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Introduction: Replicating Bodies in Nineteenth-Century Science and Culture

Will Abberley

The articles in this issue of *19* all respond to the contention that, in nineteenth-century science and culture, to read a body was to replicate it. Medical practitioners collaborated with artists to produce new kinds of anatomical models which resembled the body with uncanny accuracy, while prosthetics mimicked body parts with unprecedented similitude.¹ At the same time, zoology as a body of knowledge became increasingly associated with replicating the likenesses of living animals through taxidermy. While earlier animal stuffing had often been relatively crude, naturalist-taxidermists such as John Hancock used new mounting techniques and extensive field observation to create displays which appeared to freeze live animals in motion.² The period also witnessed new efforts to capture and replicate bodies' varying attitudes and motions through visual technologies. Although this effect would be most fully achieved in cinematography, it was pursued much earlier through collections and sequences of static images. In *Essays on the Anatomy of Expression in Painting* (1806), anatomist Charles Bell used drawings of faces contorted into different emotional expressions to illustrate the muscular variability of the human countenance. Charles Darwin's *The Expression of the Emotions in Man and Animals* (1872) would build on this work, reproducing photographs of people and animals in various expressive attitudes. In the 1870s and 1880s, Eadweard Muybridge and Étienne-Jules Marey developed forms of stop-motion photography that replicated animals' split-second movements in a sequence of stills. In the same period, the emergence of the phonograph replicated human voices, enabling investigators like Edward Wheeler Scripture to slow them down in order to analyse the phonetic minutiae of

¹ Elizabeth Hallam, *The Anatomy Museum: Death and the Body Displayed* (London: Reaktion Books, 2016), pp. 162–66; Stephen Mihm, “‘A Limb Which Shall Be Presentable in Polite Society’: Prosthetic Technologies in the Nineteenth Century”, in *Artificial Parts, Practical Lives: Modern Histories of Prosthetics*, ed. by Katherine Ott, David Serlin, and Stephen Mihm (New York: New York University Press, 2002), pp. 282–99 (pp. 285–88).

² See Diana Donald, *Picturing Animals in Britain, 1750–1850* (New Haven: Yale University Press, 2007), pp. 89–90.

speech.³ Artificially replicating bodies and their activities offered new ways of understanding them, generating knowledge as well as demonstrating it.

Organic bodies were also viewed as vehicles for mimicry. Philosophers since Aristotle had claimed that humans possessed an innate tendency to mimic each other.⁴ However, it was not until the late eighteenth century that philosophers such as J. G. H. Feder in Germany systematically postulated an ‘imitation drive’, possibly shared between humans and animals.⁵ Edmund Burke similarly identified an innate ‘desire of imitating’, which ‘forms our manners, our opinions, our lives’. Yet this process was purely physiological, he claimed, occurring ‘without any intervention of the reasoning faculty’.⁶ The body’s apparent tendencies towards imitation conflicted with ideals of individualism, both in the Romantic sense of originality and self-realization and the liberal sense of the individual as a political-economic free agent.⁷ It was perhaps for this reason that imitation in the nineteenth century was frequently associated with primitive mindlessness. Darwin noted ‘a strong tendency to imitation, independently of the conscious will’ in humans and argued that this tendency was discernible in other primates.⁸ By the turn of the twentieth century, the American psychologist James Mark Baldwin was describing the child as ‘a veritable copying machine’.⁹ Similarly, the French sociologist Gabriel Tarde conceptualized imitation as the ‘social’ expression of a universal law of ‘repetition’ which occurred throughout the organic world via heredity.¹⁰ This sense that mimicry was a natural law was reinforced by studies into bodily resemblances between different species across the animal kingdom. In the early

³ See Edward Wheeler Scripture, *The Elements of Experimental Phonetics* (New York: Charles Scribner’s Sons; London: Arnold, 1902). See also, Matthew Rubery, ‘Thomas Edison’s Poetry Machine’, 19: *Interdisciplinary Studies in the Long Nineteenth Century*, 18 (2014) <<http://doi.org/10.16995/ntn.678>>.

⁴ Aristotle, ‘Poetics’, in *Norton Anthology of Theory and Criticism*, ed. by Vincent B. Leitch, 2nd edn (New York: Norton, 2010), pp. 83–118 (p. 90).

⁵ See Johann Georg Heinrich Feder’s discussion of a ‘Triebe der Nachahmung’ in *Untersuchungen über den menschlichen Willen*, 2 vols (Göttingen: Trattner, 1785), 1, 455–56. See also, Eckart Scheerer, ‘Pre-Evolutionary Conceptions of Imitation’, in *Contributions to a History of Developmental Psychology*, ed. by Georg Eckardt, Wolfgang G. Bringmann, and Lothar Sprung, New Babylon Studies in the Social Sciences, 44 (Berlin: Mouton, 1985), pp. 27–54.

⁶ Edmund Burke, *A Philosophical Inquiry into the Origins of Our Ideas of the Sublime and the Beautiful* (London: Dodsley, 1757), pp. 28–29.

⁷ On these different kinds of individualism, see Stephen Lukes, *Individualism* (New York: Harper & Row, 1973), pp. 17–39.

⁸ Charles Darwin, *The Expression of the Emotions in Man and Animals* (London: Murray, 1872), p. 356.

⁹ James Mark Baldwin, *The Individual and Society; or, Psychology and Sociology* (Boston: Badger, 1911), p. 21.

¹⁰ Gabriel Tarde, *The Laws of Imitation*, trans. by Elsie Clews Parsons (New York: Holt, 1903), pp. 7–8.

nineteenth century, the entomologist William Sharp Macleay argued that such ‘analogies’ between unrelated insects occurred in interlinking patterns, reflecting the exquisite symmetry of the creation.¹¹ Later, Henry Walter Bates and Alfred Russel Wallace posited the concept of ‘protective mimicry’, by which animals evolved to resemble other species which were unpalatable or otherwise defended against predators.¹² Bodies seemed naturally formed to replicate each other.

This issue explores how nineteenth-century representations of bodies as objects and subjects of replication interacted with wider concerns about authenticity, epistemology, identity, and animal/human, nature/culture binaries. As in current times, ‘replication’ signified repetition or reproduction, reflecting its Latin and French derivations. Yet the word was also used to signify echoing and replying, connotations which are useful for considering the ambiguities of mimicking bodies and bodily mimicry.¹³ In his suggestive study of ‘the copy’ in western modernity, Hillel Schwartz observed that ‘the more adroit we are at carbon copies, the more confused we are about the unique, the original, the Real McCoy’.¹⁴ Anatomical models and images and taxidermic specimens problematized the dichotomy between original and copy as they sought not only to replicate specific bodies but to represent ideal types that supposedly lay behind individual examples. Further, while organic bodies existed in constant flux, both physically moving around and passing through cycles of growth, senescence, and decay, artificial replications gave such bodies an impossible stasis. Such objects were thus sometimes characterized, paradoxically, by their *unlikeness* to the bodies they replicated, revealing minute details which were unobservable upon living, moving bodies. In these ways, artificial efforts to mimic organic bodies raised questions about the dynamics of representation and reflected diverging attitudes towards it in science and art. Similarly, human tendencies to mimicry undermined notions of personality as internal and essential. Identities seemed increasingly constituted by their relations with others. Views of imitation as primitive and animal clashed with psychological theories that placed it at the centre of learning

¹¹ W. S. Macleay, *Horae Entomologicae; or, Essays on the Annulose Animals, vol. I, part II* (London: Bagster, 1821), p. 363.

