

## Notes

### Chapter 1. Introduction: Enlightenment Mock Arts and Industrial Enlightenment

- 1 On Industrial Enlightenment see Joel Mokyr, *The Enlightened Economy: An Economic History of Britain 1700–1850* (Yale University Press, 2009), pp. 40–62, and Peter Jones, *Industrial Enlightenment: Science, Technology and Culture in Birmingham and the West Midlands, 1760–1820* (Manchester University Press, 2017), pp. 70–109; on its significance see, most insistently, Deirdre N. McCloskey, *Bourgeois Dignity: Why Economics Can't Explain the Modern World* (University of Chicago Press, 2022), esp. pp. 48–60.
- 2 Nancy Armstrong, *Desire and Domestic Fiction: A Political History of the Novel* (Oxford University Press, 1987), pp. 59–103; Michael McKeon, *The Secret History of Domesticity: Public, Private, and the Division of Knowledge* (Johns Hopkins University Press, 2005), pp. 627–691.
- 3 Charles Taylor, *Sources of the Self: The Making of the Modern Identity* (Cambridge University Press, 1989), pp. 159–174, 248–265; Dror Wahrman, *The Making of the Modern Self: Identity and Culture in Eighteenth-Century England* (Yale University Press, 2004), pp. 265–311.
- 4 Raymond Williams, *The Country and the City* (1973; London: Vintage, 2016), pp. 172–182, and, for example, Marjorie Levinson, *Wordsworth's Great Period Poems: Four Essays* (Cambridge University Press, 1986), pp. 14–57.
- 5 Richard Yeo, *Encyclopaedic Visions: Scientific Dictionaries and Enlightenment Culture* (Cambridge University Press, 2001), pp. 12–18, 22–32; Chad Wellmon, *Organizing Enlightenment: Information Overload and the Invention of the Modern Research University* (Johns Hopkins University Press, 2015), pp. 77–107; Ritchie Robertson, *The Enlightenment: The Pursuit of Happiness, 1680–1790* (London: Penguin, 2020), pp. 220–221; on useful knowledge see David Philip Miller, 'The Usefulness of Natural Philosophy: The Royal Society and the Culture of Practical Utility in the Later Eighteenth Century', *British Journal for the History of Science* 32 (1999): 185–201; Joel Mokyr, *The Gifts of Athena: Historical Origins of the Knowledge Economy*

- (Princeton University Press, 2002); cf. Maxine Berg, 'The Genesis of Useful Knowledge', *History of Science* 45 (2007): 123–133, introducing a special issue on Mokyr's paradigm; for international perspectives see Dagmar Schafer and Simona Valeriani, 'Technology Is Global: The Useful and Reliable Knowledge Debate' (introduction to special issue), *Technology and Culture* 62 (2021): 327–347.
- 6 As such they could be classed as a species of Menippean satire; see Leah Kronenberg, *Allegories of Farming from Greece and Rome: Philosophical Satire in Xenophon, Varro, and Virgil* (Cambridge University Press, 2009), p. 33, on Menippean satire as 'a genre whose core focus might be called the parody of didacticism'.
  - 7 For general discussion see Paddy Bullard, 'The Scriblerian Mock-Arts: Pseudo-technical Satire in Swift and His Contemporaries', *Studies in Philology* 110 (2013): 611–636; see also Clare Brant, 'Artless and Artful: John Gay's *Trivia*', in *Walking the Streets of Eighteenth-Century London: John Gay's Trivia (1716)*, ed. Clare Brant and Susan E. Whyman (Oxford University Press, 2007), pp. 105–119; cf. Henry Power, 'Virgil, Horace, and Gay's Art of Walking the Streets', *Cambridge Quarterly* 38 (2009): 338–367, at 339 and 342–343.
  - 8 For the early-modern and seventeenth-century roots of this trend see Pamela O. Long, *Openness, Secrecy, Authorship: Technical Arts and the Culture of Knowledge from Antiquity to the Renaissance* (Johns Hopkins University Press, 2001), pp. 244–250, and Natasha Glaisyer, *The Culture of Commerce in England, 1660–1720* (Woodbridge: Royal Historical Society/Boydell Press, 2006), pp. 16–17.
  - 9 Joseph Addison, 'An Essay on the Georgics', in Dryden, *Works*, vol. 5, pp. 145–153, at 147–148.
  - 10 This is well expressed by Courtney Weiss Smith, *Empiricist Devotions: Science, Religion and Poetry in Early Eighteenth-Century England* (University of Virginia Press, 2016), p. 185.
  - 11 For national patterns and global perspectives see the essays in Jeff Horn, Leonard Rosenband and Merritt Smith, eds., *Reconceptualizing the Industrial Revolution* (MIT Press, 2010); for a classic statement see Marshall G. S. Hodgson, *Rethinking World History: Essays on Europe, Islam, and World History* (Cambridge University Press, 1993), pp. 44–71.
  - 12 For a survey of the debate see Angus Maddison, *Contours of the World Economy, 1–2030 AD: Essays in Macro-Economic History* (Oxford University Press, 2007), pp. 308–316; for a critique of British and European exceptionalism see Jack A. Goldstone, 'Efflorescences and Economic Growth in World History: Rethinking the "Rise of the West" and the Industrial Revolution', *Journal of World History* 13 (2002): 323–389; for global comparison, Ian Inkster, 'Discoveries, Inventions and Industrial Revolutions: On the Varying Contributions of Technologies and Institutions from an International Historical Perspective', *History of Technology* 18 (1996): 39–58.

