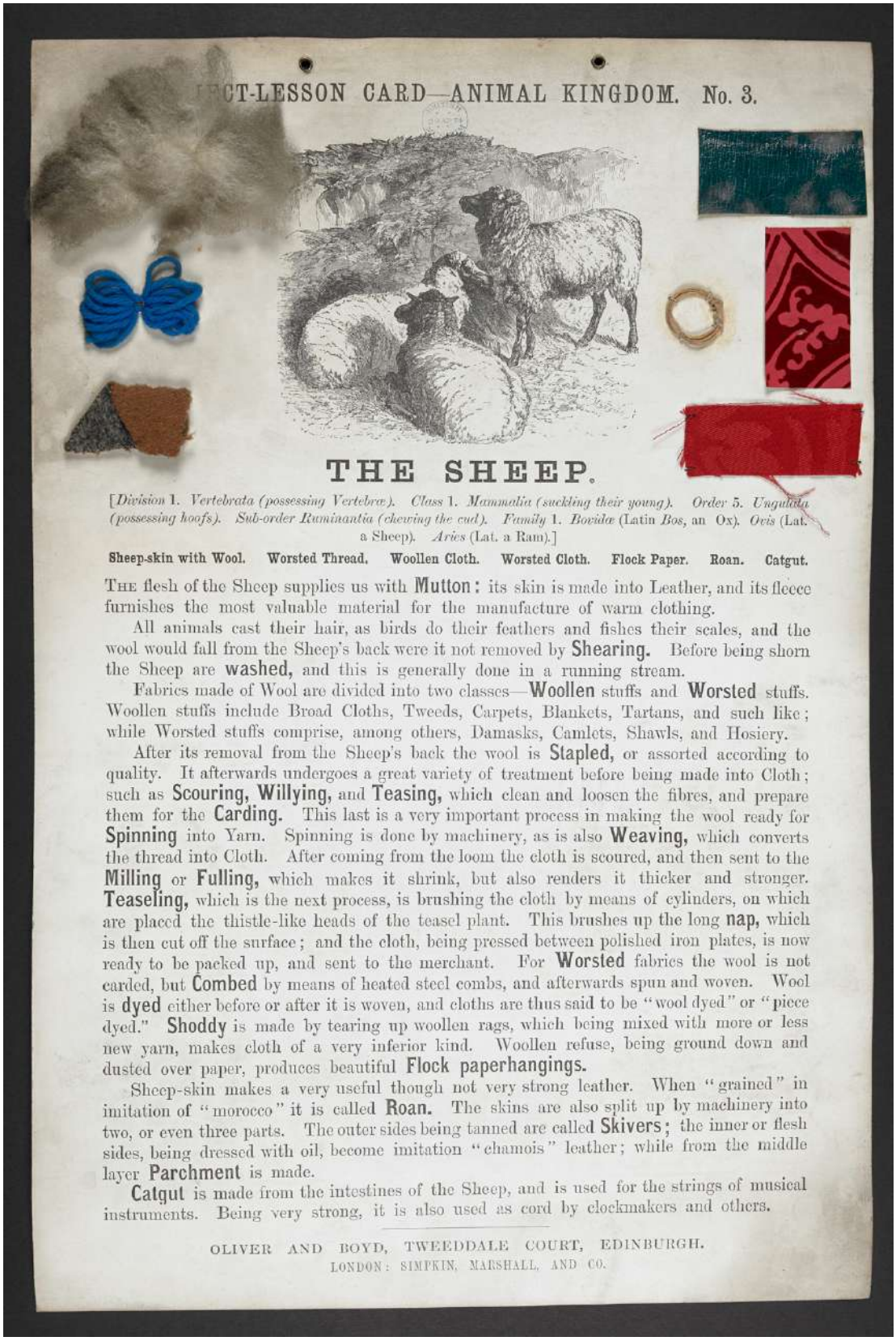
PLATE II.

Fig.
1. Conus *marmoreus*. . Marble Cone.
2. Cypræa *arabica* . . Nutmeg Cowry.
3. The same, *young*.
4. Cypræa *moneta* . . Money Cowry.
5. Cypræa *europæa* . . Nun Cowry.
6. Bulla *lignaria* . . . Wood Dipper.
7. Gizzard of *Ditto*.
8. Bulla *volva*.[1] . . . Weaver's Shuttle.
9. Bulla *fontinalis*.[2] . . Stream Dipper.
10. Voluta *oliva*.[3] . . . Olive Volute.
11. Voluta *episcopalis*.[4] . Bishop's Mitre.

[1] Ovula *Volva* of Lamarck.
[2] Physa *Fontinalis* Ditto.
[3] Oliva Ditto.
[4] Mitra *Episcopalis* Ditto.

Fig. 1. Plate 2 of Elizabeth Mayo's *Lessons on Shells*, 2nd edition (London, 1838). Image courtesy of University of California Libraries.

<https://archive.org/details/shellsalessonson00mayorich/page/n4.>



CT-LESSON CARD—ANIMAL KINGDOM. No. 3.

THE SHEEP.

[*Division* 1. *Vertebrata (possessing Vertebræ). Class* 1. *Mammalia (suckling their young). Order* 5. *Ungulata (possessing hoofs). Sub-order Ruminantia (chewing the cud). Family* 1. *Bovidæ* (Latin *Bos*, an Ox). *Ovis* (Lat. a Sheep). *Aries* (Lat. a Ram).]

Sheep-skin with Wool. Worsted Thread. Woollen Cloth. Worsted Cloth. Flock Paper. Roan. Catgut.

THE flesh of the Sheep supplies us with **Mutton**: its skin is made into Leather, and its fleece furnishes the most valuable material for the manufacture of warm clothing.

All animals cast their hair, as birds do their feathers and fishes their scales, and the wool would fall from the Sheep's back were it not removed by **Shearing.** Before being shorn the Sheep are **washed,** and this is generally done in a running stream.

Fabrics made of Wool are divided into two classes—**Woollen** stuffs and **Worsted** stuffs. Woollen stuffs include Broad Cloths, Tweeds, Carpets, Blankets, Tartans, and such like; while Worsted stuffs comprise, among others, Damasks, Camlets, Shawls, and Hosiery.

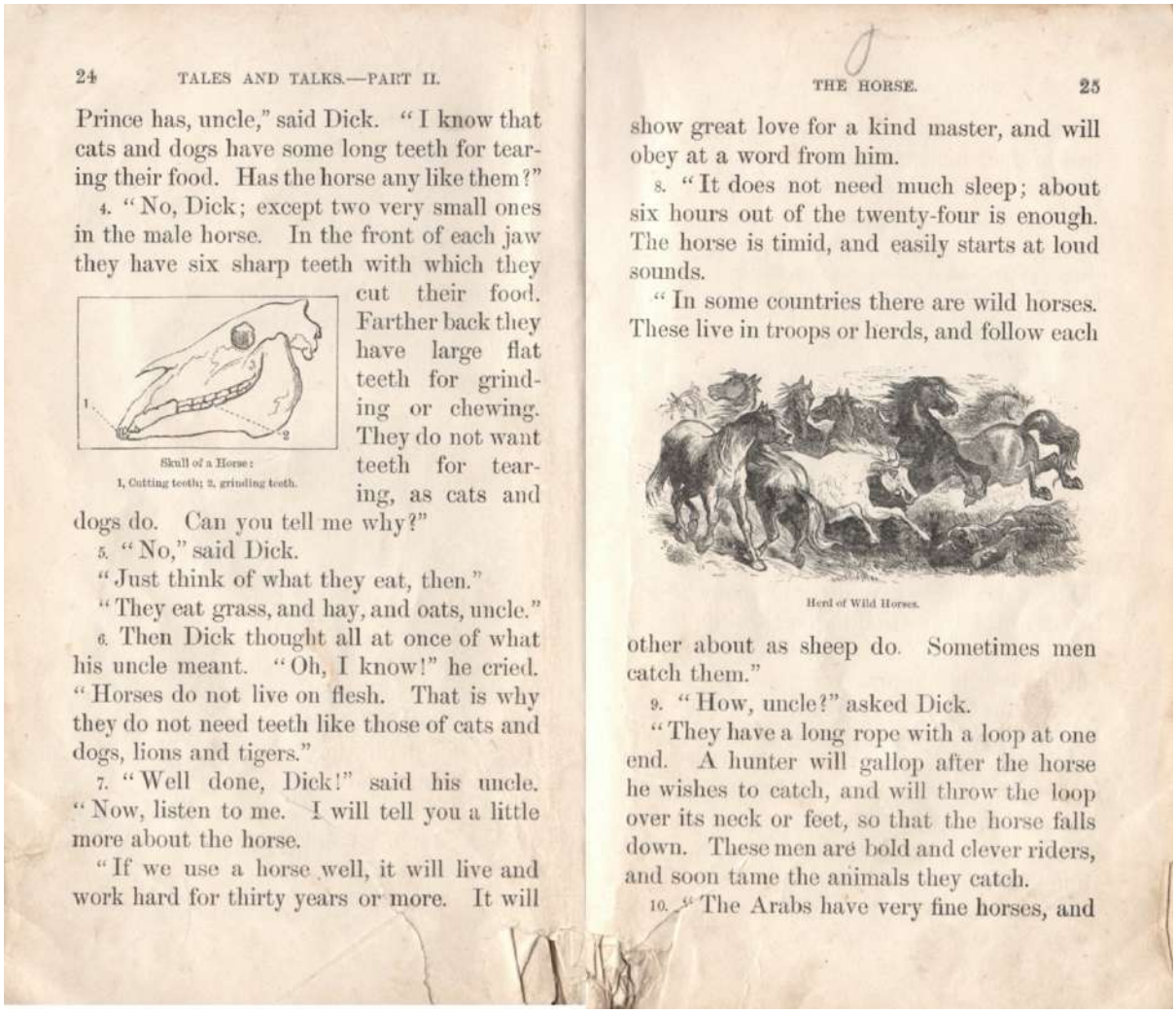
After its removal from the Sheep's back the wool is **Stapled,** or assorted according to quality. It afterwards undergoes a great variety of treatment before being made into Cloth; such as **Scouring, Willying,** and **Teasing,** which clean and loosen the fibres, and prepare them for the **Carding.** This last is a very important process in making the wool ready for **Spinning** into Yarn. Spinning is done by machinery, as is also **Weaving,** which converts the thread into Cloth. After coming from the loom the cloth is scoured, and then sent to the **Milling** or **Fulling,** which makes it shrink, but also renders it thicker and stronger. **Teaseling,** which is the next process, is brushing the cloth by means of cylinders, on which are placed the thistle-like heads of the teasel plant. This brushes up the long **nap,** which is then cut off the surface; and the cloth, being pressed between polished iron plates, is now ready to be packed up, and sent to the merchant. For **Worsted** fabrics the wool is not carded, but **Combed** by means of heated steel combs, and afterwards spun and woven. Wool is **dyed** either before or after it is woven, and cloths are thus said to be "wool dyed" or "piece dyed." **Shoddy** is made by tearing up woollen rags, which being mixed with more or less new yarn, makes cloth of a very inferior kind. Woollen refuse, being ground down and dusted over paper, produces beautiful **Flock paperhangings.**

Sheep-skin makes a very useful though not very strong leather. When "grained" in imitation of "morocco" it is called **Roan.** The skins are also split up by machinery into two, or even three parts. The outer sides being tanned are called **Skivers**; the inner or flesh sides, being dressed with oil, become imitation "chamois" leather; while from the middle layer **Parchment** is made.

Catgut is made from the intestines of the Sheep, and is used for the strings of musical instruments. Being very strong, it is also used as cord by clockmakers and others.

OLIVER AND BOYD, TWEEDDALE COURT, EDINBURGH.
LONDON: SIMPKIN, MARSHALL, AND CO.

Fig. 2. "The Sheep," *Oliver and Boyd's Object-Lesson Cards* (Edinburgh: Oliver and Boyd, 1874-78). Image courtesy of the British Library. (c) British Library Board: N.Tab.2016/4.



24 TALES AND TALKS.—PART II.

Prince has, uncle," said Dick. "I know that cats and dogs have some long teeth for tearing their food. Has the horse any like them?"

4. "No, Dick; except two very small ones in the male horse. In the front of each jaw they have six sharp teeth with which they cut their food. Farther back they have large flat teeth for grinding or chewing. They do not want teeth for tearing, as cats and dogs do. Can you tell me why?"

Skull of a Horse:
1, Cutting teeth; 2, grinding teeth.

5. "No," said Dick.

"Just think of what they eat, then."

"They eat grass, and hay, and oats, uncle."

6. Then Dick thought all at once of what his uncle meant. "Oh, I know!" he cried. "Horses do not live on flesh. That is why they do not need teeth like those of cats and dogs, lions and tigers."

7. "Well done, Dick!" said his uncle. "Now, listen to me. I will tell you a little more about the horse.

"If we use a horse well, it will live and work hard for thirty years or more. It will

THE HORSE. 25

show great love for a kind master, and will obey at a word from him.

8. "It does not need much sleep; about six hours out of the twenty-four is enough. The horse is timid, and easily starts at loud sounds.

"In some countries there are wild horses. These live in troops or herds, and follow each

Herd of Wild Horses.

other about as sheep do. Sometimes men catch them."

9. "How, uncle?" asked Dick.

"They have a long rope with a loop at one end. A hunter will gallop after the horse he wishes to catch, and will throw the loop over its neck or feet, so that the horse falls down. These men are bold and clever riders, and soon tame the animals they catch.

10. "The Arabs have very fine horses, and

Fig. 3. "Skull of a Horse" and "Herd of Wild Horses," in *Blackie's Object-Lesson and Science Readers, Pt. II: Tales and Talks on Common Things* (London: Blackie & Son, 1893). Image courtesy of the British Schools Museum, Hitchin, UK, Object No. JGB416.

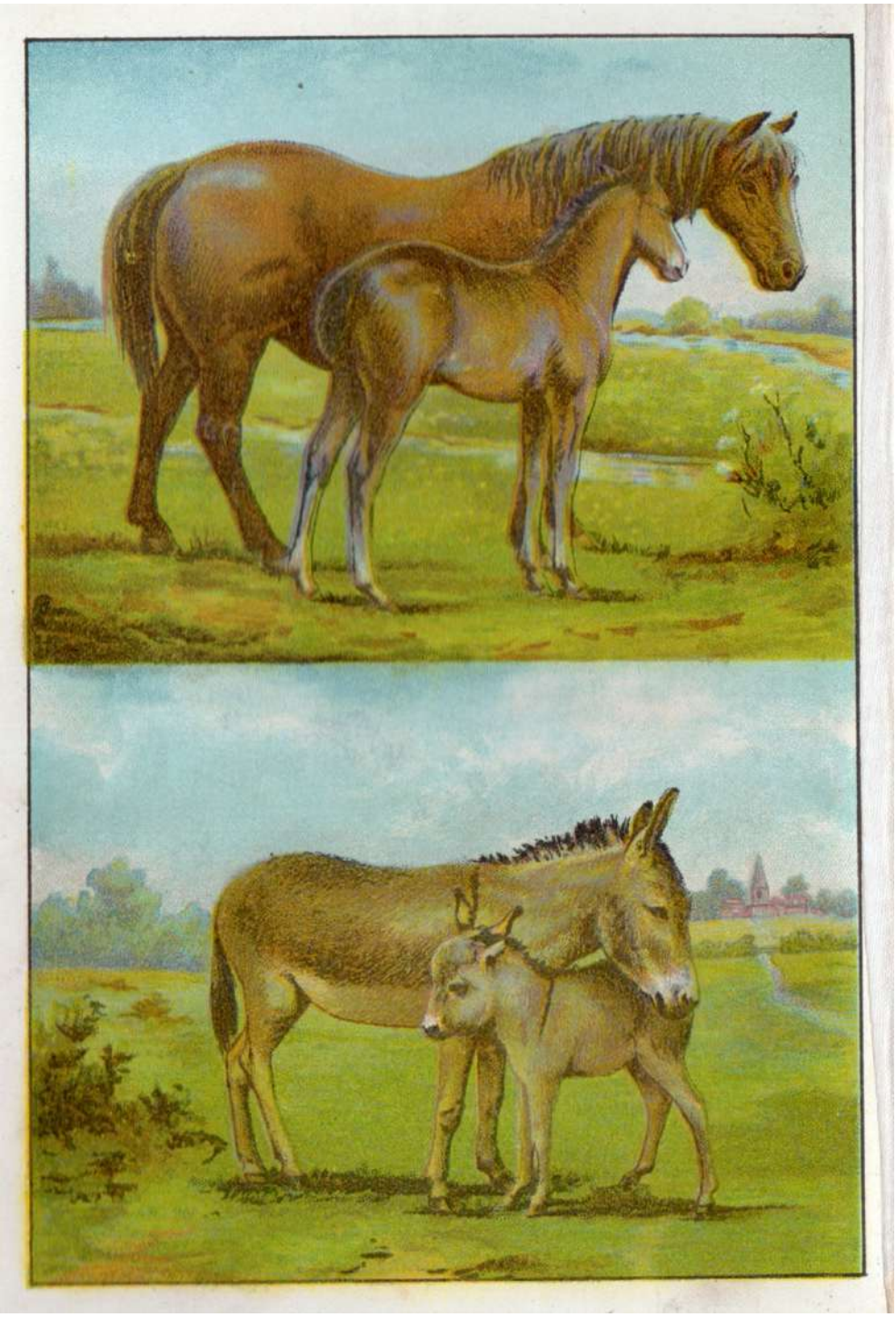
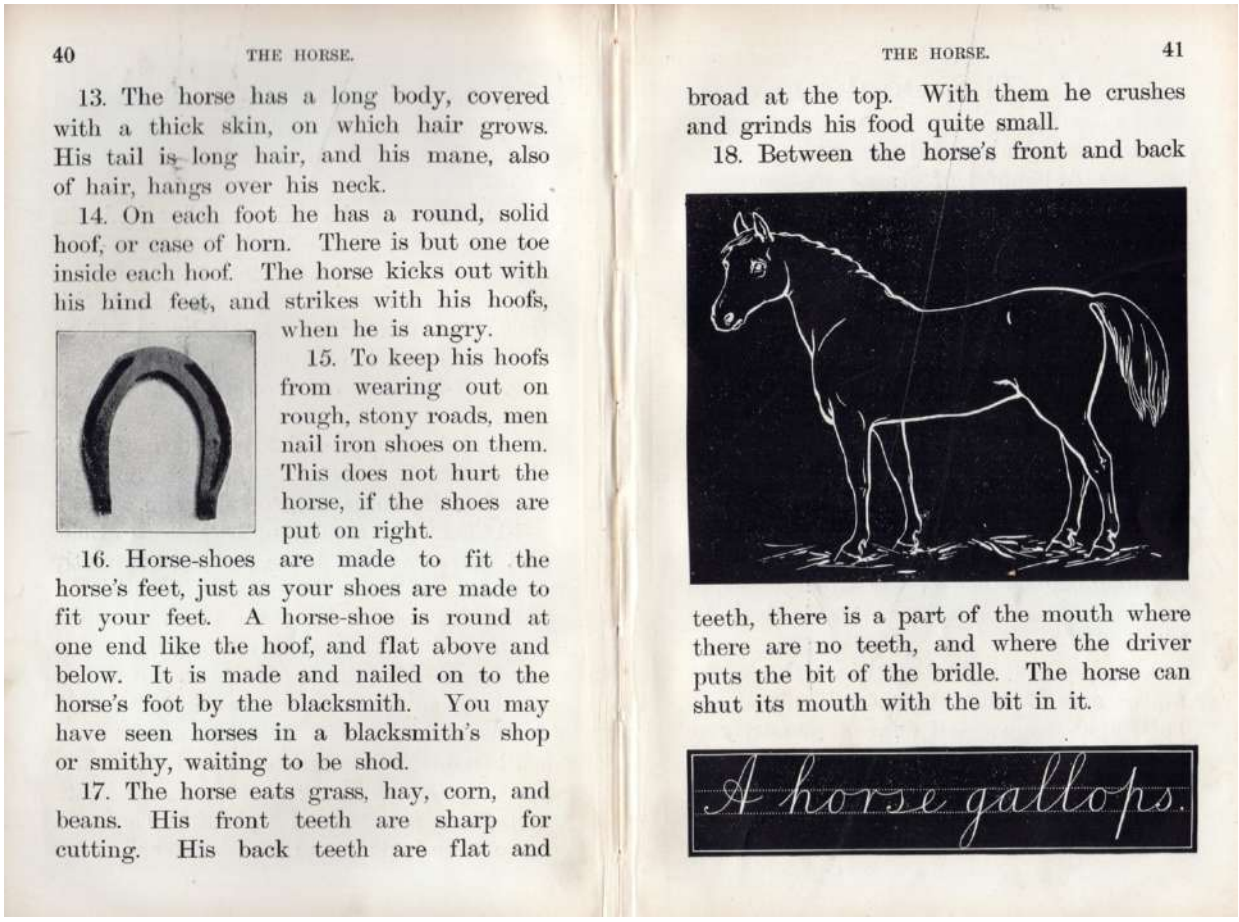


Fig. 4. From the Lesson on "The Horse," in *The Graphic Object Reader* (London and Glasgow: William Collins, Sons & Co., 1898). Image courtesy of the British Schools Museum, Hitchin, UK, Object No. JGB53.



40 THE HORSE.

13. The horse has a long body, covered with a thick skin, on which hair grows. His tail is long hair, and his mane, also of hair, hangs over his neck.

14. On each foot he has a round, solid hoof, or case of horn. There is but one toe inside each hoof. The horse kicks out with his hind feet, and strikes with his hoofs, when he is angry.

15. To keep his hoofs from wearing out on rough, stony roads, men nail iron shoes on them. This does not hurt the horse, if the shoes are put on right.

16. Horse-shoes are made to fit the horse's feet, just as your shoes are made to fit your feet. A horse-shoe is round at one end like the hoof, and flat above and below. It is made and nailed on to the horse's foot by the blacksmith. You may have seen horses in a blacksmith's shop or smithy, waiting to be shod.