¹² Henry Walter Bates, ‘Contributions to an Insect Fauna of the Amazon Valley. Lepidoptera: Heliconidae’, *Transactions of the Linnean Society*, 23 (1862), 495–566 (p. 498); Alfred Russel Wallace, ‘Mimicry, and Other Protective Resemblances among Animals’, *Westminster Review*, July 1867, pp. 1–43 (p. 22).

¹³ See ‘replication’, *OED*. For more on the plural associations of this word, see *Replication in the Long Nineteenth Century: Re-makings and Reproductions*, ed. by Julie Codell and Linda K. Hughes (Edinburgh: Edinburgh University Press, forthcoming).

¹⁴ Hillel Schwartz, *The Culture of the Copy: Striking Likenesses, Unreasonable Facsimiles* (New York: Zone Books, 1996), p. 11.

and selfhood. Mimicry might both reinforce distinctions between savagery and civilization, and collapse them.

Uncanny replications

Mimicry also escaped these naturalistic contexts to go to work in stranger ways, as an aspect of what psychoanalysts would later call the uncanny. Ernst Jentsch (and later Sigmund Freud) defined this term as a state of psychological discomfort associated (among other things) with the blurring of boundaries between the animate and inanimate. Building on this idea, more recent researchers have posited an ‘uncanny valley’, a hypothetical threshold on a scale of human likeness at which objects incur eeriness and revulsion.¹⁵ Although nineteenth-century authors lacked this psychoanalytic hermeneutic, many were sensitive to the potentially disorientating effects of objects replicating the appearance of animate bodies. E. T. A. Hoffmann’s ‘The Sandman’ (1816) (which Jentsch and Freud both used to illustrate the uncanny) famously depicted the mechanical automaton Olympia, with whom the protagonist of the story falls in love, believing it to be a woman. Similarly, in Charles Dickens’s *The Old Curiosity Shop* (1841), the travelling show-woman Mrs Jarley declares her human waxworks

so like life, that if wax-work only spoke and walked about, you’d hardly know the difference. I won’t go so far as to say, that, as it is, I’ve seen wax-work quite like life, but I’ve certainly seen some life that was exactly like wax-work.¹⁶

Mrs Jarley’s paradox emphasizes the dizzying *trompe l’oeil* which waxworks could create, momentarily upsetting the apparent relationship between organic original and artificial copy. Stuffed animals could be equally unnerving, as Verity Darke discusses in her article on taxidermy in Dickens’s *Our Mutual Friend* (1865). Darke notes that Dickens’s description of such objects as ‘paralytically animated’ highlights how they blurred the boundaries between life and death, nature and artifice.

¹⁵ Ernst Jentsch, ‘On the Psychology of the Uncanny (1906)’, trans. by Roy Sellars, *Angelaki*, 2.1 (1997), 7–16; ‘The Uncanny’, in *The Standard Edition of the Complete Works of Sigmund Freud*, ed. and trans. by James Strachey, 24 vols (London: Hogarth Press, 1953–74), xvii: *An Infantile Neurosis and Other Works* (1955), pp. 218–52; Masahiro Mori, ‘The Uncanny Valley’, trans. by Karl F. MacDorman and Norri Kageki, *IEEE Robotics & Automation Magazine*, 19.2 (2012), 98–100 <<http://doi.org/10.1109/MRA.2012.2192811>>. See also, Nicholas Royle, *The Uncanny* (Manchester: Manchester University Press, 2003), pp. 187–202.

¹⁶ Charles Dickens, *The Old Curiosity Shop*, ed. by Elizabeth M. Brennan (Oxford: Clarendon Press, 1997), p. 211.

The tendencies of live bodies to resemble and seem to replicate each other also furnished rich material for uncanny narrative in the period. We might think of the mysterious doppelgänger who torments the protagonist of Edgar Allan Poe's 'William Wilson' (1839). The protagonist is vexed to find himself and his classmate 'of the same height' and 'singularly alike in general contour of person and outline of feature'. Recognizing the double's striking resemblance to him, the narrator feels 'possessed with an objectless yet intolerable horror'.¹⁷ Later, bodily resemblances similarly confused identities in the work of Thomas Hardy, who exploited uncertainties about heredity to conjure weird moments of doubling. In his short story 'An Imaginative Woman' (1894), the protagonist Ella bears a son who looks remarkably like a poet whom she was once obsessed with but never met. The coincidence causes her husband to wrongly imagine that the child is not his. 'By a known but inexplicable trick of nature', the narrator states, 'there were undoubtedly strong traces of resemblance [...]; the dreamy and peculiar expression of the poet's face sat, as the transmitted idea, upon the child's.'¹⁸ The tale evokes old notions of 'maternal impressions' which assumed that children could be influenced by sensory stimuli experienced by their mothers during pregnancy.¹⁹ By the end of the century, such Lamarckian heredity was increasingly disputed, following August Weismann's studies which suggested that parents' individual experiences did not affect the hereditary information they transmitted.²⁰ However, the idea that ancestral features were passed across generations unchanged could have equally uncanny implications, producing eerie likenesses across time. The speaker in one of Hardy's poems fancies that he sees 'my mien, and build, and brow' mirrored in an endless line of predecessors, causing him to despair: 'I am merest mimicker and counterfeit!'.²¹ Hardy's vision of an immortal family face evokes the search for types behind individual bodies in anatomical models and images and in the composite portraits of Francis Galton which combined mug shots of

¹⁷ Edgar Allan Poe, 'William Wilson', in *Great Tales and Poems of Edgar Allan Poe* (London: Pocket Books, 2007), pp. 271–300 (p. 281).

¹⁸ Thomas Hardy, 'An Imaginative Woman', in *The Distracted Preacher and Other Tales*, ed. by Susan Hill (New York: Penguin, 1985), pp. 305–30 (p. 330). See also, Angelique Richardson, *Thomas Hardy and the Politics of Biology: Character, Culture and Environment* (Oxford: Oxford University Press, forthcoming).

¹⁹ Cristina Mazzoni, *Maternal Impressions: Pregnancy and Childbirth in Literature and Theory* (Ithaca: Cornell University Press, 2002), pp. 17, 22–35.