- 13 T. S. Ashton, *The Industrial Revolution, 1760–1830* (Oxford University Press, 1948), p. 48; see for example Samuel Smiles, *Selections from Lives of the Engineers*, ed. Thomas Parke Hughes (MIT Press, 1966); for the drawbacks of historical focus on innovation and the importance of technology-in-use, David Edgerton, 'From Innovation to Use: Ten (Eclectic) Theses on the History of Technology', *History and Technology* 16 (2004): 111–126.
- 14 For a summary see Robert C. Allen, *The British Industrial Revolution in Global Perspective* (Cambridge University Press, 2009), pp. 1–22, 238–270; for a counter-response see Margaret C. Jacob, *The First Knowledge Economy: Human Capital and the European Economy, 1750–1850* (Cambridge University Press, 2014).
- 15 On the 'ideological' background to Britain's technological advantage see Mokyr, *Enlightened Economy*, pp. 30–39; on its 'cultural packaging' see Margaret Jacob, *Scientific Culture and the Making of the Industrial West* (Oxford University Press, 1997), pp. 99–116; on the diffusion of hard scientific knowledge see Larry Stewart, *The Rise of Public Science: Rhetoric, Technology, and Natural Philosophy in Newtonian Britain, 1660–1750* (Cambridge University Press, 1992); an important adjustment of Jacob's argument about the effectiveness of artisanal knowledge is Cormac Ó Gráda, 'Did Science Cause the Industrial Revolution?', *Journal of Economic Literature* 54 (2016): 22–239.
- 16 Maxine Berg, *The Age of Manufactures, 1700–1820: Industry, Innovation, and Work in Britain*, 2nd ed. (London: Routledge, 1994), p. 257; for artisans translating Enlightenment thinking into practice across national borders see Ursula Klein, 'Artisanal-Scientific Experts in Eighteenth-century France and Germany', *Annals of Science* 69 (2012): 303–306; Lauren R. Cannady and Jennifer Ferng, *Crafting Enlightenment: Artisanal Histories and Transnational Networks* (Oxford: Voltaire Foundation, 2021).
- 17 For the broader history of this conjunction see essays collected by Lissa Roberts, Simon Schaffer and Peter Dear, ed., in *The Mindful Hand: Inquiry and Invention from the Late Renaissance to Early Industrialization* (Amsterdam: Koninklijke Nederlandse Akademie van Wetenschappen, 2007); for the Enlightenment as an event in the history of mediation see essays in Clifford Siskin and William Warner, eds., *This Is Enlightenment* (University of Chicago Press, 2010); Mokyr aside, the paradigm of an artisan's Enlightenment has been most thoroughly explored in French context: Paolo Bertucci, *Artisanal Enlightenment: Science and the Mechanical Arts in Old Regime France* (Yale University Press, 2017); Liliane Hilaire-Pérez, 'The Codification of Techniques: Between Bureaucracy and the Markets in Early Modern Europe from a Global Perspective', *Technology and Culture* 62 (2021): 442–466.
- 18 For the mechanisms of informal knowledge transmission in systems such as trades guilds or apprenticeship organisations see Stephan R. Epstein, 'Craft Guilds, Apprenticeship, and Technological Change in Preindustrial Europe', *Journal of Economic History* 58 (1998): 684–713; Patrick Wallis,

- 'Apprenticeship in England', in *Apprenticeship in Early Modern Europe*, ed. Maarten Prak and Patrick Wallis (Cambridge University Press, 2019): 247–281.
- 19 The literary arts of the industrial revolution have received less attention than the graphic arts, although Celina Fox in *The Arts of Industry in the Age of Enlightenment* (Yale University Press, 2009), p. 8, makes room for 'specialized treatises and general encyclopaedias' in her important study.
  - 20 Important investigations include John Bender, 'Novel Knowledge: Judgment, Experience, Experiment', in *This is Enlightenment*, ed. Siskin and Warner, pp. 284–300; Rudolf Beck, 'From Industrial Georgic to Industrial Sublime: English Poetry and the Early Stages of the Industrial Revolution', *British Journal for Eighteenth-Century Studies* 27 (2004): 17–36; and Joseph Drury, *Novel Machines: Technology and Narrative Form in Enlightenment Britain* (Oxford University Press, 2017), especially pp. 25–48 on the novel as 'technical invention'; on further convergences between literature and technology see the essays in Kristin M. Gerten and Aaron R. Hanlon, eds., *British Literature and Technology, 1600–1830* (Bucknell University Press, 2023).
  - 21 Following eighteenth-century usage, in this book the term 'mechanic' (as in 'mechanical knowledge' or 'mechanical art') refers primarily to actions and aptitudes associated with 'mechanics' (e.g., Johnson, *Dictionary*, vol. 2, 'MECHA'NICK*n.f.*: 'A manufacturer; a low workman'); this primary personal sense tended to be complicated, however, with scientific usages (Johnson, *Dictionary*, 'MECHA'NICAL*adj.*: 'Constructed by the laws of mechanicks', as it was in Sir Isaac Newton's famous pun: 'The main Business of Natural Philosophy is to argue from Phaenomena without feigning Hypotheses [by which] we come to the very first Cause, which certainly is not mechanical', *Opticks* (1704; second edition, 1718), p. 344.
  - 22 David Hume 'Of Refinement in the Arts', in *Essays Moral Political and Literary*, ed. Eugene F. Miller (Indianapolis: Liberty Fund, 1985), pp. 268–280, at 270–271.
  - 23 Cf. Malachy Postlethwayt, *The Universal Dictionary of Trade and Commerce, Translated from the French of the Celebrated Monsieur Savary*, 2 vols. (1774), vol. 1, p. vi: 'When trade and industry administered wealth and honour, then was encouragement given to letters: in return for which, learning and science have contributed to the general advancement of trade and commerce' – the latter depending in turn on 'the daily improvements made by our artificers'; cf. vol. 1, pp. 116–118, 'Artificers'.
  - 24 On the Aristotelian foundation of the theory–praxis distinction see Joseph Dunne, *Back to the Rough Ground: Practical Judgment and the Lure of Technique* (University of Notre Dame Press, 1993), pp. 244–245; Aristotle, *Nicomachean Ethics*, tr. H. Rackham (Harvard University Press, 1926), pp. 330–345 (1139b–1141a); Long, *Openness*, pp. 12–24.
  - 25 Adam Ferguson, *An Essay on the History of Civil Society*, ed. Fania Oz-Salzberger (Cambridge University Press, 1995), p. 164, my emphasis.

- 26 William Lewis, *Proposals for Printing, by Subscription, Commercium Philosophico-technicum: or the Philosophical Commerce of Arts* (1748), p. 6; Lewis argued in the *Commercium Philosophico-technicum* (1763) itself that it is ‘only by bringing the arts as it were to approach one another that we can make advances towards perfections’, p. xiii.
- 27 For the study of disciplinarity since Foucault see Jan Golinsky, *Making Natural Knowledge: Constructivism and the History of Science* (1998; University of Chicago Press, 2005), pp. 66–78; for the historical separation of the fine arts from an older technical system that included mechanical processes see Lawrence Lipking, *The Ordering of the Art in Eighteenth-Century England* (Princeton University Press, 1970), with literary writing discussed on pp. 327ff.; Paul Oskar Kristeller, *Renaissance Thought II: Papers on Humanism and the Arts* (New York: Harper Torchbooks, 1965), pp. 163–227; McKeon, *Secret History of Domesticity*, summary on pp. 323–327; for a reconsideration see essays collected by Luisa Calè and Adriana Craciun in the special issue ‘The Disorder of Things’, *Eighteenth-Century Studies* 45 (2011): 1–13 and following.
- 28 Jenny Uglow, *The Lunar Men: The Friends Who Made the Future, 1730–1810* (London: Faber, 2002), p. xviii.
- 29 For caveats about the historiography of expertise see Eric H. Ash, ‘By Any Other Name: Early Modern Expertise and the Problem of Anachronism’, *History and Technology* 35 (2019): 3–30; by putting personal knowledge at the heart of historical constructions of expertise I follow the ‘SEE’ methodology developed by Harry Collins in, for example, ‘Studies of Expertise and Experience’, *Topoi* 37 (2018): 67–77.
- 30 This feedback places the texts considered in this book within the realm of ‘technography’, as discussed by Sean Pryor and David Trotter in the ‘Introduction’ to their edited collection *Writing, Medium, Machine: Modern Technographies* (London: Open Humanities Press, 2016), pp. 7–17; in this study I am cautious about the dangers of imposing a twenty-first-century fascination with machines and devices onto early-modern thinking about human technique, notwithstanding much-discussed increases in the significance of mechanical tools for that discourse.
- 31 For differences between invention, innovation and adaptive use see Lissa Roberts, ‘Introduction’, and Ian Inkster, ‘Thoughtful Doing and Early-Modern Oeconomy’, both in Roberts, Schaffer and Dear, eds., *Mindful Hand*, pp. 1–10, 443–451; Edgerton, ‘Innovation to Use’, 114–115, 125–126.
- 32 B. Zorina Khan, *Inventing Ideas: Patents, Prizes, and the Knowledge Economy* (Oxford University Press, 2020), pp. 94–142, examines data from the Society for the Encouragement of Arts and finds that this leading learned society had no discernible impact on technological innovation; Cormac O Grada, in ‘Did Science Cause the Industrial Revolution?’, *Journal of Economic Literature* 54 (2016): 224–239, concludes likewise that while such societies lent scientific knowledge respectability, their role in spreading it was limited.