17. The horse eats grass, hay, corn, and beans. His front teeth are sharp for cutting. His back teeth are flat and

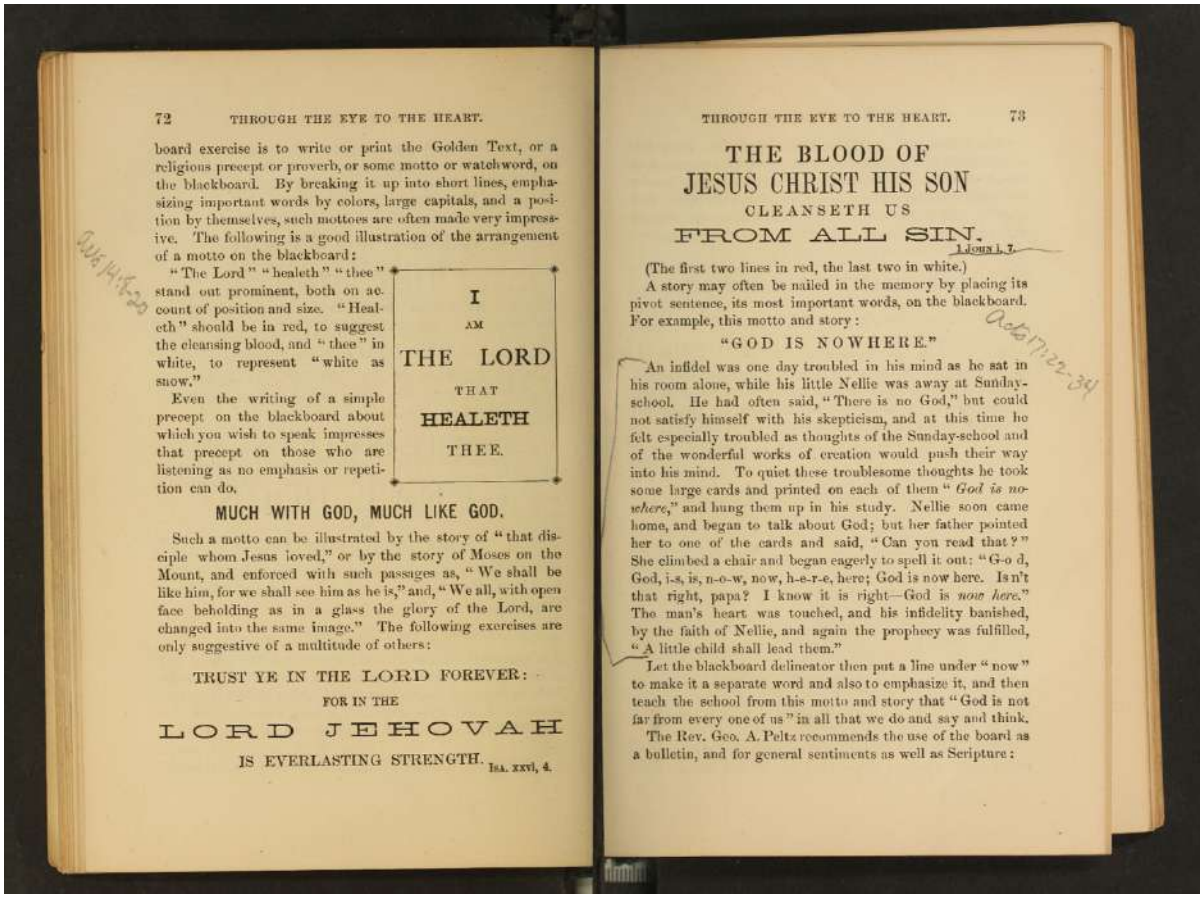
THE HORSE. 41

broad at the top. With them he crushes and grinds his food quite small.

18. Between the horse's front and back

teeth, there is a part of the mouth where there are no teeth, and where the driver puts the bit of the bridle. The horse can shut its mouth with the bit in it.

Fig. 5. From the Lesson on "The Horse," in *The Graphic Object Reader* (London and Glasgow: William Collins, Sons & Co., 1898). Image courtesy of the British Schools Museum, Hitchin, UK, Object No. JGB53.



72 THROUGH THE EYE TO THE HEART.

board exercise is to write or print the Golden Text, or a religious precept or proverb, or some motto or watchword, on the blackboard. By breaking it up into short lines, emphasizing important words by colors, large capitals, and a position by themselves, such mottoes are often made very impressive. The following is a good illustration of the arrangement of a motto on the blackboard:

"The Lord" "healeth" "thee" stand out prominent, both on account of position and size. "Healeth" should be in red, to suggest the cleansing blood, and "thee" in white, to represent "white as snow."

Even the writing of a simple precept on the blackboard about which you wish to speak impresses that precept on those who are listening as no emphasis or repetition can do.

I
AM
THE LORD
THAT
HEALETH
THEE.

MUCH WITH GOD, MUCH LIKE GOD.

Such a motto can be illustrated by the story of "that disciple whom Jesus loved," or by the story of Moses on the Mount, and enforced with such passages as, "We shall be like him, for we shall see him as he is," and, "We all, with open face beholding as in a glass the glory of the Lord, are changed into the same image." The following exercises are only suggestive of a multitude of others:

TRUST YE IN THE LORD FOREVER:
FOR IN THE
LORD JEHOVAH
IS EVERLASTING STRENGTH. Isa. xxvi, 4.

THROUGH THE EYE TO THE HEART. 73

THE BLOOD OF
JESUS CHRIST HIS SON
CLEANSETH US
FROM ALL SIN.
1 John i. 7.

(The first two lines in red, the last two in white.)

A story may often be nailed in the memory by placing its pivot sentence, its most important words, on the blackboard. For example, this motto and story:

"GOD IS NOWHERE."

An infidel was one day troubled in his mind as he sat in his room alone, while his little Nellie was away at Sunday-school. He had often said, "There is no God," but could not satisfy himself with his skepticism, and at this time he felt especially troubled as thoughts of the Sunday-school and of the wonderful works of creation would push their way into his mind. To quiet these troublesome thoughts he took some large cards and printed on each of them "*God is nowhere*," and hung them up in his study. Nellie soon came home, and began to talk about God; but her father pointed her to one of the cards and said, "Can you read that?" She climbed a chair and began eagerly to spell it out: "G-o d, God, i-s, is, n-o-w, now, h-e-r-e, here; God is now here. Isn't that right, papa? I know it is right—God is *now here*." The man's heart was touched, and his infidelity banished, by the faith of Nellie, and again the prophecy was fulfilled, "A little child shall lead them."

Let the blackboard delineator then put a line under "now" to make it a separate word and also to emphasize it, and then teach the school from this motto and story that "God is not far from every one of us" in all that we do and say and think.

The Rev. Geo. A. Peltz recommends the use of the board as a bulletin, and for general sentiments as well as Scripture:

Fig. 6. From Wilbur Fisk Crafts's *Through the Eye to the Heart: Eye-Teaching in the Sunday-School* (New York NY: Nelson & Phillips, 1873). Image courtesy of the Library of Congress, https://archive.org/details/throughеyetohear00craf/page/72.

Seeing in the City: Modern Visuality in M. E. Braddon's *The Trail of the Serpent* (1860)

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Abstract
This article proposes the metropolitan scenes of Mary Elizabeth Braddon's first novel, The Trail of the Serpent (1860), as engagements with the rapidly shifting and 'contested terrain' of modern visuality. Locating much of its action in Paris and London, the paradigmatically modern cities of the mid-nineteenth century, the novel reveals a porous boundary between visual practices used for detection and leisure: the theatre figures as a site of disciplinary potential, and the touristic gaze proves amenable to that of the detective. Seemingly poised to corroborate contemporary anxieties about criminality becoming invisible as a result of urban expansion, in fact Trail resists such a notion by exposing how technological and material changes serve as much to conceal forces of inspection. Yet Trail does not subscribe wholeheartedly to teleological ideas about the direction of modern visuality either, but, as signalled especially by the posthumous condition of its criminal antagonist, offers a more complex and ambiguous situation.

Upon his relocation to London, the criminal antagonist of Mary Elizabeth Braddon's *The Trail of the Serpent* (1860) (hereafter *Trail*) makes a seemingly counterintuitive declaration to his new wife, Valerie de Cevennes:

> We are rarely seen to address each other, and we are not often seen in public together. Very well this in South America, […] here it will not do. To say the least it is mysterious. The fashionable world is scandalous. People draw inferences. […] A banker must be respectable, or people may be afraid to trust him. […] I must be universally trusted. [1]

The declaration seems counterintuitive because, having removed himself from the site of his criminal activities (Paris), the expectation is that Jabez North will avoid the risk of being identified—not to court its increase. *Trail* is hailed as one of the first detective stories,[2] yet this scene seems a striking contradiction of the 'original social content' that Walter Benjamin ascribes to the genre, namely 'the

[1] Mary Elizabeth Braddon, *The Trail of the Serpent*, ed. by Chris Willis (New York, NY: Modern Library, 2003), p. 257. Subsequent parenthetical citations refer to this edition. It was first published in 1860 as *Three Times Dead; or, The Secret of the Heath* (London: W&M Clark) before being reworked and released under its present title in 1861 (London: Ward, Lock). During 1864 it was serialized in the *Half-Penny Journal*.
[2] Sarah Waters, 'Introduction', in *The Trail of the Serpent* (New York, NY: Modern Library, 2003), pp. xv–xxiv (p. xxii); Chris Willis, 'Afterword', in *The Trail of the Serpent* (New York, NY: Modern Library, 2003), p. 408.

obliteration of the individual's traces in the big-city crowd'.[3] Jabez's demand for greater visibility is understandable, however, according to the logic of the 'social body' in Victorian Britain, which equated the undesirable aspects of the city—vice, pathogens, criminality—with what could not be seen;[4] by voluntarily subjecting himself to visual scrutiny, therefore, Jabez is able to avoid the moral aspersions that would, rightly, be assigned to him. This scene acts, firstly, as a further demonstration of the savviness that Jabez displays throughout *Trail* in subverting visual expectations. But the recognition of London's exceptional status ('*here* it will not do') pinpoints an extra target of his comment: the modern city seems to foster distinctive ways of seeing that demand close attention.

Taking such instances as its cue, this article reads the metropolitan scenes of *Trail* as closely engaged with the material and social transformations occurring in the mid-nineteenth-century city, jointly productive of 'modern visuality'. Without venturing too far into theorisations of 'modernity', I follow Jonathan Crary's suggestion that a modern form of seeing emerges after the discoveries of physiological optics and their rupturing of the 'classical episteme' (broadly synonymous here with Cartesian perspectivalism and the *camera obscura*).[5] The second part of this term is perhaps simpler to account: 'visuality' incorporates, as Chris Otter explains, the 'simultaneously physiological, practical, discursive, and technospatial nature of vision';[6] of its distinction from 'vision', Hal Foster elaborates:

> [it] signals a difference within the visual – between the mechanism of sight and its historical techniques, between the datum of vision and its discursive determinations – a difference, many differences, among how we see, how we are able, allowed or made to see, and how we see this seeing or the unseen therein[7]

[3] Quoted in Sharrona Pearl, *About Faces: Physiognomy in Nineteenth-Century Britain* (Cambridge, MA: Harvard University Press, 2010), pp. 33–34.
[4] On the 'social body' in Victorian Britain, see Mary Poovey, *Making a Social Body: British Cultural Formation, 1830-1864* (Chicago, IL: University of Chicago Press, 1995); Pamela K. Gilbert, *Mapping the Victorian Social Body* (New York, NY: State University of New York, 2004).
[5] Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge, MA: MIT Press, 1992). As Robert S. Nelson notes, any claim of this kind 'depends upon the definition of modernity'; 'Introduction: Descartes's Cow and Other Domestications of the Visual', in *Visuality Before and Beyond the Renaissance: Seeing as Others Saw*, ed. by Robert S. Nelson (Cambridge: Cambridge University Press, 2000), pp. 1–20 (p. 6).
[6] Chris Otter, *The Victorian Eye: A Political History of Light and Vision in Britain, 1800-1910* (Chicago, IL and London: University of Chicago Press, 2008), p. 25.
[7] Hal Foster, 'Introduction', in *Vision and Visuality*, ed. by Hal Foster (Seattle, WA: Bay Press, 1988), p. ix.

Trail has received a 'surge of interest in recent years', becoming read against such contemporary concerns as madness and toxicology;[8] it is increasingly seen as a text that not only 'occupies a fascinating place in relation both to Braddon's sensational oeuvre and to the criticism that greeted it', but one that is also highly engaged with intellectual contexts.[9] Christine Ferguson and Saverio Tomaiuolo have shown *Trail*'s imbrication with several aspects of visuality, their readings focusing on the novel's depiction of bodies and the character of Joseph Peters (the 'mute detective') from a disability studies perspective.[10] This article attends more closely to *Trail*'s concern for how visuality is affected by the conditions of the mid-nineteenth-century city, the relevant contexts being therefore closer to those discussed in Crary's *Techniques of the Observer* and Otter's *The Victorian Eye*. It posits Braddon's novel as a case study for how, as Martin Jay says, 'the scopic regime of modernity may best be understood as a contested terrain, rather than as a harmoniously integrated complex of visual theories and practices'.[11] *Trail* substantiates the drive to go beyond the two 'hegemonic visual paradigms' often used to examine vision and power in nineteenth-century Britain: the flâneur (spectacle) and the panopticon (surveillance).[12] In the novel, leisurely spaces and activities merge seamlessly with, or act as the cover for, surveiling opportunities; and the notoriously subversive potential of sensation fiction is achieved in *Trail* via its depiction of visuality as a conduit for inverted class relations. Meanwhile, though it contests contemporary anxieties about criminality becoming invisible as a result of urbanisation, Braddon's novel does not subscribe to a teleological perspective either.

'Lost in a Crowd'? Detectives Turning Tourists and Vice Versa

Trail's sensational story centres on the orphan Jabez North and his schemes to obtain a fortune and aristocratic title. It opens in the town of Slopperton, where

[8] Andrew Mangham, '"Drink It up Dear, It Will Do You Good": Crime, Toxicology and *The Trail of the Serpent*', in *New Perspectives on Mary Elizabeth Braddon (DQR Studies in Literature)* (Amsterdam: Rodopi, 2013), pp. 95–112 (p. 95); Valerie Pedlar, *'The Most Dreadful Visitation': Male Madness in Victorian Fiction* (Liverpool University Press, 2006); Lillian Nayder, 'Science and Sensation', in *The Cambridge Companion to Sensation Fiction*, (Cambridge: Cambridge University Press, 2013), pp. 154–67 (pp. 159–61).

[9] Waters, pp. xv–xvi.

[10] Christine Ferguson, 'Sensational Dependence: Prosthesis and Affect in Dickens and Braddon', *LIT: Literature Interpretation Theory*, 19.1 (2008), 1–25 (p. 14); Saverio Tomaiuolo, 'Perception, Abduction, Disability: *Eleanor's Victory* and *The Trail of the Serpent*', in *In Lady Audley's Shadow: Mary Elizabeth Braddon and Victorian Literary Genres* (Edinburgh: Edinburgh University Press, 2010), pp. 97–118.

[11] Martin Jay, 'Scopic Regimes of Modernity', in *Vision and Visuality*, ed. by Hal Foster, Discussions in Contemporary Culture (Seattle, WA: Bay Press, 1988), pp. 2–23 (p. 4).

[12] For a summary of the critical scholarship using these paradigms, see Otter, p. 2. See especially pp. 76-82 of Tony Bennett, 'The Exhibitionary Complex', *New Formations*, 4 (1988), 73–102; Joseph Litvak, *Caught in the Act: Theatricality in the Nineteenth-Century Novel* (Berkeley, CA: University of California Press, 1992).

Jabez is a schoolmaster, and with his murder of the wealthy Montague Harding and a schoolboy. The first of these murders leads to the indictment of the victim's nephew, Richard Marwood, whose sentence is commuted to life imprisonment in a lunatic asylum after intervention by the mute detective Joseph Peters. Upon Richard's eventual escape, he resolves, with the help of his friends and Peters, to trace the real culprit and exonerate himself. In the meantime, Jabez has fled to Paris after leaving behind the body of his twin brother as evidence of his own suicide; while there he blackmails the Spanish heiress Valerie de Cevennes into marrying him and poisoning her betrothed. He relocates to London, where Peters chances upon him (now known as the Count Raymond de Marolles); Richard's group convenes and investigates further. Eventually gathering enough evidence to implicate him, Jabez is caught and put on trial in Slopperton. Pronounced guilty, Jabez takes his own life before the sentence can be carried out.

As this synopsis hints at, lengthy and formative sections of *Trail* are set within the paradigmatically modern cities of Paris and London.[13] Significantly, these are locations in which Jabez's criminal ambitions are furthered and confounded, respectively, by his being first a visual subject and then object. Specifically, his plot against Valerie begins in the Paris Opera when he identifies her feelings for the opera singer, Gaston de Lancy, by reading her physiological reactions to his presence; afterwards, he arranges 'ocular demonstration' of Gaston's infidelity, leading her to poison him out of jealousy (p. 139). In fact, Jabez hires actors to stage an amorous display in conditions that obscure vision.[14] On relocating to London, however, Jabez becomes the *object* of visual scrutiny, as Peters and his adopted son, Sloshy, identify him in its streets; then, in an almost exact reversal of the Paris Opera scene, occurring in Her Majesty's Theatre, Haymarket, Jabez becomes scrutinised from afar by Marwood's amateur band of detectives, the 'Cherokees'. The proceeding analysis looks to these situations in turn, beginning with Jabez's detection by Peters and Sloshy upon their arrival in the British capital.

Hitherto portrayed exclusively in a professional capacity, as a detective with the Slopperton police, Peters is specifically noted to be in London for personal reasons: to 'enjoy the *otium cum dignitate* [leisure with dignity]' earnt by his involvement in facilitating Richard's escape from the asylum (p. 259). In practice, '*otium*' is soon found to be tourism, as Peters and Sloshy begin a sightseeing trip that includes 'St. Paul's [Cathedral], the Monument, Punch and Judy, and other intellectual exhibitions' (p. 261). Whilst these sites are designated as 'intellectual', the pair's responses reveal that the *visual* appeal of these exhibitions is forefront:

[13] On Paris, see for instance Andrew Billing and Juliette Cherbuliez, 'Paris as Capital, Capital in Paris', *L'Esprit Créateur*, 55.3 (2015), 1–14. On London, see for instance the Introduction to Joseph De Sapio, *Modernity and Meaning in Victorian London* (London: Palgrave, 2014).

[14] Cf. Ferguson's notice of how '[Jabez's] crimes are all staged in areas of half-light and visual impairment'; p. 10. It is crucial to recognise, however, that having profited from his crimes, Jabez seeks public visibility to maintain the illusion of benevolence, as in the opening example.

> [The Punch and Judy] was not so sublime a sight, perhaps, as the outside of St. Paul's; but, on the other hand, it was a great deal cleaner; and the 'fondling' [Sloshy] would have liked to have seen Sir Christopher Wren's masterpiece picked out with a little fresh paint before he was called upon to admire it. The Monument, no doubt, was very charming in the abstract; but unless he could have been perpetually on the top of it […] it wasn't very much in his way. But Punch […] indeed, was an exhibition to be seen continually, and to be more admired the more continually seen. (p. 262)

This account is proliferated by visual concerns: aesthetic criteria (the 'sublime' and 'charming'); the placement of the viewing subject; and the pleasures to be derived from witnessing spectacle. The invocation of these aspects so soon after Peters and Sloshy enter London attests, I would suggest, to a recognition that, as Lynda Nead writes:

> metropolitan experience was primarily a visual one […] its defining character was seen to lie in its address to the sense of sight. The spectacles of modern life seemed to demand new modes of representation and new skills of description.[15]

But one new 'mode of representation' in particular is indexed by Peters and Sloshy's tour and its catalogic quality (its listing of one site after another): the travel guide. Conspicuous throughout the decade before *Trail*'s publication,[16] guides strove to distil London's vast array of potential spectacles into an itinerary that was manageable for the increasing numbers of visitors to the city.[17] Their impetus is concisely expressed by John Murray's *Modern London; or, London as It Is* (1851), amongst the most popular examples of its kind; its self-declared purpose was to 'point out those features of the metropolis best worth seeing, with the way in which they may be seen to the best advantage.[18] Peters and Sloshy's tour is evidently prompted by, and measured against, such aims, notably in its critique about the difficulty of finding a suitable position from which to admire the Monument; meanwhile, the appraisal of Punch and Judy as something 'to be seen continually' is perhaps a rejoinder to Murray's list of 'Places and Sights to be Seen', which does not include the show.[19] While chafing at its rigidity, Peters and Sloshy's conduct in London would nevertheless have been recognisable to

[15] Lynda Nead, *Victorian Babylon: People, Streets and Images in Nineteenth-Century London* (New Haven, CT and London: Yale University Press, 2005), p. 57.
[16] Notable examples first published in the 1850s include Peter Cunningham, *Modern London; or, London as It Is* (London: John Murray, 1851) and John Timbs, *Curiosities of London* (London: John Camden, 1867 [1855]). The sites visited by Peters and Sloshy are given in Timbs: pp. 16, 107–17, 570–71.
[17] By the 1860s, it had become a 'modern tourist centre'; Nead, p. 58; see also Pearl, *About Faces: Physiognomy in Nineteenth-Century Britain*, pp. 28–29.
[18] Cunningham, p. iii.
[19] Cunningham, p. xliii.

contemporary readers of *Trail* as a form of touristic experience encouraged by the travel guides and tailored to the prospects of the modern, visually-oriented city.

This revisionist potential is taken further as the pair's sightseeing goes on. Peters tries to show Sloshy the 'outside[s]' of the 'exhibitions' and yet, arriving at the Bank of England, the boy not only looks at the building's façade but then attempts to 'peer in[side …] in the fond hope of seeing the money' (p. 262). The motivation behind this apparently incidental detail merits further consideration; Sloshy is not content to restrict his visual inspection of the building to its surface details, but aims to uncover its inner workings. Equivalently, the detective profession that Peters is on leave from (and which Sloshy aspires to join) was popularly conceived of as applying a 'penetrating interior vision' to the criminal body, seeking to deduce that person's interior character from external aspects.[20] While the focus of the inspective gaze is applied first to a financial 'body' (the Bank), it is then inadvertently turned to its 'rightful' target, as Sloshy and Peters stop to view a gentleman 'get on horseback' outside a 'handsome building' (p. 262-63). Converting this scene of ordinary life into a touristic spectacle, the figure in question becomes the subject of prolonged scrutiny in a manner licensed by the pair's activity; John Urry's outline of the 'touristic gaze' helps to explain the operation of vision here: 'the viewing of such tourist sights often involves different forms of social patterning, with a *much greater sensitivity* to visual elements of landscape or townscape. People *linger* over such a gaze'.[21] In this case, however, greater sensitivity facilitates a surveiling result: the 'gentleman' proves none other than Jabez North (passing as Count Raymond de Marolles); this scene at Bank Junction collapses distinctions between the spectacular and the disciplinary.