²⁰ August Weismann, *Essays Upon Heredity and Kindred Biological Problems*, trans. by A. E. Shipley and Selmar Schönland, ed. by Edward B. Poulton (Oxford: Clarendon Press, 1889). See Laura Otis, *Organic Memory: History and the Body in the Late Nineteenth and Early Twentieth Centuries* (Lincoln: University of Nebraska Press, 1994), pp. 47–49.

²¹ 'The Pedigree', in *The Variorum Edition of the Complete Poems of Thomas Hardy*, ed. by James Gibson (London: Macmillan, 1979), pp. 460–61 (p. 461).

convicts to depict typical ‘criminal’ features.²² In such materialist science, the body represented not the shell of a metaphysical soul but the basis of character, suggesting that physical resemblances might correlate with moral, psychological ones.

Even uncannier was the birth of identical siblings, although their resemblances could signify different meanings through the period. Early in the century, storytellers often presented twins’ visible likenesses as misleading, since different life experiences produced different characters.²³ Hence, Susan Ferrier’s *Marriage* (1818) depicts twin sisters who are raised by different mistresses and, consequently, diverge in their personalities, one becoming sensible and dutiful and the other reckless and immoral. This pattern is repeated in Madeline Leslie’s *The Twin Brothers* (1843) as the twin protagonists receive a religious and irreligious upbringing respectively, leading one to become an upstanding citizen and the other a criminal. Later in the century, however, twins increasingly came to symbolize the power of heredity to replicate personalities irrespective of environment. Having surveyed the families of many twins, Galton argued that twins’ habits, dispositions, and even lifespans were mostly remarkably similar, as though they were ‘keeping time like two watches’.²⁴ Grant Allen would use this image in his story ‘The Two Carnegies’ (1885) in which twin brothers echo each other in all of their actions and life experiences, albeit with a two-week delay. One brother declares, ‘We’re like two clocks wound up to strike at fixed moments’, and his assessment is confirmed at the end of the tale when the brothers die from the same illness a fortnight apart.²⁵ These examples show how twins could be made to symbolize the primacy of both biology and environment, both the depth of bodily replication and its superficiality.

Uncanny resemblances also derived from humans’ abilities to consciously mimic each other’s appearances. In ‘William Wilson’, the protagonist finds himself mirrored through skilful imitation as well as physical similarities. Of his disturbing double, Wilson laments, ‘my gait and general manner were, without difficulty, appropriated; [...] even my voice did not escape him’ (Poe, p. 281). The anxiety that bodily mimicry could falsify identities was fuelled through the century by widely publicized

²² See Francis Galton, ‘Composite Portraits, Made by Combining Those of Many Different Persons into a Single Figure’, *Nature*, 18 (1878), 97–100.

²³ Schwartz, p. 29; Alan Richardson, *British Romanticism and the Science of the Mind* (Cambridge: Cambridge University Press, 2004), p. 96.

²⁴ Francis Galton, ‘The History of Twins, as a Criterion of the Relative Powers of Nature and Nurture’, *Fraser’s Magazine*, November 1875, pp. 566–76 (p. 574).

²⁵ Grant Allen, ‘The Two Carnegies’, *Cornhill Magazine*, March 1885, pp. 292–324 (p. 293). On the history of twins as objects of scientific knowledge, see William Viney, ‘Curious Twins’, *Critical Quarterly*, 56.2 (2014), 47–58.

cases of imposture, such as the pretended baronet Roger Tichborne.²⁶ The shift to a credit-based economy that loosened class boundaries and the anonymity of modern urban life generated new interest in and concern about individuals posing as people that they were not. William Brewer notes that, in the Romantic period, ‘numerous tales about criminal chameleons appeared in the periodical press’, which ‘condemned the mendacity and criminality of imposters while praising the culprits’ acting skills, apparel, handsomeness, charm, and gentility. Courtrooms, prison cells, and scaffolds became stages on which protean swindlers performed before appreciative onlookers.²⁷ The persistence of these theatrical associations with chameleon criminality can be seen near the end of the century in Grant Allen’s novel *An African Millionaire* (1896), which follows the shape-shifting con man Colonel Clay. Clay repeatedly defrauds the mining magnate Sir Charles Vandrift by changing his appearance to look like a succession of different people (including even Sir Charles himself). A former maker of waxwork figures, Clay is said to use his technical skills ‘to mould his own nose and cheeks, with wax additions to the character he desires to personate.’²⁸ The disorientating effect of such mimicry is highlighted when Clay is finally caught and put on trial, with the prosecution case consisting of proving that the man in the dock is the same as Clay’s various incarnations. Yet, when Sir Charles asserts that he was defrauded by a man posing as a parson, whose photograph is shown to the court, Clay draws attention to another man in the middle of the court. Turning around, Sir Charles is startled to see a parson who ‘was — to all outer appearance — the Reverend Richard Brabazon *in propria persona*’ (p. 304). The parson in the court turns out to be an accomplice, on whom Clay modelled his disguise, and Clay’s identity is finally proved through comparisons of photographs of his different personas. Nonetheless, his misdirection of the court testifies to the dizzying effect of contrived bodily resemblance.

A similar sense of confusion, of reality losing its stable coordinates, runs through Jane Goodall’s article, which probes the complex relationship between bodily mimicry and the uncanny. This theme is pursued through a discussion of the Gothic genre and the history of theatre. Goodall shows how fascination with ghosts and other supernatural visions in the

²⁶ Rohan McWilliam, ‘Unauthorized Identities: The Imposter, the Fake and the Secret History in Nineteenth-Century Britain’, in *Legitimacy and Illegitimacy in Nineteenth-Century Law, Literature and History*, ed. by Margot C. Finn, Michael Lobban, and Jenny Bourne Taylor (Basingstoke: Palgrave Macmillan, 2010), pp. 67–92.

²⁷ William D. Brewer, *Staging Romantic Chameleons and Imposters* (Basingstoke: Palgrave Macmillan, 2015), pp. 3–4.

²⁸ Grant Allen, *An African Millionaire: Episodes in the Life of the Illustrious Colonel Clay* (New York: Arnold, 1897), p. 19. See Christopher Pittard, *Purity and Contamination in Late Victorian Detective Fiction* (Farnham: Ashgate, 2011), pp. 119–44.

period dovetailed with developing ideas in psychology that conceived of the human mind as ‘haunted’ in various ways, such as by dim memories of ancestral experience. In this context, Goodall suggests, the figure of the uncanny double served to express ‘pre-Freudian insights into how the mind hides things from itself’. Bodily replication could present the original in a new light, discovering previously unknown divisions and pluralities.