- 33 See Roger D. Lund, 'Wit, Judgment, and the Misprisions of Similitude', *Journal of the History of Ideas* 65 (2001): 53–54; Alexander Marr et al., ed., *Logodaedalus: Word Histories of Ingenuity in Early Modern Europe* (University of Pittsburg Press, 2018), pp. 193–233, on 'Genius', 'Ingenuity', 'Wit' and 'Cunning' in dictionaries.
- 34 *Letters Written by Philip Dormer Stanhope, Earl of Chesterfield, to his Son, Philip Stanhope, Esq.*, 4 vols. (1774), vol. 1, pp. 474–478 (Letter CLXVI, 17 October 1749), at 476. Thanks to Marcus Walsh for the reference.
- 35 For the 'passerelles' between progressive elites, natural philosophers and mechanics in France and England see Liliane Hilaire-Pérez, *L'invention technique au siècle des Lumières* (Paris: Albin Michel, 2000), pp. 72, 195; cf. Mokyr, *Enlightened Economy*, p. 89.
- 36 Hartlib's encyclopaedic registers kept at an 'Office of Address' were elaborated by William Petty, who projected the employment of research officers charged with 'perusing al Books and taking notice of all Mechanicall Inventions', *Advice of W. P. to Mr. Samuel Hartlib* (1648), p. 3; see Walter E. Houghton, Jr., 'The History of Trades: Its Relation to Seventeenth-Century Thought: As Seen in Bacon, Petty, Evelyn, and Boyle', *Journal of the History of Ideas* 2 (1941): 33–60; Richard Foster Jones, *Ancients and Moderns: A Study of the Rise of the Scientific Movement in Seventeenth-Century England*, 2nd ed. (Washington University Press, 1961), pp. 155–158; Michael Hunter, *Science and Society in Restoration England* (Cambridge University Press, 1981), pp. 87–112, on 'utility and its problems'; for a literary perspective, Joanna Picciotto, *Labors of Innocence in Early Modern England* (Harvard University Press, 2010), pp. 178–187.
- 37 On wages see L. D. Schwartz, 'The Standard of Living in the Long Run: London, 1700–1860', *Economic History Review* 38 (1985): 4–41, and Allen, *British Industrial Revolution*, pp. 25–57; on agricultural institutions, Mark Overton, *The Agricultural Revolution: The Transformation of the Agrarian Economy: 1500–1850* (Cambridge University Press, 1996), pp. 3–4, 133–92, 206; on energy, Paolo Malanima, 'Energy Crisis and Growth, 1650–1850: The European Deviation in a Comparative Perspective', *Journal of Global History* 1 (2006): 101–121; on skills, John R. Harris, 'Skills, Coal and British Industry in the Eighteenth Century', *History* 61 (1976): 167–182, and skills as transferred through apprenticeship, Jane Humphries, *Childhood and Child Labour in the British Industrial Revolution* (Cambridge University Press, 2010), pp. 256–305; on empire, David Ormrod, *The Rise of Commercial Empires: England and the Netherlands in the Age of Mercantilism, 1650–1770* (Cambridge University Press, 2003), pp. 334–350; on constitutional changes and favourable investment climates, Daron Acemoglu, Simon Johnson and James Robinson, 'The Rise of Europe: Atlantic Trade, Institutional Change and Economic Growth', *American Economic Review* 95 (2005): 546–579; for an overview, John J. McCusker, 'The Industrial Revolution 1780–1860: A Survey', in *The Economic History of Britain Since 1700, vol. I, 1700–1860*, ed. Roderick Floud and D. N. McCloskey (Cambridge University Press, 1981) pp. 103–127.



- 38 On human capital in the Industrial Revolution see Morgan Kelly, Joel Mokyr and Cormac Ó Gráda, 'Precocious Albion: A New Interpretation of the British Industrial Revolution', *Annual Review of Economics* 6 (2014), 363–389.
- 39 Serafina Cuomo, *Technology and Culture in Greek and Roman Antiquity* (Cambridge University Press, 2007), pp. 7–40; Long, *Openness*, pp. 16–45.
- 40 Xenophon, 'Oeconomicus', in *Memorabilia. Oeconomicus. Symposium. Apology*, tr. E. C. Marchant and O. J. Todd, rev. Jeffrey Henderson (Harvard University Press, 2013), p. 415 (4.2); Plutarch, 'Life of Pericles', in *Lives, Volume III: Pericles and Fabius Maximus. Nicias and Crassus*, tr. Bernadotte Perrin (Harvard University Press, 1916), p. 5 (152–153).
- 41 Henry Peacham, *The Compleat Gentleman, Fashioning him Absolute* (1622), p. 12.
- 42 Henry Dircks, *The Life, Times and Scientific Labours of the second Marquess of Worcester* (London: Quaritch, 1865), pp. 14–15.
- 43 Montagu, 'Constantinople, To [William Fielding]', in *Essays and Poems*, pp. 206–210, at 209 (lines 73–75).
- 44 Ralph Cudworth, *The True Intellectual System of the Universe: The First Part* (1678), p. 156; cf. Aristotle, *Metaphysics, Volume I: Books 1–9*, tr. Hugh Tredennick (Harvard University Press, 1933), pp. 6–7 (I.i.11–12).
- 45 Jean Le Rond d'Alembert, *Preliminary Discourse to the Encyclopedia of Diderot*, tr. Richard N. Schwab (University of Chicago Press, 1995), p. 124.
- 46 Sir Philip Sidney, 'An Apologie for Poetrie' in *Prose Works of Sir Philip Sidney*, ed. Albert Feuillerat, 4 vols. (Cambridge University Press, 1962), vol. 3, p. 8.
- 47 John Dryden 'Preface to *Sylvae*', *Works*, vol. 3, p. 3.
- 48 Johnson, *YE*, vol. 3, pp. 46–50, at 50.
- 49 Hobbes, *CE*, vol. 4, p. 134; Hobbes was sarcastic about the mechanical enthusiasms of vulgar Baconians, as in a passage collected by John Aubrey, published as 'Considerations on the Reputation, Loyalty, Manners and Religion of Thomas Hobbes of Malmesbury', in *The English Works of Thomas Hobbes*, ed. Sir William Molesworth, 11 vols. (1839–1845), vol. 4, p. 437: 'Not every one that brings from beyond seas a new gin, or other jaunty device, is therefore a philosopher.'
- 50 Edward Young, *Conjectures on Original Composition* (1759), pp. 8–9.
- 51 John Arbuthnot, *An Essay on the Usefulness of Mathematical Learning* (1701), p. 26.
- 52 D'Alembert, *Preliminary Discourse*, p. 51.
- 53 The division was conventional. See John Sheffield, Duke of Buckingham, *Essay on Poetry* (1682), p. 2, on number, rhyme etc. as 'necessary, yet but vulgar Arts'; and later William Wordsworth, 'Preface to *Lyrical Ballads*', in *Selected Prose*, ed. John O. Hayden (Harmondsworth: Penguin, 1988), p. 289, re. poetic language as 'in some degree mechanical' compared with experienced suffering.
- 54 Joseph Glanvill, 'Against Confidence in Philosophy', in *Essays on Several Important Subjects in Philosophy and Religion* (1676), p. 6.