As identification gives way to a chase (Jabez begins to leave), the distinction is undercut in the other direction; Sloshy responds to this professional pursuit as if it is a continuation of the sightseeing they conducted earlier, only surpassing it in its ability to entertain: 'the outside of St. Paul's, and the performance [of Punch and Judy …] were mild dissipations […] compared to the delight of following a ghost' (p. 265). This action would seem, I propose, to posit a unity between tourism and detection on the basis that they both exhibit a 'heightened awareness of the visual'.[22] *Trail* thus offers a variation on what Otter claims to be the ideological commonality between the panopticon and flâneur:

> both [panopticism and flânerie …] are fantasies […] And their fantasy is of total knowledge of a subject population, be it of a body of criminals or of

[20] Richard T. Gray, *About Face: German Physiognomic Thought from Lavater to Auschwitz* (Detroit, MI: Wayne State University Press, 2004), p. xvii. See also Peter de Bolla, 'The Visibility of Visuality: Vauxhall Gardens and the Siting of the Viewer', in *Vision and Textuality*, ed. by Stephen Melville and Bill Readings (London: Macmillan Education UK, 1995), pp. 282–95 (pp. 284–85).
[21] John Urry, *Consuming Places* (London and New York, NY: Routledge, 1995), pp. 132–33. Emphasis added.
[22] Nead, p. 59.

> an urban crowd. The flâneur moves everywhere and sees everything, while the prisoner of the panopticon is permanently seen and known. A fantasy of omniscience underlies both models.[23]

A crucial distinction is that, by contrast to the 'exclusive [and] elitist' nature of flânerie, tourism in *Trail* is egalitarian—an activity embodied by figures on the margins: Peters, as a disabled man, and Sloshy, as an orphan.[24] The 'fantasy' is therefore, more specifically, of a modern city becoming opened up to 'a new mode of urban perception and experience' (tourism) that will ensure criminality cannot avoid detection.[25]

In offering this suggestion, *Trail* rejects both contemporary concerns about the relation between criminality and urbanity, and the sensationalist treatment that such a relation was often afforded in popular fiction. In 1860, the same year that *Trail* was first published, the *Saturday Review* expressed the fear that urbanisation was creating more opportunity for criminality to evade capture: 'the fusion of society gives a murderer every chance of being lost in a crowd'.[26] As identified in the introduction to this article, such anxieties motivated action to improve the 'social body': transparency became the ambition, with the modern city dreamt of as an endlessly open and visible site.[27] As was also noted, such anxieties were also, for Benjamin, the original ingredients of early detective fiction. By situating Jabez in Paris and then London, *Trail* teases an adherence to this prospect of the criminal lost within the urban mass; and the aftermath of the Bank Junction scene above offers an explicit allusion to it when, in pursuit of Jabez through the London streets, Peters is said to look as if he 'thought the horseman they [were] following would melt into thin air' (p. 263).

These alarmist possibilities are never realised, however; Peters and Sloshy trace Jabez to his London address and therefore enable his later scrutiny by Marwood and the Cherokees. In fact, in direct contradiction of popular anxieties, it is the detective and his adopted son—embodiments of law enforcement—that become obfuscated by the 'big-city crowd' (Benjamin), whereas criminality is seemingly more conspicuous. It is instructive of that egalitarianism noted above that social aspects are indicated to play a role in this imbalance; obfuscation is produced not merely by ocular impediments to vision (the density of the urban

[23] Otter, p. 7.
[24] Otter, p. 7. On the flâneur vis-à-vis the tourist, see De Sapio, pp. 153-54.
[25] Nead, p. 59.
[26] 'Hanging No Murder', *The Saturday Review*, 10.254 (1860), 302–3 (p. 303).
[27] 'Modernity has been haunted […] by a myth of transparency: transparency of the self to nature, of the self to the other, of all selves to society, and all this represented, if not constructed, from Jeremy Bentham to Le Corbusier, by a universal transparency of building materials, spatial penetration, and the ubiquitous flow of air, light, and physical movement'; Anthony Vidler, *The Architectural Uncanny: Essays in the Modern Unhomely* (Cambridge, MA and London: MIT Press, 1992), p. 217.

masses) but also by Jabez's 'blindness' to those of an inferior class;[28] by way of explaining Jabez's failure to realise he is being watched, it is noted that '[the Count] has better occupation for his bright blue eyes than the observation of such small deer as Mr. Peters and the "fondling"' (p. 263). That detail of '*such small deer*', combined with the fact that every participant is identified either by their title or status, indicates how 'visibility' is intersected by issues of class; implicit within this gesture is the idea that Sloshy and Peters—visually coded as members of the working class—appear simply as an undifferentiated mass to Jabez, or, rather, the 'Count'; his aristocratic title is, pertinently, foregrounded throughout the scene. Contemporary beliefs about unilateral vision within the modern city are therefore upheld in *Trail*, but their expected direction is inverted along class lines; aristocratic criminality becomes vulnerable to the working-class gaze.

On this issue, Ferguson observes that the novel seems concerned by how to achieve 'the vigilance and sensitivity required to police and maintain a productive community', claiming that it is performed by 'nervousness'.[29] While agreeing on the first point, the evidence of the Bank Junction scene in particular indicates that, for the modern city at least, tourism might fulfil this role, as an activity that generates a 'greater sensitivity' to the visual. The concern is thus bound up with the direction of visual modernity, and the setting of Bank Junction functions significantly in suggesting this as the target. As the centrepiece of the British economy—where the City's commercial streets met—it represented the 'heart of empire', and therefore modernity itself, through much of the nineteenth century.[30] By staging this key moment of visual recognition at Bank Junction, Braddon is therefore able to offer a commentary about visuality that resonates beyond the particularities of the setting, but which can speak more widely to the forces depicted therein.

'Vigilant Microscopic Observation': Scrutiny On and Off the Stage

After this encounter between Peters, Sloshy, and Jabez, visual scrutiny is 'taken indoors'; its follow-up, in which Marwood and 'the Cherokees' try to scrutinise Jabez for themselves, is carried out within Her Majesty's Theatre, Haymarket, a location equally resonant with the visual culture of mid-century London as Bank Junction, for reasons explained shortly. More generally, though, it can be said that the decision to examine their criminal target within an interior space speaks to the mid-century understanding that 'perceptual control was vastly simpler when

[28] Cf. Ferguson's observation about the alley of Blind Peter in Slopperton: 'it is not darkness per se but rather a journalistic laziness and, perhaps, unwillingness to offend the sensibilities of the [Sunday] paper's readership with anything so unsightly as the real that prevents Blind Peter from coming into view'; p. 11.
[29] Ferguson, p. 15.
[30] Iain Black, 'Imperial Visions: Rebuilding the Bank of England, 1919-39', in *Imperial Cities: Landscape, Display and Identity*, eds. Felix Driver and David Gilbert, (Manchester: Manchester University Press, 2003), pp. 96–116 (pp. 96–98).

undertaken within the walls of institutions than outside in the more unruly streets'.[31] This remark by Otter is no doubt meant to refer to *institutionalised* visuality, as in that of the factory, yet it applies quite precisely to *Trail* and its depiction of the streets versus the theatre; the 'unruliness' of the former is clearly shown by the preceding chase around Bank Junction, when Jabez nearly evades Peters and Sloshy. By contrast, theatre spaces were designed to facilitate the prolonged visual observation that Marwood and his group need; writing c.1878, the architect T. Roger Smith notes of this aim: '[important] to the entertainment [in the theatre] is that the audience should see each other, so as to allow all who wish it an opportunity for public display, and for scrutinising the appearance of others'.[32] For Smith, then, the appeal of the theatre derives from so-called 'auto-voyeurism'[33]—the opportunity to see and be seen in equal measure. Rather than the unilateral operation of vision (audiences watching on-stage performers) it is closer to the rhizomatic: everyone watching everyone else.

The depiction of visuality in *Trail*'s Paris and London opera scenes corresponds closely to Smith's idea of the theatre space; in nearly every case, audience members' scrutiny of one another takes priority over attention to what is happening on stage; practically the only exception is Valerie's enjoyment of Gaston's performance. Yet Braddon's novel is attentive to what Smith identifies as the need for consent in these visual relations—the fact that 'all *who wish it*' should be given a chance for public display. Contrarily, in the Paris opera Valerie neither desires, nor is aware of, Jabez's observation of her; a pleasurable *auto*-voyeurism becomes pure voyeurism. This situation, and others like it in *Trail*, wherein persons' bodies are read so as to deduce their internal characteristics, invokes the ambition of physiognomy: a system of reading outlined in Johann Caspar Lavater's *Physiognomische Fragmente* (1775-78), the aim of which was to discern correspondences between (in his words) 'the external and internal man, the visible superficies and invisible contents'.[34] Voyeurism was privileged in physiognomy because, according to its logic, the target of such scrutiny had no inclination to dissimulate if they were unaware of being watched; this visual relation therefore promised to give a more truthful reading of a person. *Trail* is

[31] Otter, p. 97.

[32] T. Roger Smith, *Acoustics in Relation to Architecture and Building: The Laws of Sound as Applied to the Arrangement of Buildings*, (New York, NY: Virtue, 1878), p. 115. Emphasis added.

[33] This concept appears in Peter de Bolla, 'The Visibility of Visuality: Vauxhall Gardens and the Siting of the Viewer', in *Vision and Textuality*, eds. Stephen Melville and Bill Readings (London: Macmillan Education UK, 1995), pp. 282–95, and is 're-visited' in the same sense by Jonathan Conlin, 'Vauxhall Revisited: The Afterlife of a London Pleasure Garden, 1770-1859', *Journal of British Studies*, 45.4 (2006), 718–43. See also Bruno Latour's 'oligoptic space'—a space of mutual oversight; quoted in Otter, p. 74. '[Auto]voyeurism' does not imply the sexual denotations of the original term.

[34] *Essays on Physiognomy*, trans. Thomas Holcroft, Eighth (London: William Tegg and Co., 1853). To judge by the editions of ,'s *Essays* and the appearances of 'physiognomy' in the popular press, interest in physiognomy peaked during the middle decades of the century. (Search term 'physiognomy' on ProQuest *British Periodicals* for the date range '1830 to 1900'.)

permeated by physiognomic imperatives and allusions to the system, and voyeuristic inspection acts according to its dictates. Unaware that Jabez is observing her, Valerie does not try to conceal the minor physiological details that disclose her feelings for Gaston: 'one faint quiver [and] a firmer compression of the thin lips' (p. 122). From this evidence of the body, Jabez obtains an accurate insight into Valerie's relationship with the opera singer and vital leverage over her.

In Her Majesty's Theatre, Haymarket, however, the direction of voyeuristic observation is reversed: unbeknownst, Jabez is subject to 'deliberate scrutiny' by the Cherokees, each of whom takes a 'long look' at his face in an attempt to confirm his unscrupulous nature (p. 270). Class dimensions are again pertinent, as they were in the Bank Junction scene, only here they intersect with the ocular arrangements prescribed by the arrangement of the theatre space. For if Smith encouraged mutual oversight among theatre-goers, this was emphatically not equal oversight. 'It is essential', he explained, 'that a variety of classes of accommodation should be preserved, and conspicuously separated from one another'.[35] Practically, such encouragements found expression in the tendency for upper-class patrons to occupy elevated seats—privileged viewing positions for observing both the performance and audience. The lower classes, by contrast, were assigned to a physically lower position—either sat or standing.[36] This link between social status and physical elevation is observed in *Trail*, and acts to mark the progress of Jabez's schemes. In the Paris Opera, before his entrapment of Valerie, he occupies the most rudimentary place: the 'front row of the stalls' (p. 120). But in Her Majesty's Theatre, having acquired a fortune and aristocratic status, he is seated in a 'box on the grand tier' (p. 269). Seemingly to index the viewing capabilities of the upper-class patrons, this new heightened position allows Jabez to 'take a leisurely survey of the audience' below him (p. 270).

Yet, this complacent observation is in stark contrast to what *Trail* otherwise says about the intersections of power, space, and vision. For though he is clearly capable of surveying the audience in Her Majesty's Theatre, Jabez is in fact made an object of scrutiny by the Cherokees, who occupy the position he formerly did: the 'pit' (p. 268). This being made apparent, the undifferentiated category of 'the audience' therefore registers as a sign of Jabez's vulnerability, rather than a strength; just as he could not distinguish within the crowds at Bank Junction, so here he is likewise unable to do so of the theatre-goers grouped below him—the Cherokees are unafraid of reciprocal observation because their integration within the lower-class audience makes them 'invisible' to an aristocrat such as Jabez is feigning to be.[37] As per Smith's prescription, the 'conspicuous separation' of the classes is upheld in *Trail*, but the power dynamics expected to emerge from it are

[35] Smith, p. 115.

[36] This leisurely institution hence parallels the productive space of the factory, where owners could supervise their workers from a similarly unequal viewing position; see Otter, p. 75.

[37] In a complication of identities and of the idea of *identity* itself, that is typical of sensation fiction, Jabez discovers that he is the son of the Marquis de Cevennes, and thus aristocratic by birth rather than through his marriage to Valerie.

radically undercut: the seemingly privileged position of the upper-class patron becomes one of acute vulnerability to lower-class scrutiny. This aspect of the novel comes into focus when we consider its 1864 serialization in the *Half-Penny Journal*, a publication with a predominantly lower-class readership;[38] it is likely that a fantasy of inverted social relations predicated upon visual power would have found appeal in such a context. *Trail* can therefore be seen, I claim, to fulfil a purpose similar to that which Sharrona Pearl identifies of physiognomy; it helps to 'reveal the tension between democracy and hierarchy that the Victorian city represented in both its layout and its modes of interaction. The urban experience was one of space and enclosure, freedom and limitation'. [39] The theatre spaces of Braddon's novel are a microcosm for these tensions: between spectacle and surveillance, lower and upper-class patrons, privacy and public display; modern visuality appears as a 'contested terrain', as Jay asserts, but it also has subversive and egalitarian aspects: it has a *carnivalesque* function, to the extent that Mikhail Bakhtin defined the carnivalesque as 'a new mode of interrelationship between individuals, counterposed to the all-powerful socio-hierarchical'.[40] Whether in the context of the streets or theatres, *Trail* writes against assumptions about who holds power in the visual encounters within the modern city.

Bakhtin's carnivalesque implies a suspension of distance between persons.[41] The novel's opera scenes indicate this as an outcome made possible through the use of visual technologies, specifically that of the opera glass: a magnification device enabling close scrutiny from a distance. Designed principally to enhance audience's appreciation of performances, in *Trail* these glasses are more often directed at the theatre-goers themselves; they act, for example, as the means by which Jabez is able to detect Valerie's miniscule facial responses in the Paris Opera, despite their class-based separation:

> The powerful glass of the lounger in the stalls records the minutest change in the face of Valerie de Cevennes. It records [physiological details]; and the eyes of the lounger fasten more intently, if possible, than before upon the face of the Spanish beauty. (p. 122)

Notable here, and throughout the Opera scene, is how the distinctions between the bodily organ (eye) and optical device (glass) are elided. Responsibility for visual scrutiny is variably assigned to 'the lounger's glass' and 'the lounger [Jabez]', which 'record' and 'see' (p. 122) their target, respectively. Only with the conclusion of the passage is a separation indicated between the observer and the technology used for observation, when 'after one last contemplative look at the

[38] Kate Watson, *Women Writing Crime Fiction, 1860-1880: Fourteen American, British and Australian Authors* (Jefferson, NC: McFarland & Co., 2012), p. 57.
[39] Pearl, *About Faces: Physiognomy in Nineteenth-Century Britain*, p. 9.
[40] Mikhail Bakhtin, *Problems of Dostoevsky's Poetics*, ed. & trans. by Caryl Emerson (Minneapolis, MN and London: University of Minnesota Press, 1984), p. 123. Original emphasis.
[41] Bakhtin, p. 123.

proud brow and set lips of Valerie […], he lowers his glass' (p. 122). This elision between eye and glass is, I contend, attributable to the legacy of physiological optics—scientific analysis of the eye and vision that developed significantly from the nineteenth century onwards, and which constituted a break from the 'classical episteme' of vision. Key in growing this field was Johannes Müller's *Elements of Physiology* (1840-43), which critiqued the notion that the eye was an infallible viewing device; instead, Müller claimed, it was inherently deficient.[42] The result of this proposal and its proliferation in the subsequent decades was, according to Jonathan Crary, that

> the relation between eye and optical apparatus becomes one of metonymy: both were now contiguous instruments on the same plane of operation, with varying capabilities and features. The limits and deficiencies of one will be complemented by the capacities of the other and vice versa.[43]

Trail's seamless transition between the eye and opera glass indicates its sympathy for this perspective, and additional evidence for such is given by the Cherokees' use of the glass in Her Majesty's Theatre; the distance between their position in the 'pit' and the 'box' where Jabez sits is acknowledged to prohibit the close scrutiny of his face that they desire, yet the devices resolve the dilemma: 'the thin arched lips are not discernible from this distance; but through the glass the general effect of the face is very plainly seen' (p. 270).

The title of the chapter set in Her Majesty's Theatre, 'The Value of an Opera Glass', draws attention to how the intended function of the device is subverted in the novel. In a variation of the street scene involving Jabez, Peters, and Sloshy, where the leisurely occupation of tourism merged effortlessly into the surveiling function of the detective, the opera glass becomes a tool for uncovering hidden aspects of a person and accessing 'truth'. *Trail* anticipates in a sensational form contemporary anxieties about the results of magnified vision in theatrical settings. In a *Fun* article of 1864, there is a comic cautioning of performers that, owing to the opera glass, they must be 'conscious of vigilant microscopic observation' and cease any behaviour that would reveal the artifice of the production, for example, a knowing wink at an audience member.[44] In Braddon's novel this attention to the revealing potential of minute facial details is extracted from the theatre setting to become a commentary on the performativity of everyday life. When Valerie declares to Jabez that the 'de Cevennes do not lie', he retorts:

> Have you acted no lies, though you may not have spoken them? Have you never lied with your face, when you have worn a look of calm indifference, while the mental effort with which you stopped the violent beating of your

[42] Johannes Müller, *Elements of Physiology*, trans. by William Baly (London: Taylor and Walton, 1842), II.
[43] Crary, p. 129.
[44] 'At the Play', *Fun*, 7 (1864), 9.

> heart produced a dull physical torture in your breast; when, in the crowded opera-house, you heard *his* [Gaston's] step upon the stage? (p. 137; original emphasis)

Trail offers a variation of that adage 'all the world's a stage', whilst investing the *Fun* article's caution with an insidious potential: not only performers must be 'conscious of vigilant microscopic observation' as a consequence of modern visual technologies like the opera glass, but everyone must be if they wish to keep anything hidden from public consumption. Accounting for its theatrical scenes, and that near Bank Junction, it becomes clear that in Braddon's novel modern visuality is not a 'contested terrain' (Jay) in some abstracted sense—there is an active competition for advantage in visual encounters. The repercussions of this are varied; there is a clear disciplinary potential to it, but equally an opportunity to redress criminality and offer egalitarian outcomes. Arguably, *Trail* provides an optimistic outlook in this regard because it stages, firstly, Valerie's deception, before 'redeeming' these voyeuristic visual practices by applying them to Jabez. This is to say that the novel provides no simplistic idea of modernity's impact upon visuality, but even-handedly displays its dangers and opportunities.

Whilst the Cherokees' scrutiny of Jabez exploits the visual opportunities provided by the theatre space, and the devices that can be utilised therein, it does not end with the opera performance; one of their group, the 'Smasher', chooses to investigate him outside Her Majesty's Theatre, in the 'unruly streets' of the Haymarket. Attention to the visual conditions existing here by the time of *Trail*'s publication, however, reveals that the distinction between the two locales is less than emphatic. Specifically, from the beginning of the century there had been a proliferation of gas lighting in metropolitan England, but especially in London.[45] The technology was seized upon by those intent on improving the 'social body', as it promised to help open up the city to visual inspection regardless of the time of day. For Anthony Vidler, the foundational figure for this equation of light and order is Jeremy Bentham; in *Panopticon; or, The Inspection House* (1791) that philosopher dreams of a time when the progress of illumination technologies will 'extend to the night the security of the day'.[46] By the mid nineteenth century, the ubiquity of gas lighting was rendering parts of London so bright that comparisons were made to the theatre, in which the installation of such technology had been equally transformative.[47] As the site of both the Opera House and Her Majesty's Theatre, the Haymarket became the target of many such comparisons.[48] Augustus

[45] See for example Wolfgang Schivelbusch, *Disenchanted Night: The Industrialization of Light in the Nineteenth Century* (Berkeley, CA: University of California Press, 1995); Nead.
[46] Vidler, p. 217; Jeremy Bentham, *Panopticon; or, The Inspection House* (Dublin and London: Thomas Payne, 1791), p. 8.
[47] Gaslight was attracting particular attention at this time with the passing of the Metropolitan Gas Act 1859 and the Sale of Gas Act 1860. For the gaslight's transformation of the stage, see Sharrona Pearl, 'Building Beauty: Physiognomy on the Gas-Lit Stage', *Endeavour*, 30.3 (2006), 84–89.
[48] 'A Looking-Glass for London', *The Penny Magazine*, 6.365 (1837), 473–75 (p. 474).

Mayhew's 1858 novel *Paved with Gold* depicts these streets following an opera performance, as the 'gas is flaring from the shop windows, and throwing out its brilliant rays until the entire street is lit up as a stage'.[49] Yet the gas-lighting seems inconsequential with respect to the unsavoury aspects of the area targeted by those concerned for London's social body; *Paved with Gold* seems to delight in noting how the opera's fashionable clientele intermingle with the disreputable under-classes in this 'great republic of vice' (Haymarket), a social divide that is symbolically mirrored by the 'chiaroscuro of gaslight'—its creation of gradients between light and dark.[50] (Cf. Figure 1 as a visual depiction of the same scene, from Henry Mayhew's *London Labour and the London Poor* (1861); both works emerged from the Mayhew brothers' investigative journalism.) The promise of perfect security as a result of gaslighting seems a remote prospect in Mayhew's London, but the technology does serve adjacent functions; trying to determine the authenticity of a coin he has received, the novel's protagonist, Phil Merton, takes advantage of the artificial brightness and 'read[s] by gas-lamp' its inscription.[51]

Figure 1. The Haymarket at midnight, from Henry Mayhew, *London Labour and the London Poor* (1861).

It is unclear if Braddon knew of Mayhew's depiction of the Haymarket, but her novel's treatment of visuality in the same area has several parallels to it.[52]

[49] Augustus Mayhew, *Paved with Gold; Or, the Romance and Reality of the London Streets* (London: Chapman and Hall, 1858), p. 106.
[50] Mayhew, p. 106; Nead, p. 83.
[51] Mayhew, p. 114.
[52] There is a possible allusion to Mayhew's novel when, on Peters' arrival in London, he finds that '[this city] is not paved with gold certainly' (p. 260).