More real than life

The notion that replication was revelatory, defamiliarizing the original, underpinned the logic of many scientific efforts to mimic organic bodies in the period. Anatomical models displayed normally unperceived structures and details through their stasis and permanence, which enabled close-up, protracted scrutiny. Carin Berkowitz comments that wax models offered ‘a way of “seeing” systems of barely visible anatomical parts with clarity, away from the messiness of the body’. By seeking ‘to hold nature still’, such objects ‘served as an intermediate between nature and representation’, replicating organic bodies in all of their (usually unseen) details.²⁹ Artificially replicating bodies did not necessarily result in a *trompe l’oeil* but could, conversely, make bodies strange by altering their normal conditions of visibility. This point is highlighted in Kristin Hussey’s review of Joseph Towne’s medical waxworks at the Gordon Museum of Pathology in London, works which captured the subtle differences in colour and texture of various skin diseases. Similarly, through their atemporality, photographs promised to make visible details of bodies that normally went unremarked. Hence, Darwin’s images of faces variously contorted seemed to capture bodies’ fleeting emotional states (even though, in reality, these expressions were staged rather than spontaneous).³⁰ Muybridge and Marey’s quick-fire photographs revealed aspects of movement which escaped the eye in real time, such as the ways in which animals ambulated and rolled over in mid-air so as to land on their feet.³¹ Artificially replicated bodies could seem more substantial than the bodies they mimicked.

This inversion of the traditional logic of mimesis caused some medical investigators to imagine such technologies as means of capturing personalities as well as physical bodies. The mid-century alienist Hugh Welch Diamond claimed to have treated delusional patients by

²⁹ Carin Berkowitz, ‘Systems of Display: The Making of Anatomical Knowledge in Enlightenment Britain’, *British Journal for the History of Science*, 46 (2013), 359–87 (pp. 368–69, 370).

³⁰ See Phillip Prodger, *Darwin’s Camera: Art and Photography in the Theory of Evolution* (Oxford: Oxford University Press, 2009), pp. 219–20.

³¹ Matthew Brower, *Developing Animals: Wildlife and Early American Photography* (Minneapolis: University of Minnesota Press, 2011), p. 155.

photographing them and then showing them the photographs to restore their sense of self.³² In a reversal of the conventional dichotomy between organic authenticity and artificial replication, living bodies were encouraged to replicate their likenesses. Treena Warren's contribution to this issue examines how Victorian medical photography sought to capture and store permanently bodies in various stages of disease and recovery. Warren notes that the medium's association with portraiture shaped the way in which patients were imaged, appearing as individuals in a specific 'social context' rather than as isolated body parts. Again, the replication could seem more substantial than the original, since the latter changed constantly while the model or portrait remained the same. This impression that artificial bodily replications could, perhaps, preserve personalities (or aspects of them) better than the bodies they inhabited was reinforced by the secularization of psychology, as the discipline emphasized the corporeal basis of mind.³³ Walter Pater famously characterized human life as a 'continual vanishing away' and a 'strange, perpetual, weaving and unweaving of ourselves'.³⁴ In contrast to this unstable ontology, the artificial likeness represented an impossible bodily permanence, symbolized in Oscar Wilde's *A Picture of Dorian Gray* (1890). Wilde's protagonist acquires the unchanging, youthful features of his painting while the image on canvas becomes decayed and distorted over the years. His iconic story shows the slippage between bodies and their artificial replications that had been long recognized in medicine permeating popular culture.

Anatomical human models further defamiliarized bodies by dividing them into pieces and peeling back tissue to expose internal organs. As Corinna Wagner explores in her article, the removable layers of medical waxworks encouraged anatomists and artists to rethink the relationship between bodily interior and exterior. As models evolved over time, they defamiliarized the human body in line with changing norms of representation. Lorraine Daston and Peter Galison have shown how notions of 'truth-to-nature', which caused earlier investigators to represent natural objects in accordance with ideals of symmetry and perfection, were progressively supplanted by efforts to 'let nature speak for itself'.³⁵ Instead of 'correcting' the individual variations of specimens, anatomical images

³² Hugh Welch Diamond, 'On the Application of Photography to the Physiognomic and Mental Phenomena of Insanity', *Proceedings of the Royal Society*, 8 (1856), p. 117; see Tiffany Watt Smith, *On Flinching: Theatricality and Scientific Looking from Darwin to Shell Shock* (Oxford: Oxford University Press, 2014), p. 183.

³³ Rick Rylance, *Victorian Psychology and British Culture 1850-1880* (Oxford: Oxford University Press, 2000), p. 80.

³⁴ Walter Pater, *The Renaissance: Studies in Art and Poetry* (London: Macmillan, 1919), p. 235.

³⁵ Lorraine Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2010), pp. 42, 120.

and models strove more to reproduce them with minute accuracy.³⁶ While earlier models claimed to replicate bodily ideals never found in reality, others of the mid- to late nineteenth century disorientated the viewer by diverging from conventional bodily representation, depicting strange, pathological abnormalities. This change is reflected in the photographs of diseased bodies discussed by Warren and in Joseph Towne's waxworks. Hussey, discussing the latter, notes that by faithfully replicating the diseased body parts of individuals, sometimes of different racial heritages, Towne's models 'bring a sense of the diverse community of hospital patients'. Medical waxworks drew attention to the changeability, variety, and hidden depths of the human body.

Such innovations promised not only to advance scientific knowledge but also to reset aesthetic values. The anatomist John Marshall wrote in a book aimed at artists, 'the beauty of the human form [...] does not by any means reside entirely in its superficial covering, but it depends essentially on that of the structures situated beneath the integument.'³⁷ Bell had promoted his studies of expressive physiology as an aid to artists, and painters such as William Holman Hunt and Dante Gabriel Rossetti studied anatomy in order to reproduce the structures of human tissue with striking 'mimetic accuracy'.³⁸ While earlier commentators had understood artistic imitation as 'a selective, idealizing process which communicates the potential best of nature', the nineteenth-century critic John Ruskin emphasized fidelity to nature's 'infinite variety'.³⁹ Yet Wagner shows that 'aesthetics of anatomical realism' also provoked revulsion for some commentators, who insisted that bodily beauty consisted in the separation of outside from inside. Further, replicating organic bodies with too much precision was also sometimes attacked as a degradation of art, reducing it to a mere mechanical activity bereft of aesthetic judgement or feeling. Ruskin railed against mechanized imitation of nature as mindless, claiming that 'science deals exclusively with things as they are in themselves', while the arts were concerned with 'the appearance of things' and 'the natural impression which they produce upon living creatures'.⁴⁰ The anatomist might *know* a body by replicating its form precisely in wax or papier mâché, but, in Ruskin's terms, he did

³⁶ Elizabeth Stephens, 'Venus in the Archive: Anatomical Waxworks of the Pregnant Body', *Australian Feminist Studies*, 25 (2010), 133–45 (pp. 134–35).

³⁷ John Marshall, *Anatomy for Artists* (London: Smith, Elder, 1878), pp. 3–4.

³⁸ J. B. Bullen, *The Pre-Raphaelite Body: Fear and Desire in Painting, Poetry, and Criticism* (Oxford: Clarendon Press, 1998), p. 11.