- 55 For a survey of the field from a functionalist and evolutionary perspective see Arthur S. Reber, *Implicit Learning and Tacit Knowledge: An Essay on the Cognitive Unconscious* (Oxford University Press, 1996); on procedural knowledge, Lynne Hasher and Rose T. Zacks, 'Automatic Processing of Fundamental Information', *American Psychologist* 39 (1984): 1372–1388.
- 56 Locke, *Essay*, p. 146 (2.9.8); cf. p. 120 (2.2.2) for the limits of the understanding's 'Art and Skill' as a compounder and divider of sense impressions.
- 57 *Ibid.*, p. 415 (3.1.13).
- 58 On Locke and Shaftesbury see Daniel Carey, *Locke, Shaftesbury, and Hutcheson: Contesting Diversity in the Enlightenment and Beyond* (Cambridge University Press, 2006), pp. 98–149, especially 100–105.
- 59 Shaftesbury, *Characteristicks*, vol. 1, p. 138.
- 60 Isaac Watts, 'Philosophical Essays', in *Works of the Late Reverend and Learned Isaac Watts, D. D.*, 6 vols. (1753), vol. 5, p. 503.
- 61 Isaac Watts, *The Improvement of the Mind: or, a Supplement to the Art of Logick* (1741), p. 253; cf. p. 42 for an earlier instance of this 'Hoards of Knowledge' metaphor.
- 62 Ferguson, *Essay*, p. 175.
- 63 Burke, *PE*, p. 53.
- 64 Joshua Reynolds, *Discourses on Art*, ed. Robert R. Wark (Yale University Press, 1997), p. 98.
- 65 For the older tensions of this kind within the virtuoso movement 'between a Baconian impulse to instructiveness and utility, and a proneness to inconclusive and frivolous curiosity which writers on the subject deprecated, stressing the need for judgement and practical knowledge', see Hunter, *Science and Society*, pp. 67–68.
- 66 Sterne, *FE*, vol. 2, pp. 625–626; vol. 1, pp. 134–137; see Judith Hawley, 'Tristram Shandy: Learned Wit and Enlightenment Knowledge', in *The Cambridge Companion to Laurence Sterne*, ed. Tom Keymer (Cambridge University Press, 2009), pp. 34–48, at 35–36.
- 67 Frances Burney, *Evelina*, ed. Edward A. Bloom (Oxford University Press, 1982), p. 76; Anna Seward, 'Colebrook Dale' (1791 text) in *Eighteenth-Century Poetry: An Annotated Anthology*, ed. David Fairer and Christine Gerrard (Oxford: Blackwell, 1999), pp. 524–527; for discussions see Julie Park, *The Self and It: Novel Objects in Eighteenth-Century England* (Stanford University Press, 2010), pp. 123–60; Jessica Riskin, 'Eighteenth-Century Wetware', *Representations* 83 (2003): 97–125; Simon Schaffer, 'Enlightened Automata', in *Sciences in Enlightened Europe*, ed. William Clark, Jan Golinski and Simon Schaffer (University of Chicago Press, 1999), pp. 126–165.
- 68 *Eighteenth-Century English Labouring-Class Poets, 1700–1800*, gen. ed. John Goodridge, 3 vols. (London: Pickering and Chatto, 2003); *Nineteenth-Century English Labouring-Class Poets, 1800–1900*, gen. ed. John Goodridge, 3 vols. (London: Pickering and Chatto, 2006).
- 69 Tim Burke, 'Introduction', *Eighteenth-Century Labouring-Class Poets*, vol. 3, p. xxvii; see Donna Landry, 'The Resignation of Mary Collier: Some