Foremost, the violent juxtaposition of social types described in *Paved with Gold* becomes in *Trail* a literal collision between the upper and lower classes:

> As the Count and Countess [Jabez and Valerie] crossed from the doors of the opera-house to their carriage, a drunken man [the Smasher] came reeling past, and before the servants or policemen standing by could interfere, stumbled against Raymond de Marolles and knocked his hat off. He picked it up immediately, and, muttering some unintelligible apology, returned it to Raymond, looking, as he did so, very steadily in the face of M. de Marolles. The occurrence did not occupy a moment, and the Count was too finished a gentleman to make any disturbance. (p. 272)

In lieu of the opera glass, through which his compatriots nullified the distance separating them from Jabez, the Smasher makes himself physically proximate to his target so that he can take a 'jolly good look at him' (p. 273). The ruse proves effective, enabling him to identify the inconspicuous feature that marks Jabez as the right person; he later reports: 'I see the cut upon his forehead, […], as you [Peters] told me to take notice of' (p. 273). This is an ironic modification of the act of reading performed in *Paved with Gold*; the Smasher inspects not a coin, but a face scarred by one—Sloshy's mother having thrown one at Jabez when he jilted her. Despite this difference, both actions speak to a desire to confirm authenticity in the modern city, and to the material transformations that enable verification by means of vision. It is perhaps surprising, therefore, that gaslight is not explicitly mentioned in *Trail*, even as its presence is clearly necessary for the Smasher to scrutinise Jabez at such a late hour. Whereas the notice of gaslight in *Paved with Gold* can be ascribed to that novel's journalistic concern for detail, I propose that its omission from *Trail* is accounted for by Nead's suggestion that many London residents were 'no longer amazed by gaslight illumination';[53] it had become a naturalised and mundane aspect of the metropolitan landscape, making direct reference unnecessary. Its implicit presence is nonetheless informative of *Trail*'s ideas about the character of modern visuality. Precisely, the novel corroborates the Benthamite promise of illumination technologies as a tool for greater security, discerning a future in which the signs of criminality are visible at all times and in increasingly many places.

The 'Chamber of Horrors': Criminality as Spectacle

The instances of scrutiny and identification considered in this article culminate in Jabez's apprehension and trial in Slopperton; sentenced to death, he takes his own life before an execution can be carried out. Yet this is not the final resting place for Braddon's criminal antagonist, for 'casts' and 'masks' are taken of Jabez and he is then put on display at the 'Chamber of Horrors' within the 'eminent wax-

[53] Nead, p. 83.

work exhibition' of Madame Tussaud's in London (p. 396). Here he is subjected to visual scrutiny in perpetuity:

> Young ladies fell in love with him, and vowed that a being—they called him a being—with such dear blue glass eyes, with beautiful curly eyelashes, and specks of lovely vermillion in each corner, could never have committed a horrid murder, but was, no doubt, the innocent victim of that cruel circumstantial evidence. (p. 396-97)

This seemingly incidental addendum to Jabez's criminal career is in fact a densely allusive statement about the ambiguities of modern visuality. The first aspect that requires mention in this regard is that the 'Chamber of Horrors' is anachronistic, that exhibition having since 1855 been known as the 'Chamber of Comparative Physiognomy'.[54] While the original intent behind Tussaud's was to 'blend utility with amusement',[55] this change of name marked an attempt to elevate its polemic function above its titillating potential. The popular press interpreted it within a teleological frame, as an indication of the changing attitudes to violent spectacle: 'people have supped full of horrors, and, it may be hoped, have got sick of them', opined a writer for *Punch*, in an 1861 piece; for them it was an 'improvement' that meant one could now 'profit' from studying the exhibitions.[56] 'Horrors' remained an accurate description of the Chamber's contents, however, consisting as they did of atomised, waxwork body parts; the head of the revolutionary figure Maximilien Robespierre was a notorious case. Braddon's anachronism signals, then, the prospect of a return to, or a lack of progress from, finding pleasure in a sensational, violent aesthetic—a type of response perceived to be closely bound up with Britain's moral improvement.

The wax tableaux of the Chamber of Horrors were distinguished from those elsewhere in Tussaud's by being displayed absent of context; there was a disunity between the catalogue, which narrated aspects of the person's life and crimes, and the depiction of their violent deaths in isolation (shorn even of the apparatus that conducted the execution). As Lela Graybill recounts, such a setup offered a highly ambivalent visual experience:

> The Chamber of Horrors neither offered nor depended on that kind of coherence [of the tableaux]. Its effectiveness grew instead out of nagging doubt—from the blurring of the line between the representational and the real […] The pleasures of Madame Tussaud's display did not hinge on the

[54] Pearl, *About Faces*, pp. 38-9. For a history of the Chamber of Horrors as 'Gothic Tourism', see Chapter 2 of Emma McEvoy, *Gothic Tourism: Constructing Haunted England* (London: Palgrave, 2015).
[55] Lela Graybill, 'A Proximate Violence: Madame Tussaud's Chamber of Horrors', *Nineteenth-Century Art Worldwide*, 9.2 (2010), 1–28 (p. 12). On the topic of vision's polemic potential see Grazia Zaffuto, '"Visual Education" as the Alternative Mode of Learning at the Crystal Palace, Sydenham', *Victorian Network*, 5.1 (2013), 9–27.
[56] 'Comparative Physiognomy', *Punch*, 1861, 9.

> sublimation of such tensions into feelings of coherence, stability, and mastery.[57]

It was the uncanny verisimilitude of the waxwork figures to real historical persons that instantiated this ambivalence about what was 'representational' and what was 'real'; with those less fragmentary and more 'complete' exhibits, viewers gained pleasure in a suspenseful judgement about whether they were alive or dead, to be eventually confirmed by the absence of expression or movement.[58] The subject was indeed 'almost alive', to borrow Uta Kornmeier's phrase, for the process of obtaining waxwork figures implied that the subject 'had also impressed, via the face, part of their personality into the wet plaster'; accordingly, they could be read like the living subject, only with more accuracy, if physiognomic principles were to be accepted, for there was the cessation of movement so keenly sought after by Lavater. Madame Tussaud herself belied the artistry involved in the waxwork process so as to augment its claims to verisimilitude: 'the mask was "taken" rather than "made". The waxwork thus gained an unmatched documentary status'.[59]

These details most accurately describe the responses to exhibits not included in the Chamber of Horrors, for there could be no doubt regarding the lifelessness of the fragmentary parts displayed therein. It is nevertheless correct for *Trail*'s depiction of the Chamber and its occupant, Jabez, who is exhibited as a full, i.e., non-atomised, figure, arrayed in 'boots' and 'evening costume' (p. 397). Presented in this way, Jabez more closely matches the 'full figure compositions of the main exhibition', such as the writer Voltaire, than he does Robespierre.[60] According to Kornmeier, visitors responded to the former as if he were poised to resume life, 'so "real" as to almost speak to the viewer'.[61] This context is a vital one, for, as Graybill explains, it was expected that these complete figures of the main part of Tussaud's 'should be viewed with sympathy'[62]—a stark contrast to the horrifying thrill cultivated by exhibits in the Chamber. Recognising this, it is possible to see the response of the 'young ladies'—who 'fell in love' with Jabez's waxwork—as something more than naivete; their sympathetic reading of this criminal figure is encouraged by the manner of his appearance. If this is another inaccuracy in Braddon's portrayal of Tussaud's, alongside the anachronistic name, then it is a purposive one. In contradiction of *Punch*'s aspirations for the Chamber to have a polemic function, in *Trail* it is a site that perpetuates a false understanding of the world; Jabez fails as a case of 'Comparative Physiognomy' from which the public might learn to recognise the signs of criminality, and thus 'profit' from changed behaviour. Instead, he

[57] Graybill, pp. 19, 22.
[58] Uta Kornmeier, 'Almost Alive: The Spectacle of Verisimilitude in Madame Tussaud's Waxworks', in *Ephemeral Bodies: Wax Sculpture and the Human Figure*, ed. by Roberta Panzanelli (Los Angeles, CA: Getty Publications, 2008), pp. 67–82 (p. 68).
[59] Kornmeier, p. 76.
[60] Graybill, p. 15.
[61] Kornmeier, p. 73.
[62] Graybill, p. 15.

spotlights the ambiguity and potential for misreading that inheres to visuality, and which appears irresolvable by technological and material progress, since greater verisimilitude would likely only enhance the changes of a sympathetic reading.

If, as this article has outlined, *Trail* broaches optimistic conclusions about the direction of modern visuality, its concluding image disrupts this by foregrounding visual incoherency. Yet it is fitting that Jabez should become a sympathetic figure within a space designed to arouse different feelings, for *Trail* consistently elides distinctions between types of visual practice and the places designed for their use; the leisurely gaze of the tourist proves amenable to detective purposes, as do the spatial arrangements and apparatus of the theatre. Braddon's novel contests the anxiety that criminality will become lost within the 'big-city crowd' (Benjamin), but it does not subscribe to its teleological alternative either, namely, the idea of 'transparency' so sought after by those authorities concerned for the city's social body. Instead, *Trail* seems more ambivalent about the prospect of accessing truth through vision; the 'almost alive' (Kornmeier) status of its criminal antagonist—whose criminal career so successfully manipulated everything visual—testifies to things unresolved within modern visuality, and a pessimism about the ability for them to ever be resolved. Moreover, by locating Jabez in the metropolitan centre, as Tussaud's was originally situated in London's Baker Street, Braddon brings a sizeable portion of her readership into symbolic confrontation with these ongoing uncertainties. That is, I suggest, part of *Trail*'s appeal; to modify Graybill's claim about what drew audiences to Tussaud's Chamber of Horrors, the 'pleasures' of reading Braddon's first novel do not depend on sublimating ambivalence into 'feelings of coherence, stability, and mastery'—instead they emerge from its foregrounding of the indeterminacies that inhabit modern visuality.

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Bibliography

‘A Looking-Glass for London’, *The Penny Magazine*, 6 (1837), 473–75

‘At the Play’, *Fun*, 7 (1864), 9

Bakhtin, Mikhail, *Problems of Dostoevsky’s Poetics*, ed. & trans. by Caryl Emerson (Minneapolis, MN and London: University of Minnesota Press, 1984)

Bennett, Tony, ‘The Exhibitionary Complex’, *New Formations*, 4 (1988), 73–102

Bentham, Jeremy, *Panopticon* (Dublin and London: Thomas Payne, 1791)

Billing, Andrew, and Juliette Cherbuliez, ‘Paris as Capital, Capital in Paris’, *L’Esprit Créateur*, 55.1 (2015), 1–14. <https://doi.org/10.1353/esp.2015.0043>

Black, Iain, ‘Imperial Visions: Rebuilding the Bank of England, 1919-39’, in *Imperial Cities: Landscape, Display and Identity*, ed. by Felix Driver and David Gilbert (Manchester: Manchester University Press, 2003), pp. 96–116

de Bolla, Peter, ‘The Visibility of Visuality: Vauxhall Gardens and the Siting of the Viewer’, in *Vision and Textuality*, ed. by Stephen Melville and Bill Readings (London: Macmillan Education UK, 1995), pp. 282–95.

Braddon, Mary Elizabeth, *The Trail of the Serpent*, ed. by Chris Willis (New York, NY: Modern Library, 2003).

‘Comparative Physiognomy’, *Punch*, 1861, 9

Conlin, Jonathan, ‘Vauxhall Revisited: The Afterlife of a London Pleasure Garden, 1770-1859’, *Journal of British Studies*, 45 (2006), 718–43

Crary, Jonathan, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge, MA: MIT Press, 1992)

Cunningham, Peter, *Modern London; or, London as It Is* (London: John Murray, 1851)

Ferguson, Christine, ‘Sensational Dependence: Prosthesis and Affect in Dickens and Braddon’, *LIT: Literature Interpretation Theory*, 19.1 (2008), 1–25

Foster, Hal, ‘Introduction’, in *Vision and Visuality*, ed. by Hal Foster (Seattle, WA: Bay Press, 1988)

Gilbert, Pamela K., *Mapping the Victorian Social Body* (New York, NY: State University of New York, 2004)

Gray, Richard T., *About Face: German Physiognomic Thought from Lavater to Auschwitz* (Detroit, MI: Wayne State University Press, 2004)

Graybill, Lela, ‘A Proximate Violence: Madame Tussaud’s Chamber of Horrors’, *Nineteenth-Century Art Worldwide*, 9 (2010), 1–28

‘Hanging No Murder’, *The Saturday Review*, 10 (1860), 302–3

Jay, Martin, ‘Scopic Regimes of Modernity’, in *Vision and Visuality*, ed. by Hal Foster, Discussions in Contemporary Culture (Seattle, WA: Bay Press, 1988), pp. 2–23

Kornmeier, Uta, ‘Almost Alive: The Spectacle of Verisimilitude in Madame Tussaud’s Waxworks’, in *Ephemeral Bodies: Wax Sculpture and the Human Figure*, ed. by Roberta Panzanelli (Los Angeles, CA: Getty Publications, 2008), pp. 67–82

Lavater, Johann Caspar, *Essays on Physiognomy*, trans. by Thomas Holcroft, Eighth (London: William Tegg and Co., 1853)

Litvak, Joseph, *Caught in the Act: Theatricality in the Nineteenth-Century Novel* (Berkeley, CA: University of California Press, 1992).

Mangham, Andrew, ‘“Drink It up Dear, It Will Do You Good”: Crime, Toxicology and *The Trail of the Serpent*’, in *New Perspectives on Mary Elizabeth Braddon (DQR Studies in Literature)* (Amsterdam: Rodopi, 2013), pp. 95–112

Mayhew, Augustus, *Paved with Gold; Or, the Romance and Reality of the London Streets* (London: Chapman and Hall, 1858)

Mayhew, Henry, *London Labour and the London Poor*, (London: Griffin, Bohn and Company, 1861)

McEvoy, Emma, *Gothic Tourism: Constructing Haunted England* (London: Palgrave, 2015).

Müller, Johannes, *Elements of Physiology*, trans. by William Baly (London: Taylor and Walton, 1842), II

Nayder, Lilian, ‘Science and Sensation’, in *The Cambridge Companion to Sensation Fiction*, (Cambridge: Cambridge University Press, 2013), pp. 154–67 (pp. 159–61)

Nead, Lynda, *Victorian Babylon: People, Streets and Images in Nineteenth-Century London* (New Haven, CT and London: Yale University Press, 2005)

Nelson, Robert S., ‘Introduction: Descartes’s Cow and Other Domestications of the Visual’, in *Visuality Before and Beyond the Renaissance: Seeing as Others Saw*, ed. by Robert S. Nelson (Cambridge: Cambridge University Press, 2000), pp. 1–20

Otter, Chris, *The Victorian Eye: A Political History of Light and Vision in Britain,*

1800-1910 (Chicago, IL and London: University of Chicago Press, 2008)

Pedlar, Valerie, *'The Most Dreadful Visitation': Male Madness in Victorian Fiction* (Liverpool: Liverpool University Press, 2006)

Pearl, Sharrona, *About Faces: Physiognomy in Nineteenth-Century Britain* (Cambridge, MA: Harvard University Press, 2010)

———, 'Building Beauty: Physiognomy on the Gas-Lit Stage', *Endeavour*, 30 (2006), 84–89 <https://doi.org/10.1016/j.endeavour.2006.09.001>

Poovey, Mary, *Making a Social Body: British Cultural Formation, 1830-1864* (Chicago, IL: University of Chicago Press, 1995)

De Sapio, Joseph, *Modernity and Meaning in Victorian London* (London: Palgrave, 2014)

Schivelbusch, Wolfgang, *Disenchanted Night: The Industrialization of Light in the Nineteenth Century* (Berkeley, CA: University of California Press, 1995)

Smith, T. Roger, *Acoustics in Relation to Architecture and Building: The Laws of Sound as Applied to the Arrangement of Buildings*, (New York, NY: Virtue, 1878)

Timbs, John, *Curiosities of London* (London: John Camden, 1867)

Tomaiuolo, Saverio, 'Perception, Abduction, Disability: *Eleanor's Victory* and *The Trail of the Serpent*', in *In Lady Audley's Shadow: Mary Elizabeth Braddon and Victorian Literary Genres* (Edinburgh: Edinburgh University Press, 2010), pp. 97–118

Urry, John, *Consuming Places* (London and New York, NY: Routledge, 1995)

Vidler, Anthony, *The Architectural Uncanny: Essays in the Modern Unhomely* (Cambridge, MA, and London: MIT Press, 1992)

Waters, Sarah, 'Introduction', in *The Trail of the Serpent* (New York, NY: Modern Library, 2003), pp. xv–xxiv

Watson, Kate, *Women Writing Crime Fiction, 1860-1880: Fourteen American, British and Australian Authors* (Jefferson, NC: McFarland & Co., 2012)

Zaffuto, Grazia, '"Visual Education" as the Alternative Mode of Learning at the Crystal Palace, Sydenham', *Victorian Network*, 5 (2013), 9–27

Looking Both Ways: *Middlemarch*, True Skin, and the Dermatological Gaze

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Abstract
Based on an analysis of a wide range of Victorian dermatology textbooks and previously unexamined articles on the skin in the periodical press, this essay demonstrates George Eliot's implementation of a dermatological gaze in Middlemarch*. The novelty of this gaze lies in a bidirectional movement that combines an optical surface assessment with observations of physiological processes taking place in the inner structures of the skin. The essay argues that this two-fold way of looking emerged in the wake of Victorian dermatology's turn towards morphological classifications and the popularisation of microscopy. At a time when microscopic images of the skin's three layers were widely disseminated, the seat of skin diseases moved from inner organs into the thickened, more complex structure of the skin itself, calling for a gaze that simultaneously looks at and into the skin. Contributing to the sparse scholarship that links dermatological history to literary figurations of skin, the article invokes the new dermatological gaze to arrive at a fuller understanding of how we look at character(s) in realist novels. It first traces Eliot's retreat from physiognomic looking and her introduction of dermatological registers of complexion. Second, it analyses the narrator's use of a two-fold gaze in passages that magnify the physiological (mal)functioning of the characters' skin. Third, it interrogates the novel's shift from visual to tactile impression. The article builds on and extends perspectives on Eliot's materialist characterology by showing how a dermatology-based reading of* Middlemarch *crucially helps to clarify the characters' choices and social behaviours.*

'Come with me, and lovingly study Skin' – is how George Eliot's *Middlemarch* patently does not begin. But resituating the 1871–72 publication of Eliot's text in the burgeoning discursive-scientific fields surrounding microscopic visualisation and the professionalisation of dermatology reveals to what extent *Middlemarch* invites readers (and fellow novelists) to apply a dermatological gaze to characters in realist literature. In this article, I propose a reconsideration of the novel's tendencies towards the visual in light of its interactions with nineteenth-century dermatological discourse. Echoing back with G.H. Lewes's emphatic call to '[…] lovingly study Nature', expressed enthusiastically ten years before in the opening chapter to his *Studies in Animal Life*,[1] Eliot's first sentences in *Middlemarch* instantaneously instruct readers to study the outward appearance of her characters. After classifying Dorothea's 'kind of beauty' as one 'which seems thrown into relief by poor dress', the narrator scrutinises her 'finely formed' hand and wrist,

[1] George Henry Lewes, *Studies in Animal Life* (New York, NY: Harper & Brothers, 1860), p. 9.

visible to narratorial observation and commentary only because they are not covered up by gloves, long sleeves, or trimmings.[2] Like contemporary writings on the natural world, the novel begins with a sweeping view of the surface texture – or 'outside tissues'– of (in)animate objects (p. 9).[3] And yet it increasingly resists and refutes such superficial optical assessments. By introducing a microscopic gaze into the narrator's and, by extension, the reader's toolkit of interpretative instruments, Eliot exposes the materials found on the inside of cutaneous surfaces. The dermatological gaze that I seek to define in this essay does not, however, simply probe beneath deceptive covers in order to unearth a supposedly true core. Its introspective move does not necessarily shift attention 'from the visible to the metaphysical'.[4] Instead, the narratorial gaze reaches underneath the outermost surface of the skin, into the skin's complex layers, in order to detect physiological processes that are described within materialist, rather than metaphysical, registers. Just as the mid-nineteenth-century microscopic cross-sections that became widespread in the periodical press visualised the skin as a surface with a depth of its own, (some of) Eliot's characters pry into one another's depth only to uncover more cutaneous surfaces, for even '[s]ouls have complexions too' (p. 12). A recognition of the layered depth that the skin accrued in dermatological discourse elucidates this paradox: 'There's a skin without and a skin within', as Alfred Power's 1871 sanitary rhyme memorably put it.[5]

The argument that Eliot takes over the trope of microscopy from the physiologists and naturalists (and Lewes, most prominently) and develops it into a key strategy of literary realism is not a new one.[6] What I would like to propose in this article is to refocus the critical lens at the precise materials that come under the microscope of her omniscient narrator. Departing from J. Hillis Miller's influential conclusion that all (optical) routes to knowledge are ultimately destabilised in the novel, existing scholarship has evaluated both the metaphorical and literal valence of the microscope to the text as facilitating an 'observation of female-kind', of 'complex human dynamics', of 'existing structures that before

[2] George Eliot, *Middlemarch* (London: Penguin, 1871–72; repr. 2003), p. 7. Further references to this edition are given after quotations in the text.

[3] Consider, for instance, an exemplary contribution to the *Popular Science Monthly* written by naturalist Hugh Macmillan shortly after the serial release of *Middlemarch*. This guided observation of the natural world characteristically begins with the 'most cursory and superficial glance', registering only those plants that 'meet our eye', before it proceeds to magnify these appearances under a microscopic lens, detecting e.g. the 'spores, or sporules' of moss and lichen; 'Lowly Vegetable Forms', *The Popular Science Monthly*, August 1873, pp. 469–79 (pp. 470–71).

[4] This is how Kate Flint has persuasively described a common Victorian 'slippage from concern with viewing the material world to inner forms of vision', in *The Victorians and the Visual Imagination* (Cambridge: Cambridge University Press, 2000), p. 9.

[5] Alfred Power, *Sanitary Rhymes* (London: T. Richards, 1871), p. 2.

[6] See Meegan Kennedy, 'Technology', in *The Routledge Research Companion to Nineteenth-Century British Literature and Science*, ed. by John Holmes and Sharon Ruston (Abingdon: Routledge, 2017), pp. 311–28 (p. 319).

were unknown'.[7] Most of these descriptions insert the microscopic mechanism into psychological, humanist, or linguistic frames, eliding the scientific materialism of Eliot's text.[8] Working towards redressing this critical oversight, this article aims to assess the extent to which contemporary dermatological discourses inform the narrative gaze developed to decipher the characters' skin, in particular its outward texture, layered structure, and physiological functions. In so doing, the article makes a substantial contribution to discussions of what Pearl Brilmyer has insightfully described as Eliot's 'materialist characterology'.[9] Where Brilmyer is concerned with the construction of characters as soft matter and thus evokes what she calls a *physics of character*, I interrogate the layered construction of the characters' skin and foreground what could be termed a *physiology* of character. Offering the first dermatology-based reading of *Middlemarch*, I seek to demonstrate how Eliot crafts materially layered characters whose inner molecules, fibres, and tissues interact, through their porous skin boundaries, with the complex cutaneous fabric in which they are 'embroiled' (p. 290).