³⁹ George P. Landow, *Aesthetic and Critical Theory of John Ruskin* (Princeton: Princeton University Press, 1971), p. 50; *The Works of John Ruskin*, ed. by E. T. Cook and Alexander Wedderburn, Library Edition, 39 vols (London: Allen; New York: Longmans, Green, 1903–12), III: *Modern Painters*, vol. 1 (1903), p. 145.

⁴⁰ *Works of Ruskin*, ed. by Cook and Wedderburn, XI: *The Stones of Venice vol. III and Examples of the Architecture of Venice* (1904), pp. 47, 48.

not *see* it. Such rhetoric in art criticism cohered with emerging discourses of objectivity which celebrated the supposed unartfulness of science, its imitations being systematic rather than intuitive (Daston and Galison, pp. 124–35).

The association between the replication of bodies and critical distance is also discernible in nineteenth-century theories of acting, which revolved around the replication of emotional expressions. The critic G. H. Lewes commented that the actor could only convincingly represent emotions which he had personally experienced: by calling these feelings to mind, he also produced their natural expressions. Yet, simultaneously, the actor was alienated from these bodily emotions, observing them with cool, intellectual detachment. As Lewes wrote, ‘he is a spectator of his own tumult; and though moved by it, can yet so master it as to select from it only those elements which best suit his purpose.’⁴¹ Lewes’s split between the actor’s artistic intellect and the partly involuntary expressions of the body highlights the ontological uncertainty of acting. The actor entrances audiences by being simultaneously himself and someone else, at once contrived and authentic.⁴²

The issue of authenticity was further complicated by audiences’ emotional reactions, which theorists also regarded as a kind of involuntary mimicry. Alexander Bain observed that ‘we are capable of entering into the situation of the actors, of becoming invested for the time with their mode of excitement’.⁴³ Edmund Burke and Charles Bell had suggested that imitating expressions of emotion aroused the associated emotions in the imitator.⁴⁴ Bain further suggested that there was in humans ‘a tendency to put on the very expression that we witness, and, in so doing, to assume the mental condition itself’ (pp. 173–74). This logic of mimetic spectatorship was woven through Darwin’s *Expression of the Emotions*, which cited anecdotes of audiences mirroring the gestures of performers through unconscious sympathy.⁴⁵ The text also repeatedly invited readers to copy the expressions described and depicted in photographs. As Tiffany Watt Smith comments, ‘*The Expression* works as a theatrical machine [...]. Darwin issues

⁴¹ George Henry Lewes, *On Actors and the Art of Acting* (London: Smith, Elder, 1875), pp. 102–03.

⁴² On the blurred lines between authenticity and theatricality in the period, see Lynn M. Voskuil, *Acting Naturally: Victorian Theatricality and Authenticity* (Charlottesville: University of Virginia Press, 2004).

⁴³ Alexander Bain, *The Emotions and the Will*, 2nd edn (London: Longmans, Green, 1865), p. 158.

⁴⁴ Burke, p. 124; Charles Bell, *The Anatomy and Philosophy of Expression* (London: Murray, 1844), pp. 198–99.

⁴⁵ See Tara MacDonald, ‘Bodily Sympathy, Affect, and Victorian Sensation Fiction’, in *A Feel for the Text: Affect Theory and Literary Critical Practice*, ed. by Stephen Ahern (Basingstoke: Palgrave Macmillan, forthcoming).

stage directions, tantalizing and explicit requests that his readers artificially reproduce emotions' (p. 77). Goodall notes that ideas of the human body being somehow primed to replicate emotions signalled by other bodies prefigures concepts in recent psychology of 'mirror neurons', by which people's brains echo the neural activity of others whom they observe. The irony of such affective mimicry was that the actors might feel less inwardly moved than the spectators (Bain, p. 175). The latter's mimetic emotions were, in a sense, more authentic than their sources, which could be calculated copies of others' outward movements. This paradox of emotional authenticity generated by contrived bodily imitation can be seen at work in Wilde's *Dorian Gray* when the protagonist falls in love with the actress Sibyl Vane. Dorian is bewitched by Sibyl's performances before she has experienced the womanly emotions she represents. Once she has returned his love, however, her efforts to depict it on stage fall flat in Dorian's eyes, causing him to revile her. While Sibyl views her acting as 'shadows' and 'but a reflection' of true feelings, Dorian is unmoved by her professions of love for him off the stage, regarding them as 'absurdly melodramatic'.⁴⁶ His response ironically confirms the claim of his hedonistic friend Lord Henry that acting is 'so much more real than life' (p. 67). Mimicry could unite bodies in sympathy but also alienate them from each other as performers' bodies became screens onto which spectators projected their solipsistic fantasies.

Mimicry as primitivism and progress

Another characteristic frequently associated with bodily imitation in the period was primitiveness. While recognizing its centrality to social life, Burke cautioned that, with only imitation to guide them, humans would 'remain as brutes do', uniform and unable to think for themselves (p. 30). In 1832, during the *Beagle* voyage, Darwin famously encountered native Fuegians and concluded that their savagery was characterized by their imitative abilities. He later wrote:

As often as we coughed or yawned, or made any odd motion, they immediately imitated us. [...] They could repeat with perfect correctness each word in any sentence we addressed them [...]. All savages appear to possess, to an uncommon degree, this power of mimicry.⁴⁷

⁴⁶ 'The Picture of Dorian Gray', in *The Complete Works of Oscar Wilde*, intr. by Merlin Holland, 5th edn (Glasgow: HarperCollins, 2003), pp. 17–159 (pp. 71, 73).

⁴⁷ Charles Darwin, *Journal of Researches*, 2nd edn (London: Murray, 1845), p. 206.

Through the century, mimicry's supposed primitiveness caused it to be similarly associated with animals, children, the mentally disabled, and women, all of which could be made to represent what Darwin referred to as 'the lower types of mankind'.⁴⁸ In demonstrations of mesmerism, the impotence of the mesmerized subject seemed to be shown by a strong, newfound tendency to mimicry.⁴⁹ As psychiatry developed, alienists argued that the primitiveness of mimicry was illustrated by its persistence after brain damage or disease stripped patients of speech and other mental faculties. Frederic Bateman related his observations of a 'human parrot' in an asylum who could only copy the words and movements of others.⁵⁰ John Stuart Mill echoed the association of mimicry with animality in his defence of personal liberty, declaring: 'He who lets the world, or his own portion of it, choose his plan of life for him, has no need of any other faculty than the ape-like one of imitation.'⁵¹ In this context, mimicry could be imagined as the antithesis of human reason: an automatic, bestial instinct.