- Problems in Feminist Literary History', in *The New Eighteenth Century*, ed. Felicity Nussbaum and Laura Brown (London: Methuen, 1987), pp. 90–120.
- 70 Ben Jonson, *The Alchemist*, ed. F. H. Mares (London: Methuen, 1967), pp. 18–19 (Act I, Scene 1, lines 94, 97).
- 71 Thomas Shadwell, *The Virtuoso, a Comedy* (1676), p. 24.
- 72 Joseph Toy Curtiss, 'Butler's Sidrophel', *PMLA* 44 (1929): 1066–1078; Marjorie Hope Nicholson, *Pepys' Diary and the New Science* (University Press of Virginia, 1965), p. 136.
- 73 Pepys, *Diary*, vol. 5, p. 34 (1 February 1664).
- 74 Sprat, *History*, pp. 418–9.
- 75 Robert Hooke, 'A General Scheme or Idea of the Prest State of Natural Philosophy', in *The Posthumous Works of Robert Hooke*, ed. Richard Waller (1705), p. 7.
- 76 Wotton, *Reflections*, pp. 357–358.
- 77 Sir Richard Blackmore, *Satyr against Wit* (1700), p. 7; John Hawkesworth connects Blackmore's dullness with his practical skill in *Works of Jonathan Swift [...] With Some Account of the Author's Life*, 14 vols. (London, 1755), vol. 1, p. 153: his 'skill as a physician atoned for his dullness as a poet'.
- 78 Another case being the *querelle des Anciens et des Modernes*, where opposing positions became fractured and complex, the reactionary Ancients later producing a new historical method. See Dan Edelstein, *The Enlightenment: A Genealogy* (University of Chicago Press, 2010), pp. 37–43; Larry Norman, *The Shock of the Ancient: Literature and History in Early Modern France* (University of Chicago Press, 2011), pp. 28–33.
- 79 Juvenal, Satire 1, in *Juvenal and Persius*, ed. Susanna Morton Braund (Harvard University Press, 2004), pp. 134–135, 136–137. After Juvenal's initial rejection of epic Daedeleian themes (lines 51–55), he affirms the satirist's warrior spirit in its manifestation as *ingenium* and *naturam*, accomplishment and talent (lines 150–154).
- 80 Hobbes, *CE*, vol. 4, p. 110; cf. Walter Charleton, *A Brief Discourse Concerning the Different Wits of Men* (1696), pp. 112–113, on malignant wits working by the 'crooked rule of their own insincere Mind and depraved inclinations'.
- 81 Isaac Barrow, *Several Sermons against Evil Speaking* (1678), pp. 45–46.
- 82 Locke, *Essay*, p. 156; cf. John Brown, *Essays on the Characteristicks*, pp. 41–42, on pure wit, which delights 'by those sudden Assemblages and pleasing Pictures of Things which it creates', as opposed to satire, which applies wit to the 'End of Persuasion'.
- 83 Dryden, *Works*, vol. 4, p. 70–71.
- 84 *Ibid.*, vol. 4, p. 655.
- 85 *Oxford Francis Bacon*, vol. 4, p. 27–28; vol. 11, p. 13.
- 86 Boyle, *Works*, vol. 6, p. 425.
- 87 John Wilkins, *Mathematicall Magick, or, The VVonders that may be Performed by Mechanicall Geometry* (1648), p. 68.
- 88 Gottfried W. Leibniz, *Die Werke*, ed. O. Klopp, 11 vols. (Hanover, 1864–1888), vol. 1, p. 133, quoted by William Clark, 'The Scientific

- Revolution in the German Nations', in *The Scientific Revolution in National Context*, ed. Roy Porter and Mikulas Teich (Cambridge University Press, 1992), pp. 90–114, at 93.
- 89 Swift, *PW*, vol. 1, p. 242.
- 90 Smith, 'Letter to the *Edinburgh Review*', *GE*, vol. 3, pp. 242–254, at 243.
- 91 *Ibid.*, p. 243–244.
- 92 See for example Smith, *GE*, vol. 4, p. 48, the opening of his ninth rhetoric lecture on Swift and Lucian, although Smith does stress Swift's stylistic restraint; but cf. Young, *Conjectures*, p. 63; for the convention see P. K. Elkin, *The Augustan Defence of Satire* (Oxford: Clarendon Press, 1973), pp. 17–19.
- 93 See Arbuthnot, *Mathematical Learning*, p. 42.
- 94 Swift, *CE*, vol. 15, pp. 233–235, 251–253.
- 95 Voltaire, *Letters Concerning the English Nation* (1733), pp. 88, 241–242.
- 96 Pope, *Dunciad Four Books*, p. 123 (Book 1, lines 181–186); cf. Spence, *Anecdotes*, vol. 1, p. 19 (no. 41); and Pope, *Prose*, vol. 2, p. 151. 'Perhaps it may be with States as with Clocks, which must have some dead weight hanging at them, to help and regulate the motion of the finer and more useful parts'.
- 97 See Boyle's remarks to Henry Oldenburg on 'the constant and permanent Ingredients of the Air' in his *General History of the Air* (1692), p. 6, which set out his basic conclusions on the action of heat on 'Elastical Air', as well as some 'extravagant Conjectures' on the generation of 'Elastical Fire'. As Valerie Rumbold notes in *Dunciad Four Books*, the relation here of 'Elasticity' to 'Emptiness' is ironic.
- 98 For Hooke's experiments with airguns see Thomas Birch, *The History of the Royal Society of London*, 4 vols (1756–1757), vol. 1, pp. 345, 367, 396; see Jim Bennett, 'Wind-gun, Air-gun or Pop-gun: The Fortunes of a Philosophical Instrument', in *Mindful Hand*, ed. Roberts, Schaffer and Dear, pp. 221–245.
- 99 Dryden, *Works*, vol. 4, p. 37.
- 100 *Ibid.*, vol. 4, p. 29.
- 101 John Brown, *An Essay on Satire: Occasion'd by the Death of Mr. Pope* (1745), pp. 12–13.
- 102 The extensive literature on this topic includes J. Paul Hunter, 'From Typology to Type: Agents of Change in Eighteenth-Century English Texts', in *Cultural Artifacts and the Production of Meaning: The Page, the Image, and the Body*, ed. Margaret J. M. Ezell and Katherine O'Brien O'Keeffe (University of Michigan Press, 1996), pp. 41–69; Christopher Fanning, 'Small Particles of Eloquence: Sterne and the Scriblerian Text', *Modern Philology* 100 (2003): 360–392; and Christopher Flint, *The Appearance of Print in Eighteenth-Century Fiction* (Cambridge University Press, 2011), especially pp. 113–126 on Swift.
- 103 Lisa Jardine and Anthony Grafton, "'Studied for Action": How Gabriel Harvey Read His Livy', *Past & Present* 129 (1990): pp. 30–78; for active