My reading affiliates itself with the turn towards materiality and object culture in Victorian studies, which can be traced as far back as to Asa Briggs's study of *Victorian Things* (1988). Yet the materialist paradigm did not seem to unfold its full methodological potential until Carolyn Steedman (*Dust*, 2001), Elaine Freedgood (*The Ideas in Things*, 2006), and Isobel Armstrong (*Victorian Glassworlds*, 2008), amongst others, convinced nineteenth-century scholars to take even the most inconspicuous or translucent 'things' seriously. Over the past decade, journals such as *Interdisciplinary Studies in the Long Nineteenth Century* have devoted special issues to the *Material Imagination* (2008), and collections such as the *Oxford Handbook of Victorian Literary Culture* (2014) contain sections on 'Material and Mass Culture' as a matter of course. Arguably, even the issues of *Victorian Network* have consecutively given more prominence to material objects: recent issues have highlighted items of *Production and Consumption* (2012), the commodities inspiring *Victorian Other Worlds* (2013), and, more succinctly still, *The Body* (2015), *Dirt* (2015), and the *Brain* (2016). From current critical vantage points, it seems undeniable that the materialist idiom

[7] J. Hillis Miller, 'Optic and Semiotic in *Middlemarch*', in *New Casebooks:* Middlemarch, ed. by John Peck (New York, NY: St. Martin's Press, 1992), pp. 65–83; Charlotte Sleigh, 'The Novel as Observation and Experiment', in *The Routledge Research Companion to Nineteenth-Century British Literature and Science*, pp. 71–86 (p. 78); Mark Wormald, 'Microscopy and Semiotic in *Middlemarch*', *Nineteenth-Century Literature*, 50 (1996), 501–24 (p. 501); David Paxman, 'Metaphor and Knowledge in George Eliot's *Middlemarch*', *Metaphor and Symbol*, 18 (2003), 107–23 (p. 113).

[8] This is not to suggest that these critics do not take Eliot's negotiation of (popular) science into account. Yet, even Wormald, who traces the novel's interrelationship with the history of microscopy, does not specify exactly what it is – in a materialist sense – that Eliot's 'magnificent study of provincial life' (p. 524) actually magnifies.

[9] S. Pearl Brilmyer, 'Plasticity, Form, and the Matter of Character in *Middlemarch*', *Representations*, 130 (2015), 60–83 (p. 63).

has suffused Victorian studies. Given the sustained focus on Victorian materialities, and corporealities in particular, it appears all the more surprising that Pamela Gilbert has been the first to devote a book-length study to *Victorian Skin* (2019), not because Gilbert's turn towards the skin is unprecedented within her own research trajectory, but because the skin has attracted much critical attention in cultural studies over the past two decades.[10]

Scholarly interest in the semiotics and semantics of the human skin has flourished since Claudia Benthien's seminal study *Haut* in 1999, prompting Kevin Siena and Jonathan Reinarz to dub this growing area of analysis 'skin studies'.[11] In one of the most significant Anglophone contributions to the field, Steven Connor charts the changing status of skin in the Western world from its classical signification as an invisible screen via its mechanical understanding as a membrane in the eighteenth century to its contemporary depth as a milieu.[12] In their sketches of the medical and cultural history of skin, both Benthien and Connor retrace a relatively neat development in which the permeable skin of the grotesque medieval body is gradually replaced with the impenetrable skin-dress that clothes/closes the bourgeois body. This linear account jars with the conflicting significations of skin that a close study of dermatological, periodical, and literary texts from the nineteenth century reveals. Against Benthien's central claim that, throughout the eighteenth and nineteenth centuries, the skin became an increasingly firm barrier and central metaphor of separation, I would hold that traces of the porous early-modern body persist in the Victorian skin image.[13] As my reading of *Middlemarch* will evince, the text embraces a notion of healthy porosity, which became central to mid-nineteenth-century dermatology. Eliot's characters are constantly prompted to look, grasp, and intuit beyond the 'impenetrable wall of separation' that nineteenth-century skin had ostensibly become.[14] Using *Middlemarch* as my primary literary case study, I would like to

[10] Pamela K. Gilbert, *Victorian Skin: Surface, Self, History* (Ithaca, NY: Cornell University Press, 2019). Gilbert's work has, in fact, carefully and continuously prepared the critical terrain for examining nineteenth-century skin by providing important analyses of the Victorian social body as well as relations between the healthy body and citizenship. After *Mapping the Victorian Social Body* (Albany, NY: State University of New York Press, 2004), *The Citizen's Body: Desire, Health, and the Social in Victorian England* (Columbus, OH: Ohio State University Press, 2007), and *Cholera and Nation: Doctoring the Social Body in Victorian England* (New York, NY: State University of New York Press, 2008), Gilbert first turned more explicitly to literary figurations of Victorian skin in 'The Will to Touch: David Copperfield's Hand', *Interdisciplinary Studies in the Long Nineteenth Century*, 19 (2014), 1–15.

[11] First published in German as *Haut: Literaturgeschichte, Körperbilder, Grenzdiskurse* (Hamburg: Rowohlt Taschenbuch Verlag, 1999), an English translation of Benthien's study appeared as *Skin: On the Cultural Border between Self and the World* in 2002 (New York, NY: Columbia University Press); Kevin Siena and Jonathan Reinarz, 'Scratching the Surface: An Introduction', in *A Medical History of Skin: Scratching the Surface*, ed. by Jonathan Reinarz and Kevin Siena (London: Pickering & Chatto, 2013), pp. 1–15 (p. 1).

[12] Steven Connor, *The Book of Skin* (London: Reaktion Books, 2004), p. 26.

[13] Benthien, p. 1.

[14] Ibid., p. 14.

make the case for reconsidering Victorian skin as a permeable, layered, and physiologically active structure that connects bodies, rather than a firm boundary line between bodies.

Microscopy and Vision in Victorian Dermatology

Victorian knowledge of the physiological functions and anatomical structure of the human skin had extended far beyond the walls of the first specialised skin hospitals and far beyond the pages of the first professional dermatological journals by the time Eliot began her work on *Middlemarch*. While Jonathan Green, in 1835, had still bemoaned the lack of systematic knowledge and dermatological education, scientific and popular interest in skin diseases reached an unprecedented peak only ten years later.[15] This was partly due to the instant success of Erasmus Wilson's *Practical Treatise on Healthy Skin*, first published in 1845, which was re-issued several times and was still in print when *Middlemarch* went into serial publication. The popularity of Wilson's textbook supported a professional reorientation towards disseminating practical knowledge on how to obtain and preserve a healthy skin. His instructions on correct washing, clothing, diet, and exercise find an echo in numerous subsequent treatises, such as Walter Cooper Dendy's *Hints on the Health and Disease of the Skin* (1846) or Thomas Innis's *The Skin, in Health and Disease: A Concise Manual* (1849). All these works offer 'concise' advice to the practitioner as well as to the reading public on how to maintain a clean, unblemished, supposedly 'natural' skin. Their amenability to and direct support of sanitary reform might go some way towards explaining the steep increase in writings on the skin in the periodical press around mid-century. Particularly relevant to my analysis is their popularisation of a layered, microscopic model of the skin.

Microscopy had played a significant role in making a connection between skin anatomy and skin cleanliness, especially since Gilbert Breschet and Augustin Roussel's determination of the sweat ducts in 1835.[16] Wilson not only adopted an anatomical vocabulary, but he also included in his 1845 treatise a standard microscopic image of a cross-section of the skin, which made scientific visualisations of the cutaneous layers available to a wider readership for the first time. The fact that Wilson's cut continued to be reproduced across the periodical press over the following years indicates that, by mid-nineteenth century, most literate Victorians would have been familiar with the image of a magnified cut through the skin's layers, which – in a slightly updated, multi-coloured, and three-dimensional version – is still the iconic way to illustrate medical explications of the skin today. In one of the innumerable articles that copied Wilson's microscopic image, in an 1847 issue of *Reynolds's Miscellany of Romance,*

[15] Jonathan Green, *A Practical Compendium of the Diseases of the Skin, with Cases* (London: Whittaker, 1835), p. 2.

[16] Mieneke te Hennepe, '"To Preserve the Skin in Health": Drainage, Bodily Control and the Visual Definition of Healthy Skin', *Medical History*, 58 (2014), 397–421 (p. 400).

General Literature, Science, and Art, physician James Johnson emphasised the importance of understanding the microscopic cross-section of the skin to the end of appreciating 'the necessity of taking due care of so useful a structure'.[17] Dermatology's ascent to a broad popularity is thus inextricably linked to the dissemination of visual materials. The model of the skin's three layers that became part of general knowledge through the initiatives of Wilson, Johnson, and their contemporaries can briefly be summarised as follows. The cross-section starts out at the external layer of the skin, which was labelled the scarf-skin, or *epidermis*. This thin layer, then thought to be insensible to pain and an indispensable protective coat, is perforated by four tubes in the standard image. These spiral their way through the second layer, called the second skin, or *rete mucosum*. Although the subject of controversies and disagreement among dermatologists, most articles in the popular press accompanying the microscopic model describe the mucous network as the seat of skin colour. The tubes originate in the innermost layer, which was – tellingly – called the true skin, or *cutis vera*. This thickest and most delicate part of the skin was defined as the seat of the perspiratory glands, the nerves, and the sense of touch.

The consequences that the wide distribution of this three-layered model might have had for Victorian images and literary figurations of corporeality has not yet been the subject of sufficient scholarly scrutiny.[18] According to Mieneke te Hennepe, who assesses the medical, rather than the broader cultural relevance of microscopic depictions of the skin,

> the microscopical exploration of the anatomical structure of the skin had put an end to the skin as open cover of the body. […] In the early nineteenth century the skin, with the help of the microscope, was visually articulated as a functionally active, thick organ.[19]

In the following sections, I approach *Middlemarch* from the hypothesis that the dermatological image of a thick, functionally active, and layered skin informs the literary construction of characters. As I will show in a close reading of selected passages, the cutaneous layers of Eliot's characters are engaged in a constant physiological-affective interchange that connects (and, just as often, fails to connect) the interior and exterior parts of their bodies through the skin. If te Hennepe is right in claiming that 'microscopic pictures defined a new idea of the relationship between the inner body and the outer milieu', then this relationship

[17] James Johnson, 'The Anatomy and Physiology of Ourselves Popularly Considered', *Reynolds's Miscellany of Romance, General Literature, Science, and Art*, 2 October 1847, pp. 329–30 (p. 330).

[18] Although Gilbert's study on *Victorian Skin* encompasses a wide range of materials, including dermatological sources, the model of the three layers is not of primary interest to her.

[19] Mieneke te Hennepe, 'Depicting Skin: Microscopy and the Visual Articulation of Skin Interior 1820–1850', in *The Body Within: Art, Medicine and Visualization*, ed. by Renée van de Vall and Robert Zwijnenberg (Leiden: Brill, 2009), pp. 51–65 (p. 55).

might also have been reconfigured in – or, more interestingly perhaps, *by* – Victorian literature.[20] This avenue of linking dermatological history to literary representations of skin, and particularly ways of looking at the skin, has not yet been explored.

One final aspect of Victorian dermatology has to be clarified before attempting such a reading, namely the extent to which the iconic visualisation of the skin through microscopic imagery promoted what I define as the new dermatological gaze. Due to dermatology's turn to precise morphological description from the start of the nineteenth century onwards, the unaided physician's eye would no longer suffice to recognise the signs of illness on the skin. Since the skin had significantly expanded in structure and depth in the new visual-anatomical understanding, diseases that were formerly located in the inner organs moved into the thick layers of the skin. The new complexity of the skin, which was no longer seen as a 'flat screen' that simply displayed organic diseases, called for new methods of clinical observation.[21] This is why Victorian dermatology, with the help of microscopy, directed its gaze *into* the skin's layers. The dermatological gaze became two-directional, no longer deciphering the outward indices of hidden malaise (thus travelling from the outside to the inside of the body), but making sense of outward manifestations that simultaneously reach within (thus gazing back and forth between an interrelated exterior and interior). When nineteenth-century dermatologists 'pretended simply to write down [their] sensory impressions', as Anne Kveim Lie explains, they were in fact seeing through the scarf-skin, taking into account the interaction between external and inner tissues, between internal blood vessels, glands, and nerves and the epidermis.[22] As Lie elaborates,

> Pathological-anatomical changes in the skin are not immediately given to the observer. They demand an interpreter who reads the outer manifestations of the skin with a gaze that knows the structure within and has learned a particular way to interpret that which is visible.[23]

This art of double observation, of seeing outer manifestations while simultaneously drawing on visualisations of the structure within, characterises the dermatological gaze that left its imprint on Victorian realist fiction, as my analysis of *Middlemarch* will demonstrate. Corresponding to the three layers of the skin, my reading will proceed in three stages, each of which accentuates a specific focal point of the dermatological gaze. The first part, "Looking At: Physiognomy", analyses the narrator's and characters' gaze at and interpretation of the skin's

[20] Ibid., p. 52.
[21] Anne Kveim Lie, 'Abominable Ulcers, Open Pores and a New Tissue: Transforming the Skin in the Norwegian Countryside, 1750–1850', in *A Medical History of Skin: Scratching the Surface*, pp. 31–42 (p. 32).
[22] Ibid., p. 38.
[23] Ibid.

outer layer, and traces a shift from physiognomic to dermatological interpretations of complexion. The focus of this section will be on (mis)interpretations of Casaubon's facial skin. The second part, "Looking Inside: Physiology", examines passages that apply the new dermatological gaze to physiological processes taking place inside the skin's layers. This section confronts the depiction of Casaubon's and Dorothea's skin-care routines, arguing that the former fails to clear his pores, whereas the latter succeeds in enabling her skin to breathe and cleanse the body of toxins. The third part, "Reaching Within: Impression", complements the analysis of scenes of visual observation of the skin with a consideration of the novel's insistence on tactile impression, here defined as reaching the characters' seat of touch, i.e., the true skin. After analysing the narrator's microscopic dissection of Will Ladislaw's layered skin, this section examines the male characters' violent fantasies and attempts to reach Rosamond's true skin by harming her studied skin barrier. Throughout the analysis, I will read passages from *Middlemarch* in conjunction with contemporary medical and popular writings on the skin, thus teasing out the profound connections between literary and dermatological representations.

Looking At: Physiognomy

The historical dermatological development that replaced visual-diagnostic routes leading from the exterior to the interior with a two-fold gaze can be connected to the retreat from physiognomy in Eliot's novels. In this context, Kate Flint has highlighted a crucial passage in *Adam Bede* (1859), a novel written in the wake of the large-scale popular dissemination of dermatological knowledge. Observing Adam's (mis)interpretation of Hetty's beauty, the narrator asks readers not to 'despise Adam as deficient in penetration'.[24] In a material sense, Adam's gaze is unable to penetrate Hetty's scarf-skin, that outward layer of the skin which displays 'exquisite lines of cheek and lip and chin, […] eyelids delicate as petals' (p. 131). Leaning on the pseudo-science of physiognomy, Adam is prone to infer from the softness, suppleness, and delicacy of Hetty's facial skin a pliable character. This is exposed as an error of judgment. Conceding that 'Nature has her language, and she is not unveracious', the narrator somewhat prosaically notes that 'we don't know all the intricacies of her syntax just yet, and in a hasty reading we may happen to extract the very opposite of her real meaning' (p. 132). The narrator's comment on Adam's misreading of Hetty's complexion calls the older dermatological model of inferring a hidden seat of malaise from outward manifestations of signs into question. Problematising the notion of a straightforward correspondence between interior and exterior, the narrator refutes the endeavour to discover 'some depth of soul behind a deep grey eye with a long dark eyelash' (p. 132). In line with the dawning obsolescence of 'the idea that character can be discerned in the shape and features of the face' around mid-

[24] George Eliot, *Novels of George Eliot: Vol. 1. Adam Bede* (Edinburgh: William Blackwood, 1880), p. 132. Further references are given after quotations in the text.

century, Eliot's early novel gestures towards the necessity of developing new optical tools to interpret character.[25] Adam's insufficiently penetrative gaze holds – as an obverse ideal – the potential for a gaze that does perforate the exterior, not to unearth 'some depth of soul' within, but to scrutinise the depth of surfaces without.

Middlemarch similarly evokes the practice of physiognomy only to reveal its fallacies. At the outset, the text toys with the false certainties of physiognomy and the by now outdated dermatological concept of a neat correspondence between interior (malaise) and exterior (eruption). The novel introduces Casaubon and Sir James Chettam in the idiom of physiognomy, or humoral theory:

> He [Casaubon] had the spare form and the pale complexion which became a student; as different as possible from the blooming Englishman of the red-whiskered type represented by Sir James Chettam. (p. 16)

The narrator's juxtaposition of characters is based on stereotyped complexions: the pale student versus the blooming red-whiskered Englishman. At the same time, these clichés are openly negotiated as representative 'types', which calls their validity into question. It is noteworthy that this passage prefers physiognomic typecasting to medico-scientific assessments. Casaubon's pale complexion is not (yet) evaluated for its dermatological meaning; instead, it signals the prototype of the studious intellectual. Similarly, the description of Sir James borders on the satirical; his rosy hue is not of interest for its dermatological value to a healthy skin, but merely lends itself to his personification of a national cliché. It becomes evident that the narrator here assumes Dorothea's perspective on her suitors when the latter compares her reading with Celia's:

> 'How very ugly Mr Casaubon is!'
> 'Celia! He is one of the most distinguished-looking men I ever saw. He is remarkably like the portrait of Locke. He has the same deep eye-sockets.'
> 'Had Locke those two white moles with hairs on them? […] Mr Casaubon is so sallow.'
> 'All the better. I suppose you admire a man with the complexion of a *cochon de lait*.' (p. 20)

Echoing Adam's misreading of Hetty's 'deep grey eye' as indicating 'some depth of soul', Dorothea (mis)takes Casaubon's deep-set facial features as indicating hidden spiritual and intellectual treasures. Celia, in contrast, refuses to look beneath Casaubon's scarf-skin and dryly provides an optical surface assessment, taking note of two hairy white moles and a sallow hue. Her implicit corrective to the narrator's description of Casaubon's *pale* complexion as *sallow* is significant. Nineteenth-century dermatology drew fine distinctions between different kinds of

[25] Suzy Anger, 'Sciences of the Mind', in *The Routledge Research Companion to Nineteenth-Century British Literature and Science*, pp. 386–407 (p. 389).

white skin to indicate age-, class-, and race-specific deviations from the postulated ideal of a 'white skin, slightly tinged with carnation'.[26] Firstly, ageing skin was generally described as turning 'worn and sallow, wrinkled and furrowed'.[27] Secondly, 'sallow complexions' were associated with those parts of the working classes that were confined to manufacturing, distinguishing them from 'tanned' agricultural labourers and the 'fair' middle and upper classes.[28] Thirdly, sallowness was associated with racial deviations from 'pure white circles' – even though there was no agreement on whether distinct complexions were caused by essential differences in the colouring matter attributed to the second skin or subject to change given exposure to different climates.[29] For instance, as one article in *Reynolds's Miscellany* from 1866 claimed, moving Caucasians from their climatic homes might lead to 'the whitest people in the world, when transferred to Constantinople becom[ing] sallow'.[30] Celia's categorisation of Casaubon's complexion as sallow thus implicitly devalues his white English upper-class credentials. Reassessing his pallor as sickly, Celia precipitates a reading that other characters in the novel will pick up on. After their return from Rome, Mr Brooke describes Casaubon's complexion to Dorothea as follows: 'Casaubon is a little pale […] – a little pale you know' (p. 276). He emphatically repeats his diagnosis of pallor a third time over the course of their short conversation, as if to amplify his otherwise carefully voiced criticism. The proto-dermatological assessment of Casaubon's skin as unhealthy, which gains traction in the novel at large, evokes the popular knowledge that Victorian readers could draw from numerous magazine articles published on the skin from around mid-nineteenth century onwards, which regularly warned against the 'pallid and discoloured skin' that comes with a 'sedentary life'.[31]

While Celia's scrutiny of the skin stops at the surface, Dorothea merely scans Casaubon's exterior for traces that confirm her preconceived notion of a valuable interior. In this context, Miller has affirmed that 'for George Eliot seeing is never just optical. […] Seeing is always interpretation'.[32] Dorothea, however, interprets rather than sees Casaubon; or, in other words, her seeing relies more on inward vision than on optical observation. In their opposing readings of Casaubon's skin, Celia represents the more modern viewpoint that associates

[26] This type of skin is 'what we commonly call a fine skin', as an early nineteenth-century article in a women's magazine explains; 'On the Beauty of the Skin', *The Ladies' Toilette*, October 1807, pp. 205–07 (p. 205).
[27] Thomas Innis, *The Skin, in Health and Disease: A Concise Manual* (London: Whittaker, 1849), p. 23.
[28] 'Varieties of Colour among Mankind', *Chambers Edinburgh Journal*, 5 December 1835, p. 354.
[29] Ibid.
[30] 'Curiosities of the Skin', *Reynolds's Miscellany of Romance, General Literature, Science, and Art*, 3 November 1866, p. 309.
[31] 'The Human Skin', *Chambers Edinburgh Journal*, 25 April 1846, pp. 258–261 (p. 258).
[32] J. Hillis Miller, *Reading for Our Time:* Adam Bede *and* Middlemarch *Revisited* (Edinburgh: Edinburgh University Press, 2012), p. 69.

complexion with 'the colour, texture or condition of the skin', whereas Dorothea subscribes to an antiquated understanding of complexion as signifying inner nature or temperament.[33] Yet her judgment is wavering. Encoded in her previous rebuke to Celia that 'Souls have complexions too' is not only the predominance she assigns to inner truths and values but the paradoxical finding that even these are enclosed in a visible cutaneous surface (p. 12). Her urge to judge inner complexions rather than outward appearances gives way when she ridicules Celia's preference for Sir James's 'complexion of a *cochon de lait*'. While her gaze is fully drawn into Casaubon's interior, Sir James's exterior surface repels her scrutiny, replicating the response that Celia gave in relation to Casaubon. Interestingly, Dorothea here adopts Celia's idiom, betraying her own knowledge of dermatological classifications. Sir James's 'blooming' complexion, before associated with jovial sanguinity, is now retranslated from the humoral realm to the dermatological, which firmly associates 'bloom' with 'the brief season of youth'.[34] Although intended for offense, the suckling pig to which Dorothea likens Sir James stands not only for young age but also signals the robust health attributed to a 'blooming tint' in popular skin treatises.[35] Hence, Dorothea inadvertently confirms Celia's diagnosis of Casaubon's sickly skin by embracing the contrast that exists, per definition, between blooming and sallow complexions. At this stage, none of the characters has learned how to apply the new dermatological gaze, which observes the skin not just for its surface appearance, nor merely for signs of deeper meanings, but complexifies these readings in a layered assessment. This is the subject of the next section.