These animalistic associations fitted with fears of working-class rebellion as commentators presented the lower orders as irrational imitators, easily swayed towards mass violence. Dugald Stewart wrote of 'the rapidity with which convulsive and hysterical disorders are propagated among a crowd' through 'sympathetic imitation'.⁵² Scholars have mapped the influence of such ideas of dangerous imitative contagion through such novels of urban life as Maria Edgeworth's *Harrington* (1817) and Elizabeth Gaskell's *Mary Barton* (1848).⁵³ The notion that imitation is a subversive force in social life permeates Henry Cockton's *The Life and Adventures of Valentine Vox, the Ventriloquist* (1839–40), which is discussed in Christopher Pittard's contribution. The mischievous Valentine disrupts public events by mimicking voices, throwing the crowds into confusion and panic. Pittard argues that the novel frames ventriloquism as an anarchic, primitive activity which Valentine must ultimately renounce as he matures. Further, Valentine's deliberate mimicries are triggers to the unconscious emotional contagion of the crowd, which quickly acquires a momentum of its own. As

⁴⁸ Charles Darwin, *The Descent of Man*, 2 vols (London: Murray, 1871), 1, 121.

⁴⁹ Amy Lehman, *Victorian Women and the Theatre of Trance: Mediums, Spiritualists and Mesmerists in Performance* (Jefferson, NC: McFarland, 2009), p. 43.

⁵⁰ Frederic Bateman, *On Aphasia: The Localisation of the Faculty of Articulate Language* (London: Churchill, 1870), p. 111.

⁵¹ John Stuart Mill, *On Liberty* (London: Parker, 1859), p. 106.

⁵² *The Works of Dugald Stewart*, 7 vols (Cambridge, MA: Hilliard and Brown, 1829), III: *Elements of the Philosophy of the Human Mind (cont.)*, 145, 136. See Mary Fairclough, *The Romantic Crowd: Sympathy, Controversy and Print Culture* (Cambridge: Cambridge University Press, 2013), pp. 125–66.

⁵³ See John Plotz, *The Crowd: British Literature and Public Politics* (Berkeley: University of California Press, 2000), pp. 43–66; Jill L. Matus, 'Mary Barton and North and South', in *The Cambridge Companion to Elizabeth Gaskell*, ed. by Jill L. Matus (Cambridge: Cambridge University Press, 2007), pp. 27–45 (pp. 31–32).

Pittard writes, once Valentine has raised an alarm, ‘the terrorized bodies of the crowd start replicating each other, at which point the [vocal] terrorist is no longer required.’ Such representations prefigured the views of later social theorists such as Gabriel Tarde and Gustave Le Bon. Tarde described the violent mob as ‘a spontaneous generation’ with its own mindless momentum: ‘Thousands of men crowded together soon form but a single animal, a wild beast without a name, which marches to its goal with an irresistible finality.’⁵⁴ Le Bon similarly claimed that the masses were liable to copy radical individuals: ‘It is not with arguments but with models that crowds are guided. In every age, there is a small number of individualities which transmit their actions and are imitated by the unconscious mass.’⁵⁵

Yet the view of mimicry as an animalistic instinct, opposed to reason, was undermined through the century as psychologists increasingly discussed it as an essential element of learning. Bain claimed that ‘by a process of observation and induction, every child comes to know the meaning of a smile or a frown, of tones soft and mild, or harsh and hurried’ (p. 173). By imitating other bodies, he suggested, humans became more than bodies, regarding bodily movements and attitudes as potential symbols with diverse significations. Seemingly mindless imitation might lay the basis of mental association and ideas. Speculations on the origin of language frequently focused upon imitation, with philologists such as Frederic William Farrar positing that speech began with mimicry of natural sounds.⁵⁶ While the anti-evolutionist Friedrich Max Müller mocked such ‘bow-wow’ theories of language origins, Darwin viewed them as a useful model for imagining the transition from animal signals to human symbols.⁵⁷ ‘It does not appear altogether incredible’, Darwin wrote,

that some unusually wise ape-like animal should have imitated the growl of a beast of prey, so as to indicate to his

⁵⁴ Gabriel Tarde, *Penal Philosophy*, trans. by Rapelje Howell (Boston, MA: Little, Brown, 1912), p. 323.

⁵⁵ ‘Ce n’est pas avec des arguments, mais avec des modèles, qu’on guide les foules. À chaque époque, il y a un petit nombre d’individualités qui impriment leur action et que la masse inconsciente imite’ (my translation); Gustave Le Bon, *L’Homme et les sociétés*, 2 vols (Paris: Place, 1988), II, 116–17.

⁵⁶ Frederic William Farrar, *On the Origin of Language* (London: Murray, 1860), p. 75. On the cultural history of ideas of language evolution, see Christine Ferguson, *Language, Science and Popular Fiction in the Victorian Fin-de-Siècle: The Brutal Tongue* (Aldershot: Ashgate, 2006); Gregory Radick, *The Simian Tongue: The Long Debate about Animal Language* (Chicago: University of Chicago Press, 2007); Will Abberley, *English Fiction and the Evolution of Language, 1850–1914*, Cambridge Studies in Nineteenth-Century Literature and Culture, 101 (Cambridge: Cambridge University Press, 2015).

⁵⁷ Friedrich Max Müller, *Lectures on the Science of Language*, 3rd edn (London: Longmans, Green, 1862), p. 365.

fellow-monkeys the nature of the expected danger. And this would have been a first step in the formation of a language. (*Descent of Man*, I, 57)

In the 1890s, Baldwin went further, arguing that imitation was ‘the physical basis of memory. A memory is a copy for imitation taken over from the world into consciousness.’ In Baldwin’s view, the mental categories through which people made sense of the world were merely organized ‘copies’ of sensory images. Human subjectivity and identity thus dissolved into tissues of imitation, as Baldwin explained: ‘Volition arises when a copy remembered vibrates with other copies remembered or presented, and when all the connexions, in thought and action, of all of them are together set in motion incipiently.’⁵⁸ Such psychological theory found a literary echo in Wilde’s epigram: ‘Most people are other people. Their thoughts are someone else’s opinions, their lives a mimicry, their passions a quotation.’⁵⁹ Traditional notions of metaphysical mind or soul were being undercut by a materialist psychology which depicted these concepts as illusions conjured by bodies echoing each other.

The idea that humans were replicating machines energized popular comparisons of their activities to technologies which seemed to reproduce human presences, such as photography and sound recording. Tarde presented humans as animate cameras, describing imitation as ‘the quasi-photographic reproduction of a cerebral image upon the sensitive plate of another brain’ (*Laws of Imitation*, p. xiv). Anne Stiles has shown that late-Victorian detective fiction frequently depicted the brain as a recording-reproduction device, with characters’ ‘photographic’ or phonographic memories supplying crucial clues to solving mysteries.⁶⁰ At the turn of the century, the French philosopher Henri Bergson proposed that humour derived from mechanical repetition in human behaviour. Indeed, Bergson argued that humans’ ludicrousness derived from their imitability: a person could only be mimicked, and so mocked, he claimed, when they resembled a predictable machine instead of a ‘living personality’.⁶¹ Yet perhaps every personality could appear mechanistic and repetitive when considered as a social unit. Musing on the unoriginality of most public discourse, H. G. Wells remarked:

⁵⁸ J. Mark Baldwin, ‘Imitation: A Chapter in the Natural History of Consciousness’, *Mind*, n.s., 3 (1894), 26–55 (pp. 30, 35).