- readers and commonplacing, 1695–1730 see Stephen Colclough, *Consuming Texts: Readers and Reading Communities, 1695–1870* (Houndmills: Palgrave Macmillan, 2007), pp. 29–63.
- 104 In addition to those given below, an important example is the passage in Cyrano de Bergerac, *Selénarhia, or, The Government of the World in the Moon a Comical History* (1659), np., where the philosopher from the sun gifts a special mechanical book, ‘full of little springs, and almost imperceptible Machines’, which is listened to rather than read.
- 105 *Oxford Francis Bacon*, vol. 4, p. 58.
- 106 Ephraim Chambers, *Cyclopædia: or, An Universal Dictionary of Arts and Sciences*, 2 vols., 2nd ed. (1738), vol. 1, np., ‘Books’, subheading ‘*The ill Effects objected to Books*’; *A Supplement to Dr. Harris’s Dictionary of Arts and Sciences* (1744), np., ‘Books’, largely transcribed from Chambers.
- 107 Sir Kenelm Digby, *Two Treatises: in the One of Which, the Nature of Bodies; in the Other, the Nature of Mans Soule is Looked Into* (1645), pp. 353–354.
- 108 Joseph Glanvill, *Plus Ultra: or, The Progress and Advancement of Knowledge since the Days of Aristotle* (1668), p. 105; cf. Robert Boyle, *Some Considerations touching the Usefulness of Experimental Naturall Philosophy. . . Second Tome* (1671), in Boyle, *Works*, vol. 6, pp. 489–505, demonstrating that ‘*the Knowledge of peculiar Qualities, or Uses of Physical things, may enable a Man to perform those things Physically, that seem to require Tools and Dexterity of Hand, proper to Artificers*’.
- 109 Mokyr, *Enlightened Economy*, pp. 45, 403–410.
- 110 Christine MacLeod, *Inventing the Industrial Revolution: The English Patent System, 1660–1800* (Cambridge University Press, 1988), pp. 197–199; Richard J. Sullivan, ‘England’s “Age of Invention”: The Acceleration of Patents and Patentable Invention during the Industrial Revolution’, *Explorations in Economic History* 26 (1989): 424–452.
- 111 MacLeod, *Inventing*, p. 98; Frans De Bruyn, ‘Reading Virgil’s Georgics as a Scientific Text: The Eighteenth-Century Debate between Jethro Tull and Stephen Switzer’, *ELH* 71 (2004): 661–689.
- 112 Smith, *GE*, vol. 5, p. 8.
- 113 See Mark Rose, *Authors and Owners* (Harvard University Press, 1993), pp. 54–58, 71–74.
- 114 William Warburton, *A Letter from an Author, to a Member of Parliament, Concerning Literary Property* (1747), in *The Works of the Right Reverend William Warburton*, 7 vols. (1788), vol. 7, p. 931.
- 115 This, according to Warburton, is what happened with the 1709 statute of Anne regarding copyright, ‘which ignorance and knavery have concurred to represent as a *restrictive*, and not *accumulative* law; and consequently, to suppose it *the sole foundation*, instead of an *additional support*, of literary property’, p. 936.
- 116 *An Enquiry into the Nature and Origin of Literary Property* (1762), p. 22; Donald W. Nichol, ‘Warburton (Not!) on Copyright: Clearing up the

- Misattribution of *An Enquiry* (1762)', *British Journal for Eighteenth-Century Studies* 19 (1996): 171–1182.
- 117 *Enquiry*, p. 26.
- 118 On printshop skills, creativity and commerce see Adrian Johns, 'The Identity Engine: Printing and Publishing at the Beginning of the Knowledge Economy', in *Mindful Hand*, Roberts, Schaffer and Dear, eds., pp. 403–428.
- 119 D. F. McKenzie, 'Typography and Meaning: The Case of William Congreve', in *Making Meaning: 'Printers of the Mind' and Other Essays*, ed. Peter D. McDonald and Michael F. Suarez (University of Massachusetts Press, 2002), pp. 198–236; James McLaverty, *Pope, Print and Meaning* (Oxford University Press, 2001); J. Paul Hunter, 'From Typology to Type', pp. 41–69.
- 120 William Kinsley, 'The *Dunciad* as Mock-Book', *Huntington Library Quarterly* 35 (1971): 29–47; Marcus Walsh, 'Swift's *Tale of a Tub* and the Mock Book', in *Jonathan Swift and the Eighteenth-Century Book*, ed. Paddy Bullard and James McLaverty (Cambridge University Press, 2013), pp. 101–118.
- 121 For example, Adam Smyth, *Material Texts in Early Modern England* (Cambridge University Press, 2017), pp. 13–14 and 137ff.; for the wider discussion in textual criticism see D. C. Greetham, *Theories of the Text* (Oxford University Press, 1999), pp. 157–205.
- 122 David F. Foxon, *Pope and the Early Eighteenth-Century Book Trade*, ed. James McLaverty (Oxford: Clarendon Press, 1991); Paddy Bullard and James McLaverty, eds., *Jonathan Swift and the Eighteenth-Century Book* (Cambridge University Press, 2013); Valerie Rumbold, *Swift in Print: Published Texts in Dublin and London, 1691–1765* (Cambridge University Press, 2020).
- 123 Nichols, *Anecdotes*, vol. 3, p. 607.
- 124 Foxon, *Pope and the Book Trade*, pp. 127–131, 151–152.
- 125 Donald Nichol, ed., *Pope's Literary Legacy: The Book-trade Correspondence of William Warburton and John Knapton, with other Letters and Documents, 1744–1780* (Oxford: Oxford Bibliographical Society, 1992), pp. xxv–lxxvi.
- 126 Nichols, *Anecdotes*, vol. 5, p. 659.
- 127 Other major encyclopaedias and practical compendia published by the Knaptons included Birch's translation of Bayle's *Dictionary* at its second edition of 1734, Edward Hatton's *Merchant's Magazine* at its ninth impression of 1734, and the English translation of *The Memoirs of the Royal Academy of Sciences at Paris* in 1743.
- 128 David McKitterick, *Print, Manuscript and the Search for Order, 1450–1830* (Cambridge University Press, 2003), p. 193.
- 129 Vicesimus Knox, *Essays, Moral and Literary*, 2 vols. (1778), vol. 1, p. 239.
- 130 Joseph Viscomi, *Blake and the Idea of the Book* (Princeton University Press, 1993).
- 131 William Blake, *Complete Writings*, ed. Geoffrey Keynes (Oxford University Press, 1966), p. 453.