Looking Inside: Physiology

It becomes clear as the novel progresses that the dermatological gaze requires not only an expert observer but also a compliant object. It is no coincidence that the two characters that give rise to the most fatal misinterpretations of their complexion are Casaubon and Rosamond. The latter thwarts an assessment of her character through the skin by artfully deploying studied blushes and dimples. Casaubon, in turn, prevents successful readings of his skin by impeding its healthy physiological functioning. The key to Dorothea's initial inability to correctly decipher Casaubon's complexion is disclosed only in Chapter 42, when the narrator notes in passing how Lydgate tries 'to help forward Mr Casaubon's purpose, which seemed to be clogged by some hesitation' (p. 423). I would argue that the choice of the adjective *clogged* is not coincidental. As te Hennepe summarises a commonplace in Victorian dermatology: 'clogged skin pores caused diseases and disaster'.[36] At a time when countless articles in popular magazines continuously pressed home the 'importance of a free action of the

[33] See Connor, pp. 19–20.
[34] Innis, p. 23.
[35] 'On the Beauty of the Skin', p. 205.
[36] Te Hennepe, 'To Preserve the Skin in Health', p. 407.

pores at all times', hardly any Victorian reader would have been unaware of the vital role played by their pores in the excretion of dirt and toxins.[37]

There are numerous hints at Casaubon's failure to keep his pores open and functioning in this way. The chapter that contains the reference to his 'clogged' purpose is replete with signifiers of obstruction. The narrator begins by noting Casaubon's 'passionate resistance to the confession that he had achieved nothing' (p. 417), proceeds by attesting that his 'intellectual ambition […] seemed to others to have absorbed and dried him' (p. 418); he is, furthermore, suffering from 'an impression which no tenderness and submission [of his wife] could remove', yet 'hid[ing] this inward drama' (p. 418). As the semantic field forming around notions of resistance, absorption, drying up, and lingering impressions suggests, Casaubon's clogged pores seem to lock toxic materials into his body. The built-up matter that has accumulated inside his body cannot be expelled through his skin, as any effort 'to expound his discontents' (p. 419) is blocked by his obstinate will and obstructed pores. Lydgate attempts to come to his aid by venturing the diagnosis that Casaubon might be 'suffering from what is called fatty degeneration of the heart' (p. 423). Notably, Lydgate derives his medical authority from citing not only his knowledge of 'anatomical or medical details' relating to the condition but also the fact that it was first explored by René Laënnec, 'who gave us the stethoscope' (p. 423) – i.e., one of the first medical instruments that allowed for an exploration of the body's interior. The close proximity to medical terms and technologies in which the adjective *clogged* first appears lends more weight to a medico-dermatological interpretation. Even if it does not explicitly inform Lydgate's diagnosis, Victorian readers might have recognised the language of dermatology in the narrator's description of Casaubon. After all, they were the recipients of an abundance of skin care advice, which regularly reminded them of their responsibility to keep their pores open – sometimes in rather drastic terms. In 1856, a piece published in the *Belfast News-Letter*, quoting from *Hall's Journal of Health*, insisted on the dangers of 'Checked Perspiration' as follows:

> There are seven millions of tubes or pores on the surface of the body, which in health are constantly open, conveying from the system, by what is called insensible perspiration, […] internal heat […]. [W]hen the pores are closed, the skin feels harsh, and hot, and dry. But another result follows […]; a main outlet for the waste of the body is closed; it re-mingles with the blood, which in a few hours becomes impure, and begins to generate disease in every fibre of the system – the whole machinery of the man becomes at once disordered.[38]

Familiarity with these common case narratives might have enabled contemporary readers to identify obstructed pores as another contributing factor leading to the quick decline in Casaubon's health. It is worth scrutinising the interaction

[37] 'Skin Deep', *All the Year Round*, 21 February 1863, pp. 562–564 (p. 563).
[38] 'Checked Perspiration', *The Belfast News-Letter*, 10 September 1856, p. 4.

between Casaubon and Dorothea that takes place just after his exchange with Lydgate. Dorothea meets her husband in the garden and, despite his 'chill' glance, builds up the courage to 'pass[…] her hand through his arm', in response to which 'Mr Casaubon kept his hands behind him and allowed her pliant arm to cling with difficulty against his rigid arm' (p. 425). Their awkward skin contact results, for Dorothea, in a 'horrible […] sensation, which this unresponsive hardness inflicted on her' (p. 425). A common symptom of so-called checked respiration, Casaubon's skin appears rigid and harsh to the touch. The different epidermal texture implied by this encounter is indicative of Casaubon's and Dorothea's larger dermatological profiles, which are encapsulated in a difference in toilette. Casaubon's skin-care routine is mentioned only once:

> Having made his clerical toilet with due care in the morning, he was prepared only for those amenities of life which were suited to the well-adjusted stiff cravat of the period, and to a mind weighted with unpublished matter. (p. 198)

When read in conjunction with the passages above, the references to the 'stiff cravat' and the weighty 'unpublished matter' once more connote obstructed pores. Despite duly attending to his toilette, Casaubon does not seem to succeed in opening up his pores and expelling built-up matter. This becomes even more apparent when we contrast his clerical routine to a later, rather lengthy passage detailing Dorothea's appearance after having carried out her morning toilette upon their return from Rome:

> She was glowing from her morning toilette as only healthful youth can glow; there was gem-like brightness on her coiled hair and in her hazel eyes; there was warm red life in her lips; her throat had a breathing whiteness above the differing white of the fur which itself seemed to wind about her neck and cling down her blue-grey pelisse with a tenderness gathered from her own […]. (p. 273)

This passage exemplifies, perhaps for the first time in the novel, the narrator's application of a two-fold dermatological gaze. Starting out at the surface, the narrator's look scrutinises every particle of Dorothea's complexion, moving vertically downward from the hair to the lips to the throat. This movement of the gaze clearly recalls the standard outline of popular dermatology textbooks. One could point here, by way of example, to R. Jones Owen's *Treatise on the Toilet and Cosmetic Arts*, published a year before *Middlemarch* appeared in serial form.[39] Owen's treatise offers *Chapters on the Management of the Hair, Skin, and Teeth*, as its subtitle reveals. It is evident that Dorothea has been successful in the

[39] R. Jones Owen, *The Practice of Perfumery: A Treatise on the Toilet and Cosmetic Arts. Historical, Scientific, and Practical; With Chapters on the Management of the Hair, Skin, and Teeth* (London: Houlston, 1870).

management of all of these components of and addendums to skin care. In contrast to her husband, she has attended to the unclogging of her pores, as reading the passage against popular recommendations of ablution to 'relieve the skin […] of effete matter' shows, which were geared towards a 'purified, renewed, and oxygenated' appearance.[40] Indeed, the cleansed facial skin that Dorothea reveals is *glowing*, *bright*, and *breathing*. Her skin is also – and this is the only time in the novel that the adjective appears – *healthful*. It abounds in the racialised, age- and class-specific properties of whiteness and purity. The traditional dermatological gaze, or the practice of physiognomy, would infer from this glowing appearance inward values and virtues – which are, of course, inevitably conjured up with the choice of descriptors. A superficial dermatological gaze would stop at this outward assessment of the epidermis, whose texture is ascertained to be intact and unblemished, and whose complexion is registered as white yet not too pale, when assessed against the 'differing white of the fur'.

Yet the narrator goes tacitly further in this dermatological observation. Underneath Dorothea's beguiling scarf-skin one can detect – surprisingly, perhaps – a 'stifling oppression' (p. 274). Although Dorothea has done her part to guarantee the smooth exchange of materials that are supposed to travel through the pores and back into the body, she seems to be sending out matter without receiving it in equal returns:

> [Dorothea was] immediately absorbed in looking out on the still, white enclosure which made her visible world […] – there was the stifling oppression of that gentlewoman's world, where everything was done for her and none asked for her aid – where the sense of connection with a manifold pregnant existence had to be kept up painfully as an inward vision, instead of coming from without in claims that would have shaped her energies. (p. 274)

As energy cannot be transported back into Dorothea's cutaneous system 'from without', it fully has to be generated within, by mobilising 'an inward vision'. The language Eliot uses in this passage ('absorbed', 'enclosure', 'connection') adapts dermatological conceptions of the skin's ability to 'absorb […] small particles from the air or any other substance in contact with it', giving these a wider social significance.[41] As outlined above, the new dermatological gaze involved an external assessment that simultaneously draws on the 'inward vision' of the structures underneath. This seems to be the case here, as the narrator contrasts a preliminary diagnosis of an intact, healthy, youthful skin with the later discovery of an oppression uncovered by looking into the skin's layers. In this case, obstruction is caused by the lack of stimulants brought to the skin from without:

[40] 'Skin Deep', p. 562.
[41] 'The Structure of the Skin', *Reynolds's Miscellany of Romance, General Literature, Science, and Art*, 7 August 1852, p. 24.

> Her blooming full-pulsed youth stood there in a moral imprisonment which made itself one with the chill, colourless, narrowed landscape, with the shrunken furniture, the never-read books, and the ghostly stag in a pale fantastic world that seemed to be vanishing from the daylight. (p. 274)

This stark description of the arrest of Dorothea's energies within the intact cover of a 'blooming' complexion blends the structure of her skin with that of her environment, at first sight so strikingly opposite. If Brilmyer is correct in claiming that 'Eliot's character descriptions […] assume no ontological difference between the "stuff" of human character and that of other nonhuman substances',[42] then I would add that this is especially true of skin representations in the novel. The narrator's vision seems to blur, as Dorothea's skin becomes 'one' with the detritus and waste matter that has accumulated in Casaubon's household.[43] While the novel establishes the maintenance of open pores as an imperative, it also hints at the dangers that come with a physiologically healthy skin in terms of its vulnerability to contamination from without.

Reaching Within: Impression

This danger notwithstanding, the dermatological gaze favours characters that allow for a fluid interaction between their skin's layers and the environment. The most exemplary case in this regard is Will Ladislaw's 'transparent complexion' (p. 204), which seems to invite microscopic inspection of the skin's layers above all other characters. Pitted against Casaubon's 'dried-up' (p. 205) exterior, Will's transparent scarf-skin allows for a facile observation of the matter travelling through it. This is why his interaction with Dorothea is free from the harshness, resistance, and obstructions that characterise her marriage. Will's smile, for instance, likened to 'a gush of inward light illuminating the transparent skin', is 'irresistible' to Dorothea, 'and shone back from her face too' (p. 205). A dermatological angle here adds to the critical observation that Eliot's characters are 'tightly interwoven into a single fabric, always in process, endlessly subdividable down to invisible minutiae',[44] as it calls attention to the materiality of the characters' connections, which depend on matter travelling through the layers of their skin. Will's smile can shine back from Dorothea's face because they have both prepared their skin for an outward orientation, enabling them to feel the 'sense of connection' that Dorothea finds to be lacking in her stifling 'gentlewoman's world' (see above). I would thus suggest reconsidering the frequently foregrounded fabric into which Eliot weaves her characters as a collective texture composed of cutaneous tissue, a material web within which

[42] Brilmyer, p. 61.
[43] Similarly, Summer J. Star argues that perception in *Middlemarch* 'draws us to the object world and substantiates our belonging to it as fellow, bodily, objects'; see 'Feeling Real in *Middlemarch*', *ELH*, 80 (2013), 839–69 (p. 842).
[44] Miller, *Reading for Our Time*, p. 61.

Eliot's characters have divergent options and skills to make visual and tactile impressions on one another through their skin.

When tracing the occurrences of the term *impression* over the course of *Middlemarch*, it is noteworthy to what extent visual impressions are increasingly complemented or even substituted by other sensory impressions, particularly tactile ones. This corresponds to Gilbert's finding that 'touch emerged as a central and privileged sense' around mid-nineteenth century, displacing the previous primacy of sight.[45] The sense of touch is accentuated in a passage where Will hears the announcement of Dorothea's visit and the narrator closely inspects his reaction, applying microscopic lenses to the various layers of his skin:

> he started up as from an electric shock, and felt a tingling at his finger-ends. Any one observing him would have seen a change in his complexion, […] which might have made them imagine that every molecule in his body had passed the message of a magic touch. And so it had. For effective magic is transcendent in nature; and who shall measure the subtlety of those touches which convey the quality of the soul as well as body […]? Will, too, was made of very impressible stuff. (p. 388)

This passage exposes once more the material makeup, or 'stuff', that Eliot's characters are made of. As has to be reiterated here – and this is where my reading differs from previous accounts of the medical and cultural history of skin – Victorian skin as exemplified by Eliot's novel is no two-dimensional surface, nor is it a rigid boundary. Instead, close observation as practised in the passage above reveals the skin's function as a deep, multi-dimensional structure, which connects the outer layer of the body with 'every molecule' within it. The narrator imparts the skill of the new dermatological gaze to the reader by starting from an unaided surface observation of a change in complexion and gently leading the gaze into the skin's layers. Even though a lay observer might not be able to dissect or magnify the skin, the narrator insists that they can yet 'imagine' the transport of matter and sense impressions from the true skin, seat of the sense of touch, to the cutaneous surface, where it finds expression in a change in complexion.[46]

Only the healthy, unobstructed, or even transparent skin of characters like Will and Dorothea allows for this direct correspondence between the character's innermost cutaneous layer, the so-called true skin, and the outermost layer, their complexion. By relaying to readers the physiological processes that regulate this correspondence, Eliot enables them to also reassess the shallow reach of visual impression, such as Dorothea's 'first impressions' (p. 32) of Casaubon, or the 'impression of refined manners' that exudes from Rosamond's 'small feet', 'perfectly turned shoulders' and 'exquisite curves of lips and eyelid' (pp. 158–

[45] Gilbert, 'The Will to Touch', p. 4.

[46] My reading here has points of connection with Richard Menke's discussion of Eliot's representational realism in terms of vivisection, in 'Fiction as Vivisection: G. H. Lewes and George Eliot', *ELH*, 67 (2000), 617–53.

59). The reason behind Dorothea's faulty assessment of Casaubon's character and Lydgate's deception in Rosamond's lies in the disturbed skin physiology that characterises Casaubon's/Rosamond's material makeup, which prevents a deep dermatological gaze. In the case of Rosamond, it is the full control she exerts over her cutaneous surface that intercedes in the natural flow of matter between the inside and the outside. While the signs displayed on the scarf-skin, most prominently the blush, are involuntary in Dorothea and thus reveal a glimpse of her true skin/character, Rosamond cannot, as Mary Ann O'Farrell has established, 'blush this blush', i.e., a sign that suggests 'a one-to-one correspondence between blush and character'.[47] Rosamond expertly displays 'a complexion beyond anything', a cutaneous surface so flawless that 'only a subtle observation' could possibly penetrate it (p. 642). As a result, Lydgate's attempts to read her remain irrevocably superficial. Even though he is the only character equipped with both a stethoscope and a microscope to cross the skin barrier and magnify the materials underneath, he is unable to catch the smallest glimpse of Rosamond's true skin, the seat of authentic inward sensations. This is why his frustration towards the end of the novel culminates in the substitute fantasy 'to smash and grind some object on which he could at least produce an impression' as he despairs over his inability to indent, mark, or impress upon Rosamond's skin (p. 660).

Will becomes the most likely candidate to act out on the exigence that all members of Middlemarch society allow for inspection of their true skin. His violent outbreak towards Rosamond at the end of the novel is provoked by her inability to imagine 'other people's states of mind except as a material cut into shape by her own wishes' (p. 777). When it comes to Will, her failure to look inside appears all the more inept, given the narrator's previous, precise dissection of his material makeup. Will is not exactly hard to read, yet Rosamond proves incapable of applying the two-fold gaze required to assess the complex structures of the skin. Rosamond's fantasy of control over her own skin physiology and that of others eludes her in the precise moment when she seeks cutaneous contact with Will. After she has 'put out her arm and laid the tips of her fingers on Will's coat-sleeve', he bursts out:

> 'Don't touch me!' he said, with an utterance like the cut of a lash, darting from her, and changing from pink to white and back again, as if his whole frame were tingling with the pain of the sting. (p. 777)

As the direct correspondence between the seat of touch and the epidermis is completely free from obstructions in Will's case, the unwanted tactile impression finds an unmediated expression in Will's change in complexion. Notably, he proceeds to retaliate the 'sting' he received in the form of a language that manages, in turn, to get underneath Rosamond's skin: his utterance has the impact of 'the cut of a lash', connoting a verbal propensity to violently tear Rosamond's

[47] Mary Ann O'Farrell, *Telling Complexions: The Nineteenth-Century English Novel and the Blush* (Durham, NC: Duke University Press, 1997), p. 121.

studied skin-screen. Paradoxically, Rosamond, in response, lowers her defences by shedding part of the textile layers that protect her scarf-skin, as she proceeds with 'untying her hanging bonnet and laying it down with her shawl' (p. 777). Giving in to a 'horrible inclination to stay and shatter Rosamond', Will continues to give his voice a 'sharp edge' (p. 778). He realises the effect of this spontaneous strategy almost instantly: 'Will stopped as if he had found himself grasping something that must not be thrown and shattered' (p. 778). Unlike Lydgate, whose wish to harm Rosamond's intact cutaneous cover remains confined to the subconscious, Will successfully manages to pierce the fortified outward layer of Rosamond's skin; his words work upon her like 'a lash never experienced before' (p. 779). The language of skin injury persists in a later chapter that revisits the residual effects on Rosamond's true skin: when Dorothea touches her hand, Rosamond feels 'as if a wound within her had been probed' (p. 795). The narrative implicitly sanctions Will's onslaught on her protective skin barrier, as it becomes clear that Rosamond, as a result, has finally become able to make and receive an authentic impression, especially the 'impression that Mrs Casaubon's state of mind must be something quite different from what she had imagined' (p. 793). This is not to support masculinist readings such as the one proposed by F.R. Leavis, who infamously claimed that 'the reader certainly catches himself, from time to time, wanting to break that graceful neck'.[48] Yet the outcome of Will's verbal violence is clearly – and, I would add, problematically – evaluated positively, given Rosamond's honest communion with Dorothea in the following chapter. After having been violently opened, Rosamond's scarf-skin no longer serves as an impenetrable cover, but the sensitive tissue of her true skin has become accessible to lasting impressions. This prompts Rosamond's first altruistic act of imparting her insight into Will's feelings to Dorothea because the violent opening of her skin barrier has given her – for the first time – the capacity to empathise.

In conclusion, a materialist approach to character in *Middlemarch* that pays attention to the interpretations and interactions of each cutaneous layer – especially the epidermis and the true skin, as well as the matter travelling between and outward from these layers – crucially helps to clarify the characters' choices and social behaviours. A misreading of complexion and a disturbed skin physiology is both behind Dorothea's fatal decision to marry Casaubon and explains Lydgate's frustration at not being able to make an impression on Rosamond. Conversely, those characters that allow for inspection of their true skin by assisting the transport of matter through a cleansed (or even transparent) scarf-skin are enabled to experience a real sense of connection and develop empathetic relations towards one another. The dermatological gaze also has a significant function within representational realism. By implementing scientific developments in the fields of microscopy and dermatology, Eliot arrives at a finer vision of the material makeup of character. Implicitly teaching readers how to

[48] *The Great Tradition: George Eliot, Henry James, Joseph Conrad* (London: Penguin, 1986), p. 84.

look at character(s), the novel's retreat from physiognomy paves the way for a more complex and often contradictory ontological relationship between depth and surface: it is neither the case that cutaneous surfaces are simply misleading – Casaubon's pallor and obstructed pores, for instance, are visible on his epidermis – nor does complexion work like an immediate index of underlying health or virtues – as characters like Rosamond are able to manipulate the signs displayed on their skin. The dermatological gaze that both the narrator and (some of) the characters learn to apply looks both ways, taking into account both surface complexion and cutaneous depth. G.H. Lewes partly anticipated Eliot's monumental contribution to literary realism when he mused in his *Sea-Side Studies* that '[h]ere one might write epics finer than the *Odyssey*, had one but genius packed up in one's carpet-bag', adding as an important afterthought: 'if the genius had been forgotten […], at any rate there was the microscope and scalpel'.[49] Applying both the microscope and the scalpel, Eliot magnifies and dissects the material makeup of her characters, whose layered skin is in a constant, if often disturbed, physiological interchange with the collective cutaneous fabric in which they are 'embroiled'.

[49] George Henry Lewes, *Sea-Side Studies at Ilfracombe, Tenby, the Scilly Isles, & Jersey* (Edinburgh and London: William Blackwood and Sons, 1858), p. 188.