⁵⁹ ‘De Profundis’, in *Complete Works of Oscar Wilde*, pp. 980–1059 (p. 1030).

⁶⁰ Anne Stiles, *Popular Fiction and Brain Science in the Late Nineteenth Century*, Cambridge Studies in Nineteenth-Century Literature and Culture, 78 (Cambridge: Cambridge University Press, 2012), pp. 85–118.

⁶¹ Henri Bergson, *Laughter: An Essay on the Meaning of the Comic*, trans. by Cloudesley Brereton and Fred Rothwell (New York: Macmillan, 1914), p. 33.

There is something of the phonograph in all of us, but in the sort of eminent person who makes public speeches about education and reading, and who gives away prizes and opens educational institutions, there seems to be little else but gramophone. [...] Gramophones thinly disguised as bishops, gramophones still more thinly disguised as eminent statesmen, gramophones K.C.B. and gramophones F.R.S. have brazened it at us time after time.⁶²

In another essay, Wells similarly complains about the social conventions which compel people to engage in repetitive small talk. He suggests that this ‘social law of gabble’ could be satisfied at dinner gatherings by each diner placing a phonograph ‘under his chin’ to do the gabbling for him.⁶³ Instead of representing an authentic origin for mechanical replications, the human body becomes yet another replicating machine.

Such mechanical coldness was countered by other views of bodily imitation as the basis of fellow feeling and morality. Bain claimed that mimicry formed ‘the real source [...] of our generous, humane, and social sentiments’ (p. 179). Interestingly, he suggested that the unconscious part of imitation rendered it morally superior to conscious moral calculations, since the latter usually involved elements of self-interest while the former was wholly selfless. ‘The outburst of pure sympathy’, Bain wrote, led one ‘to sacrifice or give up a portion of one’s own personality or happiness, without a thought of reciprocity or reward’ (p. 180). This idea of partly renouncing one’s personality and entering into another’s was fundamental to the later concept of empathy, coined by the psychologist Edward Titchener in 1909.⁶⁴ The word was a translation of the German *Einfühlung*, which meant ‘feeling one’s self into the place’ of someone or something, a concept which Vernon Lee adopted to theorize aesthetic experience.⁶⁵ Lee argued that the perception of beauty or ugliness in objects involved the spectator unconsciously mimicking them, and these bodily movements triggered positive or negative emotions. In this way, the ‘subjective’ action of bodily mimicry could be imagined as undergirding ‘objective’ mental life.⁶⁶ Similarly, at the turn of the century, intellectuals increasingly celebrated imitation as a healthy and necessary part of social life. Tarde defined ‘society’ as ‘a group

⁶² H. G. Wells, *An Englishman Looks at the World* (London: Cassell, 1914), p. 240.

⁶³ H. G. Wells, *Certain Personal Matters: A Collection of Material Mainly Autobiographical* (London: Lawrence & Bullen, 1898), p. 36.

⁶⁴ Edward Bradford Titchener, *Lectures on the Experimental Psychology of the Thought-Processes* (New York: Macmillan, 1909), pp. 21–22, 91, 185.

⁶⁵ See Carolyn Burdett, “‘The subjective inside us can turn into the objective outside’: Vernon Lee’s Psychological Aesthetics”, *19: Interdisciplinary Studies in the Long Nineteenth Century*, 12 (2011) <<http://doi.org/10.16995/ntn.610>>.

⁶⁶ Vernon Lee and Clementina Anstruther-Thomson, *Beauty and Ugliness and Other Studies in Psychological Aesthetics* (London: John Lane, 1912), p. 239; Burdett, p. 2.

of beings who are apt to imitate one another' (*Laws of Imitation*, p. 68). The American philosopher Josiah Royce argued that humans were only able to share mental concepts and understand each other's points of view through imitation: 'If you laugh, I know what you mean just in so far as, under similar circumstances, I can join with you and laugh heartily also [...]. What I cannot interpret by imitation, I cannot definitely realize as another man's experience.'⁶⁷ Instead of representing the bestial or savage, mimicry could be associated with sensibility and openness: the glue of civilization. Susan Glenn notes that these intellectual discussions were mirrored in turn-of-the-century popular culture via a craze for mimetic performances on the vaudeville stage which celebrated a multiform, labile sense of self.⁶⁸ Mimicry could be celebrated as a vehicle of sympathy and imagination.

Despite the rhetoric which associated mimicry with primitiveness, the capacity of the disempowered to mimic their oppressors could also undermine such hierarchized identities. Nineteenth-century colonialism was sometimes rationalized through a rhetoric of bodily replication, such as in Thomas Babington Macaulay's call for the creation of 'a class of persons Indian in blood and colour, but English in tastes, in opinions, in morals and in intellect'.⁶⁹ Macaulay's image of Indian civil servants of the British Empire exemplifies the paradox of the mimetic colonial subject described by Homi Bhabha as 'almost the same, but not quite' as his colonial master. While Macaulay seems to downplay the importance of racial differences, suggesting that Indians might become 'English' in character, his continued recognition of their 'blood and colour' points to the impossibility of ever fully escaping a subordinate position as the colonized. However, Bhabha notes that such mimicry also destabilized colonial power by accentuating the performative and non-essential nature of identity.⁷⁰ Tiziana Morosetti touches upon this ambiguity in her article on efforts to replicate the 'exotic' body on the nineteenth-century British stage. Like ethnological shows and exhibitions which attracted large crowds through the century, theatre

⁶⁷ Josiah Royce, *Studies of Good and Evil: A Series of Essays upon Problems of Philosophy and of Life* (New York: Appleton, 1898), pp. 219–20.

⁶⁸ Susan A. Glenn, "'Give an Imitation of Me": Vaudeville Mimics and the Play of the Self', *American Quarterly*, 50 (1998), 47–76 (pp. 60–69).

⁶⁹ Thomas Babington Macaulay, 'Minute on Indian Education', excerpt in *The Post-Colonial Studies Reader*, ed. by Bill Ashcroft, Gareth Griffiths, and Helen Tiffin (London: Routledge, 2002), pp. 428–30 (p. 430).