## Chapter 2. Daedalus and Proteus: Satire and Useful Knowledge in Seventeenth-Century England

- 1 Cf. the sceptical account of satire as marking where ‘literature ceases to serve the ends of science’ see Claire Preston, *The Poetics of Scientific Investigation in Seventeenth-Century England* (Oxford University Press, 2016), pp. 24–33, at 27.
- 2 Swift, *CE*, vol. 2, ‘Headnote’ to ‘A Meditation Upon a Broomstick’, pp. 2–11, at 8.
- 3 For the relation of didactic to polite literature and to satire see J. Paul Hunter, *Before Novels: The Cultural Contexts of Eighteenth-Century English Fiction* (New York: Norton, 1990), pp. 248–273 (‘Directions of Didacticism: The Guide Tradition’), especially 253.
- 4 Pope, *Prose*, vol. 2, p. 239, note 2; Collier, *Essay*, pp. 18–20.
- 5 *Oxford Francis Bacon*, vol. 4, p. 65; cf. ‘Preparative to a Natural History’, vol. 11, p. 463; for a reading of this passage stressing that ‘Causes and Axiomes’ are the ‘final goal’ here see Romano Nanni, ‘Technical Knowledge and the Advancement of Learning: Some Questions about “Perfectibility” and “Invention”’, in *Philosophies of Technology: Francis Bacon and his Contemporaries*, ed. Claus Cittel et al., 2 vols. (Leiden: Brill, 2008), pp. 51–66.
- 6 Francis Bacon, *The Wisdome of the Ancients*, tr. Sir Arthur Gorges (1619), pp. 66–70; cf. *Oxford Francis Bacon*, vol. 13, p. 101, on the ‘Proteus of Matter’.
- 7 Virgil, *Georgics*, pp. 239–259 (*Georgic* 4, lines 281–558).
- 8 Bacon, *Wisdome*, p. 69.
- 9 See Antonio Pérez-Ramos, *Francis Bacon’s Idea of Science and the Makers Knowledge Tradition* (Oxford University Press, 1988), p. 145; cf. Sophie Weeks, ‘The Role of Mechanics in Francis Bacon’s *Great Instauration*’, in *Philosophies of Technology*, ed. Claus Zittel et al., pp. 133–196, at 151–152.
- 10 For Bacon on imagination and analogy see Katharine Park, ‘Bacon’s “Enchanted Glass”’, *Isis* 75 (1984): 290–302.
- 11 Juvenal, ‘Satire 1’, in *Juvenal and Persius*, ed. Susanna Morton Braund (Harvard University Press, 2004), pp. 130–131, lines 1–2; Swift, *Corr.* vol. 2, p. 606; see David Womersley’s comments on Swift’s vexing, Swift, *CE*, vol. 15, pp. lxxvii–lxxxv; see also Elkin, *Defence of Satire*, pp. 46, 47, 91, 94.
- 12 Bacon, *Wisdome*, p. 90; for other humanist accounts of the ‘uncouthness’ of Daedalus see Jess Edwards, *Writing, Geometry and Space in Seventeenth-Century England and America: Circles in the Sand* (Abingdon: Routledge, 2006), pp. 45–47.
- 13 Bacon, *Wisdome*, pp. 93–94.
- 14 For the thread of Daedalus’ ingenuity in Bacon’s wider thinking see Rhodri Lewis, ‘Francis Bacon and Ingenuity’, *Renaissance Quarterly* 67 (2014): 113–163, at 130–131.
- 15 Francis Bacon, *Parasceve ad historiam naturalem et experimentalem*, in *Works of Francis Bacon*, ed. James Spedding et al., 14 vols. (London: Longman, 1857–1874), vol. 4, pp. 257–258.

- 16 Bernard Palissy, *The Admirable Discourses of Bernard Palissy*, tr. Aurèle La Rocque (University of Illinois Press, 1957), p. 242; for Bacon and Palissy see Jürgen Klein, 'Francis Bacon's *Scientia Operativa*: The Tradition of the Workshops, and the Secrets of Nature', in *Philosophies of Technology*, ed. Claus Zittel et al., pp. 21–49, at 26–31.
- 17 For utopia's satirical mode see Robert C. Elliott, *The Shape of Utopia: Studies in a Literary Genre* (Bern: Peter Lang, 2013), pp. 11–20, 23–35, 62–64.
- 18 More, *Utopia*, pp. 87–88; see Barbara Fuchs and Philip S. Palmer, 'A Lettered Utopia: Printed Alphabets and the Material Republic of Letters', *Renaissance Quarterly* 73 (2020): 1235–1276, at 1264–1266.
- 19 More, *Utopia*, p. 87; on More's frame or 'mundi machinam' see Romuald Lakowski, 'Science and Utopia: Thomas More's Knowledge of Renaissance Science', *Moreana* 53 (2017): 119–145, at 137–138.
- 20 Bacon, *New Atlantis*, p. 181; on the mechanical arts as 'conditioning images for Bacon's instauration in its inner form', see Christopher Kendrick, 'The Imperial Laboratory: Discovering Forms in *The New Atlantis*', *ELH* 70 (2003): 1021–1042, at 1026.
- 21 Bacon, *New Atlantis*, p. 183.
- 22 *Ibid.*, p. 183.
- 23 *Oxford Francis Bacon*, vol. 11, p. 299; see Lorraine Daston and Katharine Park, *Wonders and the Order of Nature, 1150–1750* (New York: Zone Books, 1998), pp. 220–245, at 225–226.
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- 25 'Icaromenippus, or the Sky-Man', in *Lucian: Volume II*, tr. A. M. Harmon (Harvard University Press, 1915), pp. 267–323, at 273, 283, 301 (ants), 299 (cosmic perspectives).
- 26 Cavendish, *Blazing*, pp. 17–18.
- 27 *Ibid.*, p. 27.
- 28 *Ibid.*, p. 28.
- 29 Bacon, *New Atlantis*, p. 181.
- 30 Cavendish, *Blazing*, p. 36; for Cavendish's opposition to 'the Baconian enterprise as a whole' see Evelyn Fox Keller, 'Producing Petty Gods: Margaret Cavendish's Critique of Experimental Science', *ELH* 64 (1997): 447–471; for a positive account cf. Line Cottegnies, 'Utopia, Millenarianism, and the Baconian Programme of Margaret Cavendish's *Blazing World*', in *New Worlds Reflected: Travel and Utopia in the Early Modern Period*, ed. Chloe Houston (Farnham: Ashgate, 2010), pp. 71–93, at 88–91.
- 31 Cavendish, *Blazing*, p. 18.
- 32 *Ibid.*, p. 41; on Cavendish's ridicule of the Royal Society see Lisa T. Sarasohn, *The Natural Philosophy of Margaret Cavendish: Reason and Fancy during the Scientific Revolution* (Johns Hopkins University Press, 2010), p. 33; for a