Bibliography

Anger, Suzy 'Sciences of the Mind', in *The Routledge Research Companion to Nineteenth-Century British Literature and Science*, ed. by John Holmes and Sharon Ruston (Abingdon: Routledge, 2017), pp. 386–407

Benthien, Claudia, *Skin: On the Cultural Border between Self and the World* (New York, NY: Columbia University Press, 2000)

Brilmyer, S. Pearl, 'Plasticity, Form, and the Matter of Character in *Middlemarch*', *Representations*, 130 (2015), 60–83

'Checked Perspiration', *The Belfast News-Letter*, 10 September 1856, p. 4

Connor, Steven, *The Book of Skin* (London: Reaktion Books, 2004)

'Curiosities of the Skin', *Reynolds's Miscellany of Romance, General Literature, Science, and Art*, 3 November 1866, p. 309

Eliot, George, *Middlemarch* (London: Penguin, 1871–72; repr. 2003)

——*Novels of George Eliot: Vol. 1. Adam Bede* (Edinburgh: William Blackwood, 1880)

Flint, Kate, *The Victorians and the Visual Imagination* (Cambridge: Cambridge University Press, 2000)

Gilbert, Pamela K., *Victorian Skin: Surface, Self, History* (Ithaca, NY: Cornell University Press, 2019)

——*Mapping the Victorian Social Body* (Albany, NY: State University of New York Press, 2004),

——*The Citizen's Body: Desire, Health, and the Social in Victorian England* (Columbus, OH: Ohio State University Press, 2007)

——*Cholera and Nation: Doctoring the Social Body in Victorian England* (New York, NY: State University of New York Press, 2008)

——'The Will to Touch: David Copperfield's Hand', *Interdisciplinary Studies in the Long Nineteenth Century*, 19 (2014), 1–15

Green, Jonathan, *A Practical Compendium of the Diseases of the Skin, with Cases* (London: Whittaker, 1835)

te Hennepe, Mieneke, 'Depicting Skin: Microscopy and the Visual Articulation of Skin Interior 1820–1850', in *The Body Within: Art, Medicine and Visualization*, ed. by Renée van de Vall and Robert Zwijnenberg (Leiden: Brill, 2009), pp. 51–65

——'"To Preserve the Skin in Health": Drainage, Bodily Control and the Visual Definition of Healthy Skin', *Medical History*, 58 (2014), 397–421

'The Human Skin', *Chambers Edinburgh Journal*, 25 April 1846, pp. 258–261

Innis, Thomas, *The Skin, in Health and Disease: A Concise Manual* (London: Whittaker, 1849)

Johnson, James, 'The Anatomy and Physiology of Ourselves Popularly Considered', *Reynolds's Miscellany of Romance, General Literature, Science, and Art*, 2 October 1847, pp. 329–30

Kennedy, Meegan, 'Technology', in *The Routledge Research Companion to Nineteenth-Century British Literature and Science*, ed. by John Holmes and Sharon Ruston (Abingdon: Routledge, 2017), pp. 311–28

Leavis, F.R., *The Great Tradition: George Eliot, Henry James, Joseph Conrad* (London: Penguin, 1986)

Lewes, George Henry, *Sea-Side Studies at Ilfracombe, Tenby, the Scilly Isles, & Jersey* (Edinburgh and London: William Blackwood and Sons, 1858)

——*Studies in Animal Life* (New York, NY: Harper & Brothers, 1860)

Lie, Anne Kveim, 'Abominable Ulcers, Open Pores and a New Tissue: Transforming the Skin in the Norwegian Countryside, 1750–1850', in *A Medical History of Skin: Scratching the Surface*, ed. by Jonathan Reinarz and Kevin Siena (London: Pickering & Chatto, 2013), pp. 31–42

Macmillan, Hugh, 'Lowly Vegetable Forms', *The Popular Science Monthly*, August 1873, pp. 469–79

Menke, Richard, 'Fiction as Vivisection: G. H. Lewes and George Eliot', *ELH*, 67 (2000), 617–53

Miller, J. Hillis, 'Optic and Semiotic in *Middlemarch*', in *New Casebooks:* Middlemarch, ed. by John Peck (New York, NY: St. Martin's Press, 1992), pp. 65–83

——*Reading for Our Time:* Adam Bede *and* Middlemarch *Revisited* (Edinburgh: Edinburgh University Press, 2012)

O'Farrell, Mary Ann, *Telling Complexions: The Nineteenth-Century English Novel and the Blush* (Durham, NC: Duke University Press, 1997)

'On the Beauty of the Skin', *The Ladies' Toilette*, October 1807, pp. 205–07

Owen, R. Jones, *The Practice of Perfumery: A Treatise on the Toilet and Cosmetic Arts. Historical, Scientific, and Practical; With Chapters on the Management of the Hair, Skin, and Teeth* (London: Houlston, 1870)

Paxman, David, 'Metaphor and Knowledge in George Eliot's *Middlemarch*', *Metaphor and Symbol*, 18 (2003), 107–23

Power, Alfred, *Sanitary Rhymes* (London: T. Richards, 1871)

Siena, Kevin, and Jonathan Reinarz, 'Scratching the Surface: An Introduction', in *A Medical History of Skin: Scratching the Surface*, ed. by Jonathan Reinarz and Kevin Siena (London: Pickering & Chatto, 2013), pp. 1–15

'Skin Deep', *All the Year Round*, 21 February 1863, pp. 562–564

Sleigh, Charlotte, 'The Novel as Observation and Experiment', in *The Routledge Research Companion to Nineteenth-Century British Literature and Science*, ed. by John Holmes and Sharon Ruston (Abingdon: Routledge, 2017), pp. 71–86

Star, Summer J., 'Feeling Real in *Middlemarch*', *ELH*, 80 (2013), 839–69

'The Structure of the Skin', *Reynolds's Miscellany of Romance, General Literature, Science, and Art*, 7 August 1852, p. 24

'Varieties of Colour among Mankind', *Chambers Edinburgh Journal*, 5 December 1835, p. 354

Wormald, Mark, 'Microscopy and Semiotic in *Middlemarch*', *Nineteenth-Century Literature*, 50 (1996), 501–24

BOOK REVIEW

Victorian Photography, Literature, and the Invention of Modern Memory: Already the Past, by Jennifer Green-Lewis (London: Bloomsbury, 2017). 200 pp. Paperback £27.99.

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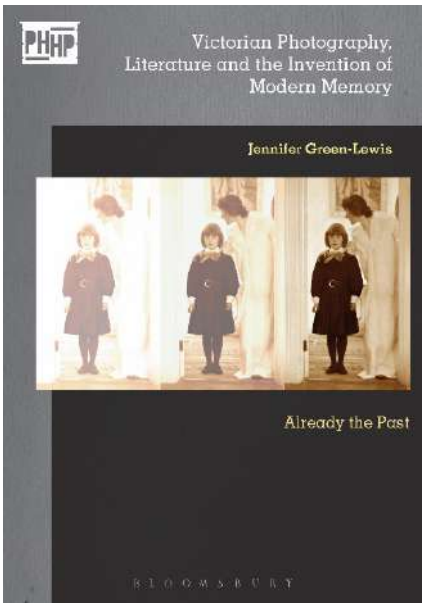

Jennifer Green-Lewis has written an ambitious book that simultaneously wrestles with how literature responded to photography's emergence and with how acts of cultural remembering are elicited and facilitated by photography. It is with this latter point that she departs from her earlier *Framing the Victorians: Photography and the Culture of Realism* (1996), which not only suggested that photography offers a direct route to understanding the Victorians, but also argued that the Victorians invested in both realism and photography as tools for seeing.[1] In her new book, Green-Lewis again identifies photography as an invaluable tool for the Victorians, but this time for looking at the past: for remembrance. She focuses on how the Victorians were already aware of the way in which the past and the present intersect in the photograph.

Despite the heavy echoes of Roland Barthes's *Camera Lucida: Reflections on Photography* (1981) throughout this book, Green-Lewis's prefatory chapter attempts to move away from Barthes's fascination with the nostalgic power of photography. Noting that Barthes described the photograph as a gesticulation to 'look', Green-Lewis adds that the photograph also asks the viewer to 'look' and to see time passing. Nonetheless, this book relies heavily on what Barthes would term 'metalanguage', as it comes to rely heavily on the idea that different meanings 'adhere' to the photograph itself.[2] In fact, Green-Lewis proposes that the physical photograph and its meaning can operate independently from one another. The section titled 'Afterlight', which is both a postscript (it was written only when the rest of the book was completed) and a preface, exposes this tension between physical object and metaphorical meaning by exploring how modern

[1] Jennifer Green-Lewis, *Framing the Victorians: Photography and the Culture of Realism* (London: Cornell University Press, 1996), p. 24.

[2] Roland Barthes, *Camera Lucida* (London: Vintage, 1993), p. 6.

photography apps mimic the way in which physical photographs age: images can be digitally scuffed or discoloured in an attempt to make a modern photograph appear 'vintage'. In an era where the digital archive is at odds with the material archive, this certainly creates an intriguing context for the book. While the issue of photography's materiality becomes a problem for Green-Lewis elsewhere, here she lays out the primary tension that arises from this interplay of past and present in the photograph. Firstly, she proposes that 'what we see today is a continued migration of photographic form in response to market forces and technological developments […] set in motion by the Victorians' and that, secondly, this 'shifting of photographic forms is a response to something older than the nineteenth century that will likely outlast the twenty-first: the ongoing human desire for narration' (p. xvi). In other words, the tension between past and present that we see in contemporary photographs has distinctly Victorian origins.

Unfortunately, while Green-Lewis proposes the narrative powers of photography, the narrative of her own book appears fractured, especially where literary analysis and photographic history intersect. As a result, the two parts of the text – 'Part One: The Photograph in Time' and 'Part Two: The Photograph As Time' – read as two separate arguments. A troublesome rift exists between the analysis of photographs and writing *about* photography (part one), and the close reading of the 'photographic aesthetic' in literature (part two). This makes it difficult to ascertain whether this book is meant to primarily appeal to photography historians, literary scholars, or both. Where the concept of narrative might bridge the gap between these two sections, Green-Lewis instead introduces the idea of memory. She proposes that photography both participated in and offered antidote to a crisis of memory that arose as the Victorians came to better understand geological time, and which intensified following the mass deaths in the First World War.

This move away from narrative towards history is inherently problematic and Green-Lewis's book routinely conflates memory with time. While the introduction diligently outlines the nineteenth-century advancements that acted as time-saving technologies (p. 11), it is not clear exactly how such technologies impacted memory or gave rise to the memory crisis. The first indication of the role photography might play in this crisis is Green-Lewis's reference to Oliver Wendell Holmes. Green-Lewis asserts that Holmes claimed photography invented the 'mirror with a memory' (p. 11). This claim is itself riddled with complications: using the words of an American polymath suggests that photography is one very specific thing globally, at the same time so many of the textual and photographic examples in this book are self-consciously British. For example, the Calotype process was invented by William Henry Fox Talbot and its use was restricted due to Talbot's patent, whereas the daguerreotype process was made publicly available. Moreover, Holmes made his assertion specifically in relation to the stereograph, which is a very different technology to the typical photograph. If Green-Lewis accepts that photography is not singular but multiple, then the classification of all photography as mirrors of memory seems like a broad stroke. Likewise, if there was a 'crisis of memory in the nineteenth century, a

heightened fear of forgetting, stimulated both by the mental demands of a new concept of human history and by the emergence on to the plate of the mind of too many things to remember' (p. 25), it is unclear how multiple photographic processes operate similarly in the mechanism of memory-making. Indeed, Green-Lewis later claims that '[p]hotographs, it seemed, were products and producers of history and memory' (p. 37), but also that, 'with the proliferation of all kinds of photographic images throughout the nineteenth century, whatever lines might once have been drawn between memory and history became increasingly blurred' (p. 37). Photographs, it seems, are connected to history- and memory-making, but not in any singular way.

What appears to be one of the biggest complications in establishing the connections between photography, memory, and history is the material status of the photograph. In Chapter Three, 'Having Been: Photography and the Texture of Time', Green-Lewis analyses the physicality of the photograph. Her analysis is the strongest and most compelling in her examination of Talbot's photographs of geologists (p. 80) and of Louis Daguerre's fossils (p. 82), which begins to hint at how photography captures the past and its physical textures. In this chapter, it is clear that the physical status of Victorian photographs is essential and ties in with Green-Lewis's much earlier assertion that

> Our engagement with any given photograph has as much to do with its material circumstances (paper, pewter, framed, screen-shotted) and the circumstances of our possession of it (how it is netted into our lives; bought, made, inherited, found) as with its original content (p. 32).

In the case of Victorian photographs, where access, even to paper images, was typically denied by expertise and expense, the people who captured and owned photographs was limited by class and social status. This makes Green-Lewis's proposition, that photographs played a universal role in cultural memory making, difficult to endorse. By focusing on the physical photograph, Green-Lewis moves away from the metaphorical power of the image. This is in spite of the fact that Green-Lewis proposes that literature was most clearly impacted by photography as a metaphor.

We see this dichotomy most clearly in Green-Lewis's analysis of Virginia Woolf, on which the majority of this book rests. Chapter Two, 'Already the Past', opens with a moving moment from Woolf's *To the Lighthouse* (1927), in which Mrs Ramsay seems to be looking forwards and backwards at the same time. This is the first time Green-Lewis uses Woolf's phrase 'already the past' as a way of describing photography's nostalgic power. However, it is not until the final pages of Green-Lewis's chapter that it becomes clear exactly how this phrase is being used. Not only is Woolf not typically described as Victorian (though she has certain affections for the Victorians),[3] but this extract is not explicitly about

[3] See Kate Flint, 'Virginia Woolf and Victorian Aesthetics', in *The Edinburgh Companion to Virginia Woolf and the Arts,* ed. Maggie Humm (Edinburgh: Edinburgh University Press, 2010), pp. 19-34.

photography. Rather, it is evocative of what Green-Lewis is suggesting photography does: 'Mrs. Ramsay's backward glance is as functionally close to photography as anything in Woolf' (p. 40). This suggestion subverts Maggie Humm's assertion that Woolf's writing, in general, had a 'photographic affect'.[4] It also undermines the reading of the material aspects of the photograph upon which the first portion of the Green-Lewis's book relies: photography is now a metaphor. While the analysis of scenes from *To the Lighthouse* demonstrates the implicit simultaneity of looking both forwards and backwards that photography performs, as well as signalling photography's early nostalgic power, by demonstrating that the meaning of photography is metaphorical as well as physical, Green-Lewis is tacitly accepting what she sets out in her introduction: that a 'stable, unified photography has never existed' (pp. 5-6).

So, if photography is multiple – it both contributes to and is a product of memory and history – the argument Green-Lewis is proposing here in some way mimics photography itself: it is multiplicitous. Green-Lewis herself begins to perform the same nostalgia she seeks to unpack.

Bibliography

Barthes, Roland, *Camera Lucida* (London: Vintage, 1993).

Flint, Kate, 'Virginia Woolf and Victorian Aesthetics', in *The Edinburgh Companion to Virginia Woolf and the Arts*, ed. Maggie Humm (Edinburgh University Press, 2010), pp. 19-34.

Green-Lewis, Jennifer, *Framing the Victorians: Photography and the Culture of Realism* (London: Cornell University Press, 1996).

Humm, Maggie, *Snapshots of Bloomsbury: The Private Lives of Virginia Woolf and Vanessa Bell* (London: Tate Publishing, 2006).

[4] Maggie Humm, *Snapshots of Bloomsbury: The Private Lives of Virginia Woolf and Vanessa Bell* (London: Tate Publishing, 2006), p. 30.

BOOK REVIEW

Blindness and Writing: From Wordsworth to Gissing, by Heather Tilley (Cambridge: Cambridge University Press, 2017). 294 pp. Hardback, £75.00. Paperback, £22.99.

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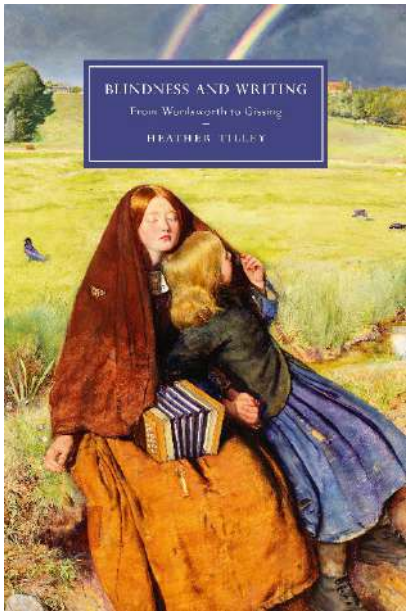

In her 1999 book, *Fiction in the Age of Photography: The Legacy of British Realism*, Nancy Armstrong made the, now well-known, argument that the Victorians equated seeing with knowing. Armstrong's work helped to shape what has become the critical consensus in the field of Victorian visual studies over the last twenty years: that the Victorians conceptualised knowledge and knowledge-production through the framework of vision, and that this in turn shaped literary production. Perhaps this consensus reflects our own modern biases. In common parlance, 'to see' is to experience, to know, to understand. If seeing and knowing were intertwined for the Victorians, they remain intertwined for Victorian literary critics. Heather Tilley's illuminating new book, *Blindness and Writing: From Wordsworth to Gissing,* seeks to destabilise the critical paradigm that associates seeing with knowing by demonstrating how blind and visually-impaired people's writing and reading practices informed nineteenth-century literary production. Through a disability studies framework that recuperates the material and corporeal experience of blindness and visual impairment in nineteenth-century Britain, Tilley demonstrates how blindness 'challenge[d] the emphasis on vision's superiority, in turn opening out a wider sensory environment for literary culture, both imaginatively and materially' (p. 5). Tilley offers fresh readings of the theme and trope of blindness in canonical literary works by sighted authors, from Charlotte Brontë to Charles Dickens to Wilkie Collins, by situating them in a broader archive of materials related to blindness, from ophthalmological texts to nineteenth-century raised print systems to autobiographical writings by blind and visually-impaired authors.

Tilley's archival historicism is in service of a cultural phenomenological approach, which she calls 're-reading blindness phenomenologically' (p. 11). Her analysis of literary representations of blindness is grounded in her account of

blindness and visual impairment as material, embodied, and historical lived experiences. Drawing on Maurice Merleau-Ponty's model of haptic visuality, Tilley argues that a phenomenological disability studies framework avoids the relegation of blindness to the realm of metaphor and offers greater historical and material specificity. It is an ethical stance, 'invit[ing] investigation into visual impairment that does not turn upon the blind person's otherness' (p. 33), and it underwrites Tilley's political project to recuperate the minoritised lived experience of nineteenth-century blind people. In this regard, Tilley's work not only enriches critical accounts of blindness and visual impairment as theme and trope in nineteenth-century literature, but also supplies a necessary pre-history for disability scholars who work on constructions of blindness in more contemporary contexts.

Blindness and Writing is divided into two parts. Part One, 'Blind People's Reading Practices', addresses the relationship between reading, writing, and visual impairment across a variety of nineteenth-century texts and media, primarily those created by and for blind and visually-impaired readers. Chapter One traces modern philosophical debates about the relationship between seeing and knowing that centre on the figure of a hypothetical blind man. It considers the philosophical legacy of what was known as 'Molyneux's problem', named after the scientist and philosopher William Molyneux and his influential discussion of whether a blind man restored to sight could visually recognise the differences between objects he previously had known only through touch. The subsequent chapters explore how blindness intersects with the material culture of writing. Chapter Two provides a fascinating discussion of the 'tension between idealized and embodied states of blindness' (p. 40) in the poetry of William Wordsworth. Wordsworth suffered from ophthalmia (now called chronic trachoma), a condition that caused episodic visual impairment and disrupted his writing practice, forcing him to rely on (often female) amanuenses in order to write. While blindness served as a Romantic trope for the poetic ideals of imagination and creativity, Wordsworth's poetry nonetheless registers his anxiety about blindness as 'a physical state that disrupts the ability to produce and consume texts' (p. 43). Of all the literary case studies included in *Blindness and Writing,* Tilley's discussion of Wordsworth most persuasively demonstrates how nineteenth-century reading and writing were practiced not only through sight, but also through networks of sound and touch. Chapter Three explores the development of raised print systems for blind readers, foregrounding the debates between blind and sighted people over what and how blind people should read. In Chapter Four, Tilley reads the genre of blind biographical writing by blind authors to explore the voices and perspectives of blind people in the nineteenth century. She discovers a network of blind authors who were determined to articulate the experience of blindness on their own terms.

Part Two, 'Literary Blindness', turns from the material conditions of blind reading and writing practices to the theme and metaphor of blindness in canonical literary works. Her readings, all of which are deeply engaging, demonstrate how Victorian writers frequently identified with figures of blindness as part of their

exploration of the materiality of writing. Moreover, for many of these writers, blindness represented positive forms of sensory experience and literary expression. In these instances, blindness was not an abstracted poetic trope, but rather an embodied state of feeling and knowing. Chapter Five considers the relationship between reading, writing, and gender in Charlotte Brontë's *Jane Eyre* (1847), Elizabeth Gaskell's *The Life of Charlotte Brontë* (1857), and Elizabeth Barrett Browning's *Aurora Leigh* (1857). Tilley's readings of *Jane Eyre* and *Aurora Leigh* turn on her analysis of their authors' personal relationships to blindness and visual impairment. Brontë wrote *Jane Eyre* against the backdrop of caring for her father through his visual impairment and cataract surgery (which she witnessed and described in letters), while *Aurora Leigh* was informed by Barrett Browning's friendship with the blind poet and scholar, Hugh Stuart Boyd. In Chapter Six, Tilley argues that Charles Dickens turned to blindness as a way of exploring writing as a sign system and material practice. The protagonist's metaphorical blindness in *David Copperfield* (1850) foregrounds the writer's mandate to represent what cannot be seen, while Esther Summerson's temporary blindness in *Bleak House* (1853) highlights the uncanny nature of writing as an arbitrary system of visual signs.

The final two chapters of the book concern how fiction both expressed and helped to formulate oculacentric perspectives that viewed sight as a precondition for knowledge, authority, and literary production. Chapter Seven compares *My Share of the World* (1861), a novel by the successful blind writer, Frances Browne, about the suicide of a blind heroine, with *Poor Miss Finch* (1872), the sighted author Wilkie Collins's novel about a blind woman who chooses not to restore her vision. While Collins tries to faithfully represent the embodied experience of his protagonist's blindness, Browne perpetuates stereotypes of blind people's incapacity against the personal testimony of her own experience. In Chapter Eight, Tilley uses George Gissing's *New Grub Street* (1891) to show how 'writing is tied to the working body of the writer, and in particular to his or her sensory capacity' (p. 208). The novel portrays the blinding of the writer and publisher, Alfred Yule, as a tragic disability under a capitalist labour system. If Collins sought to animate the period's discourses about blind agency, reading, and writing practices in his construction of a blind heroine, Gissing's novel represents what would become the erasure of such discourses from the historical record. Like Browne, Gissing counters the evidence of nineteenth-century blind authorship when he constructs Yule's blindness as incompatible with the material practice of writing or with the capacity for imaginative experience.

Tilley's discussions of *My Share of the World* and *New Grub Street* are exceptions in a book that presents how Victorian writers viewed blindness as productive for writing. Tilley's remarkable close readings leaves you with the sense that nineteenth-century writers conceived of vision not in terms of a strict sighted/blind binary, but as a phenomenological spectrum that encompasses a range of sensory experiences. One of the strengths of *Blindness and Writing* is the way it turns to a form of biographical criticism to generate evidence for sighted Victorian writers' intimate experiences of visual impairment and

blindness. Blindness was neither remote nor abstract; it shaped the Victorian writer's experience of family and community, as well as the public discourse on writing and reading, in which they were active participants. In recuperating the lived experience of blindness in nineteenth-century culture, Tilley positions herself against the work of visual studies scholars such as Jonathan Crary, who she argues is responsible for 'reifying the primacy of the visual in Victorian fiction and poetry' through his analysis of nineteenth-century spectatorship. However, Tilley's work meaningfully complements as well as complicates Crary's formulations. In *Techniques of the Observer* (1992), Crary argued that nineteenth-century optical toys, like the phenakistoscope and stereoscope, exemplified the new approach to vision as an embodied and subjective state. He recognised that, for the Victorians, seeing was *not* knowing; seeing was increasingly constructed as vulnerable not only to delusion and deception, but also to external manipulation and control. *Writing and Blindness* joins more recent works in Victorian visual studies, by scholars such as Srdjan Smajic and Anna Henchman, that consider how the Victorian construction of vision as physiological, embodied, and fragile informed the literary imagination.[1] What makes Tilley's book exemplary among others in this field is its commitment to reconstructing historical sensory and embodied experience, coupled with its deft integration of literary inquiry with cultural phenomenology. Through its interdisciplinary method and challenge to an oculacentric historical record, *Writing and Blindness* persuasively advances and enlarges the scholarly conversation about visual experience in Victorian culture.