⁷⁰ Homi K. Bhabha, *The Location of Culture* (London: Routledge, 1994), pp. 122, 89. On indigenous 'copying' of colonizers, see also, Michael Taussig, *Mimesis and Alterity: A Particular History of the Senses* (New York: Routledge, 1993), pp. 13–17. Luce Irigaray similarly argued that women had been historically forced into 'mimicry' due to male dominance of discourse, yet such female mimicry could also be subversive, challenging the supposed naturalness of gender identities: see Luce Irigaray, *This Sex Which Is Not One*, trans. by Catherine Porter and Carolyn Burke (Ithaca: Cornell University Press, 1985), p. 76.

sought to reproduce the world (and growing British Empire) in miniature by displaying varieties of racialized bodies. Yet, as Marty Gould has shown, imperialist theatre also reflected anxieties about the potential erosion of differences between colonizer and colonized, such as in the figure of the English emigrant ‘gone native’.⁷¹ Morosetti designates theatrical replications of the exotic body ‘simulacra’, since they combined efforts to reproduce accurately the details of different peoples (such as Zulu assegais, shields, and vocalizations) while also deploying stylized conventions of the exotic. Aside from non-white performers and whites made up to look exotic, Morosetti suggests that bodies were also exoticized indirectly by decorative background features. She thus argues that the replication of stock exotic objects and imagery could sometimes highlight ‘the fictionality of the exotic body’. Behind the illusion of theatre replicating the peoples of the world on stage lay the suggestion that it was only replicating visual clichés. Supposed mimetic resemblance merged into arbitrary signification and endless chains of reference.

This last point underlines how mimicry and bodily replication in the nineteenth century occurred not only in material contexts but also semiotic ones, which problematized the dichotomy of copy and original. Anatomical models, images, and stuffed specimens not only replicated specific organic bodies but also constructed typical standards against which those bodies could be judged. Even though their makers often sought faithfully to copy examples from nature, such objects inevitably acquired an ideality through their privileged position as representatives of species and varieties of human life. Their value was relational rather than individual, serving to illustrate wider systems of organic difference.⁷² Representing organic bodies meant not merely replicating them physically but also ordering and making sense of them, turning them into icons of ideal types. The infinite variety of nature, so celebrated by Romantic philosophers and poets, precluded artificial mimicry of it. Instead, as Ruskin argued, art (and, by extension, all representation) could only depict phenomenal experiences of nature (III, 104). Nature’s resistance to mimicry was further underlined by evolutionary theory, which replaced the model of fixed essences and types with constant change. On the grand, Darwinian scale, bodies dissolved into fleeting spectres: only the abstract processes of change, imaged in Darwin’s diagram of species branching out from a common source, could be regarded as real.⁷³ Hence, while art and popular culture strove to replicate

⁷¹ Marty Gould, *Nineteenth-Century Theatre and the Imperial Encounter*, Routledge Advances in Theatre and Performance Studies, 18 (New York: Routledge, 2011), pp. 114–38.

⁷² Thomas Thiemeyer, ‘Work, Specimen, Witness: How Different Perspectives on Museum Objects Alter the Way They Are Perceived and the Values Attributed to Them’, *Museum and Society*, 13 (2015), 396–412 (pp. 402–03).

⁷³ James Krasner, *The Entangled Eye: Visual Perception and the Representation of Nature in Post-Darwinian Narrative* (Oxford: Oxford University Press, 1992), pp. 5–7.

phenomenal bodies, such as in dramatic museum dioramas, professional scientific representations of bodies became increasingly schematic and omisive, such as in Towne's isolated body parts.⁷⁴ Specimens and models of organic bodies seemed less copies of solid realities than symbols of nature's laws. Similarly, the variety of human expression and experience problematized mimicry as a bodily behaviour. Discussing the art of acting, Lewes argued that actors could not simply replicate authentic emotional expressions because feelings were expressed differently by different people. Further, he claimed, the extraordinary nature of dramatic narrative meant that the emotions involved and, hence, their expressions, were not common to everyday life. The actor's expressions were thus 'symbolical', evoking 'ideal' images generally associated with particular emotions (Lewes, p. 99). What seemed like iconic mimesis might in fact be arbitrary convention.

The articles in this issue draw out the complications which lay behind the superficially straightforward concept of mimicry in nineteenth-century culture. Initially, mimicry seems to imply clear boundaries between self and other, original and copy. Anatomical models and images and stuffed specimens implicitly refer to 'real' organic bodies while mimicry as an embodied behaviour implies the existence of authentic identities which are being counterfeited. Yet post-structuralist critique long ago shattered faith in stable, essential identities outside of the circuits of cultural construction and symbolic reference. In this context, Michael Taussig argued that 'the mimetic faculty' functions to help humans forget their alienated position, 'suturing nature to artifice [...], granting the copy the character and power of the original, the representation the power of the represented' (p. xviii). Mimicry troubles the boundaries between sameness and otherness, original and copy, even as it seems to reinforce them by being 'almost the same but not quite'. Bhabha wrote that mimicry 'alienates' identity 'from essence', revealing it as a dynamic interplay between parties instead of an isolated singularity (p. 122). Such non-essentialist, relational views of mimicry cohere with the recent 'material turn' in nineteenth-century studies which focuses on embodied human experience and how physical objects 'become recognizable, representable and exchangeable to begin with'.⁷⁵

⁷⁴ See also Ann Shelby Blum's argument that, through the century, zoological illustration shifted from realism to schematization, in *Picturing Nature: American Nineteenth-Century Zoological Illustration* (Princeton: Princeton University Press, 1993), pp. 3–4.

⁷⁵ Bill Brown, *A Sense of Things: The Object Matter of American Literature* (Chicago: University of Chicago Press, 2003), p. 4. See also, Lyn Pykett, 'The Material Turn in Victorian Studies', *Literature Compass*, 1 (2004), 1–5; Elaine Freedgood, *The Ideas in Things: Fugitive Meaning in the Victorian Novel* (Chicago: University of Chicago Press, 2006); Nicholas Dames, *The Physiology of the Novel: Reading, Neural Science, and the Form of Victorian Fiction* (Oxford: Oxford University Press, 2007); William A. Cohen, *Embodied: Victorian Literature and the Senses* (Minneapolis: University of Minnesota Press, 2008); *Women and Things, 1750–1950: Gendered Material Strategies*, ed. by Maureen Daly Goggin and Beth Fowkes Tobin (London: Routledge, 2009); *Bodies and Things in Nineteenth-Century Literature and Culture*, ed. by Katharina Boehm (Basingstoke: Palgrave Macmillan, 2012).

This approach frames objects and bodies as ‘things’, cultural constructs which derive their meanings from their relations to each other in networks. Similarly, as we conceptualize human and animal bodies through models, images, and preserved specimens of them, we develop identity by mimicking others and being mimicked. In this sense, mimicry can be understood as a form of thing-generation, making possible concepts of objecthood and subjecthood, self and other. Such theory was prefigured in nineteenth-century psychological models of mimicry which tended to dissolve human personalities into imitative composites that echoed each other in an infinite loop. Artificial replications of organic bodies also pointed to tensions in the concept of mimesis (in the sense of representation) which theorists are still grappling with in the twenty-first century. From the displaced voices of ventriloquism and exotic bodies of Victorian theatre to the familiar strangeness of taxidermic and anatomical models and the psychological doubling of Gothic spectres, this issue of *19* shows that bodily replication served as a versatile trope in the nineteenth century for thinking about identity, difference, authenticity, science, and art.

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