Bibliography

Armstrong, Nancy, *Fiction in the Age of Photography: The Legacy of British Realism* (London: Harvard University Press, 1999).

Crary, Jonathan, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (London: MIT Press, 1992).

Henchman, Anna, *The Starry Sky Within: Astronomy and the Reach of the Mind in Victorian Literature* (Oxford: Oxford University Press, 2014).

Smajic, Srdjan, *Ghost-Seers, Detectives, and Spiritualists: Theories of Vision in Victorian Literature and Science* (Cambridge: Cambridge University Press, 2010).

[1] See Srdjan Smajic, *Ghost-Seers, Detectives and Spiritualists: Theories of Vision in Victorian Literature and Science* (Cambridge: Cambridge University Press, 2010); and Anna Henchman, *The Starry Sky Within: Astronomy and the Reach of the Mind in Victorian Literature* (Oxford: Oxford University Press, 2014).

BOOK REVIEW

Second Sight in the Nineteenth Century: Prophecy, Imagination and Nationhood, by Elsa Richardson (Basingstoke: Palgrave Macmillan, 2017). 260 pp. Hardback £79.99.

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Second sight is the stuff of Gothic tales, often associated with witchcraft, the Highlands, rural landscapes, and premonitions of death. Elsa Richardson's *Second Sight in the Nineteenth Century* reconsiders our understanding of second sight today by looking at the way it was shaped by nineteenth-century scientific discourse. As the subtitle of her book suggests, Richardson sets out to reassert the specificity of second sight 'as a peculiarly Scottish faculty' while tending to the way it impacted on both scientific and creative engagements with the perception of reality (p. 5). Richardson argues that second sight bears subversive potential and, thereby, rehabilitates 'this folkloric figure as a valuable subject for historians of science, psychology and popular culture' (p. 11). Richardson is wary to enhance the complexity of her topic; while appropriated by Lowlanders and Englishmen as an object suitable for empiric observation, second sight also seems to be elusive, unreliable, and subversive. The study offers an extraordinarily rich and compelling exploration of diverse supernatural manifestations. By observing the reception and representation of these manifestations in scientific discourse, Richardson enables the reader to reconsider the nineteenth-century interest in the other-worldly as a politically inscribed practice both denoting a form of appropriation of Northern Britain and informing the social division of society.

Offering a postcolonial reading of second sight, Richardson presents a subversive counter-narrative to the dominant culture that allows for alternative models of historiography refusing linear chronology (p. 251). Following the

example of Matthew Wickman and Silke Stroh,[1] Richardson uses postcolonial theories as a paradigmatic framework to scrutinise the place given to Highland territories in the newly-unified Great Britain (p. 5). As such, this work follows the lines of study opened up by recent scholarship,[2] which takes an interdisciplinary interest in various branches of the Victorian supernatural rather than occupying a solely literary or social perspective (p. 3). Moving beyond a 'natural' and 'supernatural' dichotomy, Richardson advocates for a new approach to second sight that recognises the apartness of this faculty within the Victorian supernatural. Reading second sight as an 'invented tradition', one that is geographically and politically inscribed, Richardson's book stands out from much of the leading work on the Victorian supernatural (p. 5).

Richardson's book underlines the interaction between the literary reception of second sight and its constant reshaping by scientific discourse. Her work participates in the ongoing research on the mutual influence of scientific and literary advances in the nineteenth century such as Lawrence Frank's *Victorian Detective Fiction and the Nature of Evidence* (2003), which aims to unveil how authors 'responded explicitly and implicitly to the scientific controversies of the day'.[3] Richardson's style is, throughout, remarkably didactic in its distinction between the different sciences. Her text is peppered with analyses of works of fiction featuring second sight, such as Walter Scott's *Waverley* (1814), thereby re-contextualising these works within the dominant scientific investigations of the supernatural. To this end, Richardson focuses on fiction writers indulging in more or less scientific activities such as Walter Scott, Catherine Crowe, or William Sharp, offering a panorama of 'eminent' figures related to the study of folklore and second sight. In this regard, Richardson's wonderful use of anecdotes and her skills in storytelling are impressive. Her work rehabilitates historic figures often obliviated such as Ada Goodrich Freer, who was considered a fraud and dismissed altogether by the Society for Psychical Research (SPR). Richardson's reading of these figures sheds light on their inscription in the complexities of second sight.

Connecting the chapters is 'the presence of myths, customs and lore, harvested from marginalised communities and put to work in the forming of elite knowledge at the metropole' (p. 5). Richardson's book outlines the malleability

[1] Matthew Wickman, *The Ruins of Experience: Scotland's 'Romantick' Highlands and the Birth of the Modern Witness,* (Philadelphia: University of Pennsylvania Press, 2007); Silke Stroh, *Uneasy Subjects: Postcolonialism and Scottish Gaelic Poetry*, (Amsterdam: Rodopi, 2011).

[2] See Pamela Thurschwell, *Literature, Technology and Magical Thinking, 1880-1920* (Cambridge: Cambridge University Press, 2001); Roger Luckhurst, *The Invention of Telepathy: 1870-1901* (Oxford: Oxford University Press, 2002); Christine Ferguson, *Language, Science and Popular Fiction in the Victorian Fin-de-Siècle: The Brutal Tongue* (Aldershot: Ashgate, 2006); Sarah Wilburn, *Possessed Victorians: Extra Spheres in Nineteenth-Century Mystical Writings* (Aldershot: Ashgate, 2006); and Jill Galvan, *The Sympathetic Medium: Feminine Channelling, the Occult, and Communications Technologies, 1859-1919* (Ithaca: Cornwell University Press, 2010).

[3] Lawrence Frank, *Victorian Detective Fiction and the Nature of Evidence: The Scientific Investigations of Poe, Dickens and Doyle* (Basingstoke: Palgrave Macmillan, 2003), p. 3.

of second sight to fit the discourse and aims of several scientific investigative cultures (p. 3). The first chapter introduces the scope of Richardson's study and her methodology. Brought to the foreground is the way second sight inscribes itself in the history of vision and the way it questions the nature of perception and reality altogether. Conflating present and future, second sight offers an alternative historiography which 'refuses linear formations of time' (p. 8).

Focusing on the seventeenth and eighteenth centuries, Chapter Two delineates the establishment of second sight as an object of study for scientists, travel writers, and novelists alike. It establishes a set of dichotomies that run through the entire book: the spoken versus the written word; unknowing Highlanders versus elite Lowlanders and Englishmen. Richardson rightly recalls that, in the context of the Enlightenment, the illiterate Highlander was a problematic figure, raising 'not only the question of what constitutes history or what is the proper subject of the historian, but also who is qualified to write it' (p. 25). Turning to *Waverley*, Richardson convincingly shows how the novel diffuses the disruptive quality of second sight and transforms it into a signifier of a lost past (p. 30). Second sight is shown to be associated with a sense of place, the fruit of the northern landscapes appropriated by antiquarians, travel writers, and readers, the inspiration of Romantic creativity. The study of Robert Kirk's *Secret Commonwealth of Elves, Fauns and Fairies* (1691) offers insight in Neo-Platonism and its influence on the perception of the world, second sight providing an entry point into the fairy world. Ultimately, Richardson points to the ambiguity of the reception of second sight that 'at the same moment as it is identified as a discrete subject its imminent dissolution is predicted, as if the reticent seer cannot be captured by the full glare of an inquisitive gaze' (p. 46).

In Chapter Three, Richardson turns to mesmerism and phrenology as a new language through which to understand second sight. Richardson thus contrasts her work with A.J.L. Busst,[4] claiming that second sight was not wholly assimilated by mesmeric discourse but that it retained its association with romantic figures (p. 52). Taking Catherine Crowe's *Vestiges of the Natural History of Creation* (1844) and *Night Side of Nature, or Ghosts and Ghost-Seers* (1848) as her starting point, Richardson demonstrates that 'second sight emerged as a key point around which new theories of perception and "visual disturbance" coalesced' (p. 62). Crowe called forth new theories of perception that shifted from the supernatural to the preternatural and focused on inner vision 'as both a creative resource and a force capable of shaping exterior reality' (p. 65). Interestingly, Richardson qualifies the common encoding of feminine nature as passive. Using Crowe's work, she argues that '[r]ather than implying a lack of action or willpower, to exist in a passive or "negative" state is to be receptive to knowledge unavailable to the waking mind'

[4] A.J.L. Busst, 'Scottish Second Sight: The Rise and Fall of a European Myth', *European Romantic Review,* 5.2 (Winter, 1995), pp. 149-77.

(p. 84). The chapter also presents the reader with an echo chamber of scientific debates, ventriloquising efforts to distinguish mesmerism as a serious scientific field distinct from popular culture. Phrenology and determinism, too, informed the meaning of second sight, which was thought of as an inherited trait or racial heritage (p. 76). As the chapter deftly demonstrates, the attempt to keep a clear separation between scientific enquiry and supernatural performance is impossible, pointing to more complex relations and cultural hybridity (p. 90).

Chapter Four is by far the most powerful of Richardson's book. Focusing on diverse theories of evolution and nascent scientific disciplines, this chapter offers a new perspective on Victorian spiritualism, construing it as 'a network of cultural exchange' (p. 105). Reading spiritualism alongside anthropology enables Richardson to reconsider the relation between Britain and the Empire, as well as the representation of the margins. Key to this chapter is the concept of inheritance, which constructs second sight 'as a unique repository of superstitious belief in an otherwise civilised country' and identifies Highlanders as an 'aboriginal race' (p. 109). Richardson's study reveals that this colonial view 'had material consequences, with marginalised groups in Britain subjected to the kinds of cultural erasures, state sanctioned violence and enforced migration enacted overseas' (p. 119). Turning to Charles Dickens and Wilkie Collins's play *The Frozen Deep* (1856), the chapter shows how second sight was used to keep control over the colonial narrative (p. 133). Though read from an evolutionary perspective, the second-sighted seer is thought to be doomed to extinction (p. 121), Richardson insists on the subversive potential of second sight as its 'disruptive historiography' offers 'other ways of imagining the individual in history' (p. 123).

Chapter Five focuses on Andrew Lang, a figure 'usually to be found haunting footnotes', but who is rehabilitated here to reveal the instability of spheres of knowledge developing in the nineteenth century (pp. 153, 155). This focus enables Richardson to tap into 'psycho-folklore' and recast second sight 'as a kind of mental capacity [which] transformed strange tales [...] into data that might provide insight into our "universal" psychology' (p. 163). Framing second sight in the literary debate as in opposition to realism and romance, the chapter brings to the fore adventure novels written by Robert Louis Stevenson or Rudyard Kipling, showing a reinforced sense of place linked to second sight. As Richardson points out, 'Scotland offers more than a setting for wild adventure novels; rather its customs and superstitions provide a way back to a more primal, instinctive consciousness' (p. 174). Thus, Richardson highlights 'an embodied heritage made visible in oral history, bardic traditions and old tales, one that made certain nations peculiarly receptive to the simple pleasures of the adventure novel' (p. 178). She concludes that Lang's multidisciplinary research allowed for an interpretation of 'second sight as simultaneously myth and mythopoetic

technique; literary inspiration and anthropological project; fairy tale and psychological phenomenon' (p. 181).

Inscribed within the context of the Celtic Revival in the *fin de siècle* and the birth of the Hermetic Order of the Golden Dawn, Chapter Six redefines second sight as an active faculty 'capable of moulding reality' (p. 201). The focus is on two female figures: Ada Goodrich Freer and Fiona McLeod (a feminine persona for the male writer, William Sharp). Contrary to Hilary Grimes, who reads Freer's experience at the haunted house of Ballechin as a metaphor for the 'female haunted mind', using 'the ghost as a haunting and powerful symbol for women's disfranchisement',[5] Richardson chooses not to consider gender implications. Rather, she acknowledges Freer's new perspective on second sight, positing it both as 'an exclusive faculty/hallucination' and as 'a universally available power/delusion' embodying 'Celtic identities' (p. 229). Richardson identifies a new methodology of immersion and proximity, which informs both Freer's investigations for the SPR and McLeod's revivalist works (p. 211). Richardson shows that the revivalist movement gave new metaphoric meaning to second sight, presenting it as 'an ancient mode of perception lost to the modern world' and an altogether different way of thinking (pp. 217-18). For Richardson, Freer's investigation and McLeod's fiction were 'invested in exploring the boundary regions of human consciousness', sharing 'self-knowledge as a common goal' (p. 223).

Richardson's study points to the 'hybridity' of second sight, to 'the way it adapted to meet the demands of very different investigative cultures', while stressing its enduring connection to the Highlands (p. 250). Her book is of importance for nineteenth-century studies, shedding light on the scientific debates of the time from an unusual angle, ultimately offering an alternative perception of history. The book is also of use for neo-Victorian studies, wherein the supernatural forms a key trope identified first by Patricia Pulham and Rosario Arias in *Haunting Spectrality* (2010). One may indeed wonder the extent to which the return of the figure of the seer in contemporary fiction inscribes itself in the continuity of second sight delineated by Richardson.

[5] Hilary Grimes, *The Late Victorian Gothic: Mental Science, the Uncanny, and Scenes of Writing*, (London: Routledge, 2011), p. 90.

Bibliography

Arias, Rosario, and Patricia Pulham (eds.), *Haunting and Spectrality in Neo-Victorian Fiction: Possessing the Past* (Basingstoke: Palgrave Macmillan, 2010).

Busst, A.J.L., 'Scottish Second Sight: The Rise and Fall of a European Myth', *European Romantic Review,* 5.2 (Winter, 1995), pp.149-77.

Ferguson, Christine, *Language, Science and Popular Fiction in the Victorian Fin-de-Siècle: The Brutal Tongue* (Aldershot: Ashgate, 2006).

Frank, Lawrence, *Victorian Detective Fiction and the Nature of Evidence: The Scientific Investigations of Poe, Dickens and Doyle*, (Basingstoke: Palgrave Macmillan, 2003).

Galvan, Jill, *The Sympathetic Medium: Feminine Channelling, the Occult, and Communications Technologies, 1859-1919* (Ithaca: Cornwell University Press, 2010).

Grimes, Hilary, *The Late Victorian Gothic: Mental Science, the Uncanny, and Scenes of Writing* (London: Routledge, 2011).

Stroh, Silke, *Uneasy Subjects: Postcolonialism and Scottish Gaelic Poetry* (Amsterdam: Rodopi, 2011).

Thurschwell, Pamela, *Literature, Technology and Magical Thinking, 1880-1920* (Cambridge: Cambridge University Press, 2001).

Wickman, Matthew, *The Ruins of Experience: Scotland's 'Romantick' Highlands and the Birth of the Modern Witness* (Philadelphia: University of Pennsylvania Press, 2007).

Luckhurst, Roger, *The Invention of Telepathy: 1870-1901* (Oxford: Oxford University Press, 2002).

Wilburn, Sarah, *Possessed Victorians: Extra Spheres in Nineteenth-Century Mystical Writings* (Aldershot: Ashgate, 2006).

BOOK REVIEW

Discourses of Vision in Nineteenth-Century Britain: Seeing, Thinking, Writing, by Jonathan Potter (Basingstoke: Palgrave Macmillan, 2018). 269 pp. Hardback, £59.99.

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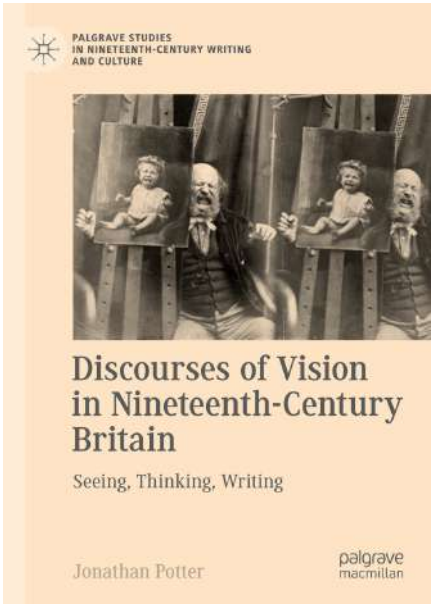

Have you ever considered a view to be 'panoramic', described a sunset as 'kaleidoscopic', or marveled at the 'magic' of cinematic projections? Visual technologies and entertainments, such as the panorama, the kaleidoscope, and the magic lantern, profoundly affected the Victorian cultural imagination. So much so, they are still embedded in the way we conceptualise, and referenced in the way we articulate, what we see today.

The ongoing endurance of such metaphors is testament to the importance of Jonathan Potter's *Discourses of Vision in Nineteenth-Century Britain,* a revealing exploration of how the interplay between experiences of optical technologies and their textual interpretation influenced Victorian understandings of visual perception, in which the origins of our own ways of seeing can be traced. While scholars of nineteenth-century visual culture, such as Isobel Armstrong, Kate Flint, and Martin Willis, have considered the cultural reverberations of optical toys and instruments, Potter's sustained interrogation of the specifically literary landscape surrounding visual invention is a valuable addition to the field. Potter delves deeply into the Victorian collective conscience, specifically in Britain, and offers fresh insight into the ways in which visual technologies shaped thought and experience throughout the era.[1]

Potter asserts that the influence of new visual technologies on processes of perception and expression was amplified by the nineteenth-century boom in print culture, which enabled the dissemination of textual accounts of visual experience on a mass scale. This entwining of direct, and mediated, experiences of visual technologies informed both visual and spatio-temporal experience for the nineteenth-century audiences that consumed them, since 'the way one perceived the world, and the way one expressed that perception, had deep implications for what one felt, thought, and imagined about the world, and also about one's self' (p. 11). Specific visual technologies offered a commonly-understood framework or point of reference, around

[1] See Isobel Armstrong, *Victorian Glassworlds: Glass Culture and the Imagination 1830-1880* (Oxford: Oxford University Press, 2008); Kate Flint, *The Victorians and the Visual Imagination* (Cambridge: Cambridge University Press, 2000); and Martin Willis, *Vision, Science and Literature 1870-1920: Ocular Horizons* (London: Routledge, 2011).

which visual discourse could form. Potter's argument is built from detailed examinations of some of these optical devices, and their literary representation, evoking the novelty and excitement they must have generated for their early audiences.

Invented in the eighteenth century, the panorama was a 360-degree painted illusion, commonly depicting a landscape, cityscape, or battle scene, which was displayed wrapped around a central viewing platform, within a specially designed circular room. By combining the vast visual scope of an elevated view with highly intricate detail, panoramas strove to create an immersive illusion of reality, which might transport the audience to the Roman Colosseum, or to Paris by night. As a media technology that attempted to manifest a totalising gaze that could not only see everything, but see everything at once, the panorama was discursively aligned with the concept of objective realism and the desire for rationality, control, and order. In contrast, the magic lantern, with its flitting projections of ethereal forms and seemingly supernatural displays of 'phantasmagoria', was associated with the fluid, the mutable, and the irrational in thought and perception, particularly with 'the highly subjective visions of dreams' (p. 72). Potter evidences these correlations with a rich array of textual readings, bringing together the work of Dickens, Carlyle, G.H. Lewes, Henry Mayhew, and articles from popular periodicals, that position visual technologies as an important contributing factor in shaping these opposing trends in nineteenth-century thought.

A visual device that did not correspond so neatly to either logical-empirical or intuitive-intangible modes of understanding was the stereoscope. Invented in 1838, this optical toy was operated by using two images (usually photographs) taken at slightly different angles that, when directed to each eye separately, combined to recreate binocular vision and form the illusion of three-dimensional space. While this effect heightened the perceived realism of the image, adding a sense of solidity and spatial depth, the apparatus itself necessitated a private and sustained gaze that invited the viewer to enter another world, stimulating imaginative engagement and the construction of narrative – particularly as a way of negotiating a series of images, loosely linked by subject or theme. An especially fascinating aspect of the stereoscope was the cognitive dissonance it generated between the obviously flat card images and the ostensible three-dimensional vision perceived through the eyepiece. This peculiar effect, in turn, foregrounded a philosophical dilemma regarding the properties of reality. It gave rise to the question as to whether form and space were mental constructs, as Kant had contended – and which the stereoscope seemed to confirm, since it showed how this might be perceived when they were obviously not present – or whether depth and solidity were fundamental properties of a physical environment perceived directly by the eye. As both a scientific instrument and a vehicle of imaginative escape, as both a popular parlour toy and an item of metaphysical debate, the stereoscope transgressed epistemological borders and opened a subversive cultural space between 'science and religion; supernatural and natural; rational and irrational' (p. 150).

As the century progressed, optical media that was once exciting and novel became widespread and, now readily accessible, was 'increasingly used in amateur contexts', meaning 'their applications became more varied, and their effects more diverse' (p. 189). This circumstance was paralleled by the proliferation of printed material, through which information had accumulated to a point that necessitated a

typological system, whereby literature was comprehended in terms of genre or form, and structured as a 'multifaceted web of meanings' rather than a unified location of truth (p. 193). Visual technologies played a role in effecting the shift from objective materialism to subjective narrative by way of a 'disintegration of knowledge into a 'fractal episteme' (p. 213), and thereby emphasising and facilitating the role of the imaginative in perceptual experience. By the turn of the century, bringing the advent of early cinema, the confluence of technology and imagination was cemented to the extent that new technologies could invoke imaginative association by referencing former technologies, as seen in the 1903 film, *La Lanterne Magigue* (*The Magic Lantern*), by (former magician) Georges Méliès: a piece of early cinema that constructs the fantasy world of a child through depicting the theatre and illusion associated with the magic lantern. *Discourses of Vision in Nineteenth-Century Britain* serves as a thoroughly researched and lucidly argued study of the complex processes by which this circumstance came about.

Bibliography

Armstrong, Isobel, *Victorian Glassworlds: Glass Culture and the Imagination 1830-1880* (Oxford: Oxford University Press, 2008).

Flint, Kate, *The Victorians and the Visual Imagination* (Cambridge: Cambridge University Press, 2000).

Willis, Martin, *Vision, Science and Literature 1870-1920: Ocular Horizons* (London: Routledge, 2011).