- positive account of her concern with ‘the endowment of man’s life’ cf. Emma Wilkins, ‘Margaret Cavendish and the Royal Society’, *Notes and Records: The Royal Society Journal of the History of Science*, 68 (2014): 245–260, at 254.
- 33 Gabriel Plattes, *A Description of the Famous Kingdome of Macaria* (1641), p. 11 (‘booke of Husbandry’).
  - 34 ODNB, ‘Plattes, Gabriel (c. 1600–1644)’ mentions *A Treatise of Husbandry* (1638), but there is no record of it on ESTC; see G. E. Fussell, *The Old English Farming Books*, 5 vols. (London: Crosby Lockwood, [1947?] 1991), vol. 1, pp. 36–37.
  - 35 On *Macaria*’s limited significance see J. C. Davis, *Utopia and the Ideal Society* (Cambridge University Press, 1981), p. 324.
  - 36 The sparse text of *Macaria* is discussed by Sharon Hogan, *Other Englands: Utopia, Capital, and Empire in an Age of Transition* (Stanford University Press, 2018), p. 163, and by Chloë Houston, *The Renaissance Utopia: Dialogue, Travel and the Ideal Society* (Farnham: Ashgate, 2014), pp. 130–132.
  - 37 For the Hartlib circle and ‘the advancement of arts and ingenuities’ see Charles Webster, *The Great Instauration: Science, Medicine and Reform, 1626–1660* (New York: Holmes & Meier, 1976), pp. 369–384; cf. Michael Hunter, *Science and Society in Restoration England* (Cambridge University Press, 1981), pp. 33, 87.
  - 38 For Comenius in England see John T. Young, *Faith, Medical Alchemy and Natural Philosophy: Johann Moriaen, Reformed Intelligencer, and the Hartlib Circle* (Aldershot: Ashgate, 1998), pp. 102–103.
  - 39 Johannes Comenius, *Panorthosia or Universal Reform*, tr. A. M. O. Dobbie (Sheffield, 1993), p. 13; for Comenius as a central figure in later utopian and Baconian educational discourse see Chloe Houston, ‘Utopia and Education in the Seventeenth Century: Bacon’s Saloman’s House and Its Influence’, in *New Worlds Reflected*, ed. Chloe Houston, pp. 161–188, at 174–176.
  - 40 On Pansophism see Vera Keller, *Knowledge and the Public Interest, 1575–1725* (Cambridge University Press, 2015), pp. 176–185.
  - 41 John Dury to Sir Cheney Culpeper, 13 January 1642, in *Comenius in England*, ed. Robert Fitzgibbon Young (Oxford University Press, 1932), pp. 77–81, at 78–79.
  - 42 Johannes Comenius, *A Reformation of Schooles*, tr. Samuel Hartlib (1642), pp. 20–21.
  - 43 Webster, *Great Instauration*, pp. 68–69; the proceedings of Renaudot’s conferences at the bureau were translated into English by George Havers as *A General Collection of Discourses of the Virtuosi of France*, 2 vols. (1664–1665).
  - 44 William Petty, *The Advice of W. P. to Mr. Samuel Hartlib for the Advancement of some Particular Parts of Learning* (1647), p. 18.
  - 45 *Ibid.*, 5.
  - 46 Sprat, *History*, p. 62.
  - 47 Petty, *Advice*, p. 19.
  - 48 Johann Comenius, *A Reformation of Schooles*, p. 7; see Meric Casaubon, *Generall Learning*, ed. Richard Serjeantson (Cambridge: RTM Publications, 1999), p. 177 for a counter-assertion of ‘industrie’ over ‘method’.

- 49 Walton, *Angler*, p. 167
- 50 *Ibid.*, p. 169
- 51 For the theological convention see John Salkeld, *A Treatise of Paradise, and the Principall Contents Thereof* (1617), pp. 145–146: in the blessed state of paradise ‘labour was not any toile, or paine, but rather [...] a recreation, and reioycing of the will and minde’; on Salkeld see Joanna Picciotto, *Labours of Innocence*, pp. 111–112.
- 52 Walton, *Angler*, pp. 170–171.
- 53 *Oxford Francis Bacon*, vol. 4, p. 27; see vol. 11, p. 119, Aph. 74. ‘They have flourished most with their first author, and gone into decline thereafter.’
- 54 *Oxford Francis Bacon*, vol. 11, ‘Great Instauration preliminaries’, p. 13.
- 55 On Walton, Mennipean satire and handbooks see Marjorie E. Swann, *Environment, Society, and The Compleat Angler* (Penn State University Press, 2023), pp. 14–15, 41–43.
- 56 Toby Barnard, *Cromwellian Ireland: English Government and Reform in Ireland, 1649–1660* (Oxford: Clarendon Press, 2000), pp. 213–229.
- 57 Evelyn to Boyle, 8 August 1659, *The Letterbooks of John Evelyn. Volume I: British Library Add MS 78298*, ed. Douglas D. C. Chambers and David Galbraith (University of Toronto Press, 2014), p. 253.
- 58 For Hooke’s unique position see Stephen Pumfrey, ‘Ideas above His Station: A Social Study of Hooke’s Curatorship of Experiments’, *History of Science* 24 (1991): 1–44, at 4.
- 59 *Diary of John Evelyn, Vol. 3: Kalendarium, 1650–1672*, ed. E. S. de Beer (Oxford: Clarendon Press, 1955), p. 416.
- 60 For Hooke’s relations with artisans see J. A. Bennett, ‘Robert Hooke as Mechanic and Natural Philosopher’, *Notes and Records of the Royal Society* 35 (1990): 33–48, at 34; on Hooke’s expertise as both ingenious and ingenuous or honest, see J. A. Bennett, ‘Instruments and Instrumentality’, in *Robert Hooke: Tercentennial Studies*, ed. Michael Cooper and Michael Hunter (Aldershot: Ashgate, 2006), pp. 65–76.
- 61 Rob Iliffe, ‘Material Doubts: Hooke, Artisan Culture and the Exchange of Information in 1670s London’, *British Journal for the History of Science* 28 (1995): 285–318, at 286–287.
- 62 Robert Hooke, *Lectiones Cutlerianae, or, A Collection of Lectures* (1679), fourth repagination, pp. 99–100.
- 63 Alan Mills et al., ‘Hooke’s Design for a Driven Equatorial Mounting’, in *Hooke: Tercentennial Studies*, pp. 77–88; Robert Hooke, *Animadversions on the First Part of the Machina coelestis of Hevelius* (1674), pp. 43–45; Robert Hooke, ‘A Description of Helioscopes’, in *Lectiones Cutlerianae*, second pagination, pp. 2–9; Robert Hooke, ‘Lampas’, in *Lectiones Cutlerianae*, third pagination, pp. 10–28; Birch, *Royal Society*, vol. 1, pp. 287, 332.
- 64 Iliffe, ‘Material Doubts’, pp. 293–99; Hooke to Edward, Earl of Conway, 17 August 1680, transcribed by M. I. Batten, ‘The Architecture of Dr. Robert Hooke F.R.S.’, *Walpole Society* 25 (1936–1937): 97–103, at 102.

- 65 Birch, *History*, vol. 1, pp. 116, 391, 397, 406; Michael Hunter, 'An Experiment in Corporate Enterprise: The Royal Society's Committees of 1663–5', in *Establishing the New Science: The Experience of the Early Royal Society* (Woodbridge: Boydell, 1989), pp. 73–121, at 87–90.
- 66 Committee minutes for 17 October 1664, in Hunter, 'An Experiment', 115–116.
- 67 Hooke to Boyle, 6 October 1664, in *The Correspondence of Robert Boyle: 1662–1665*, ed. Michael Hunter et al., 6 vols. (London: Pickering & Chatto, 2001), vol. 2, p. 344; Samuel Pepys heard the lecture on felt on 21 February 1661, *Diary*, vol. 7, p. 51.
- 68 Robert Hooke, *Micrographia: or Some Physiological Descriptions of Minute Bodies made by Magnifying Glasses* (1665), g1<sup>v</sup>.
- 69 Ibid.; Sprat, *History*, p. 71.
- 70 Hooke, *Micrographia*, a2<sup>r</sup>; cf. Sprat, *History*, p. 72, 'their Hand, and their Eyes uncorrupted'.
- 71 Cf. manual operations mentioned by Hooke at *Micrographia*, d2<sup>r</sup> ('handling'), or g2<sup>v</sup> ('such a Mechanical Hand, and so Philosophical a Mind'); Catherine Wilson reads it as an operating hand in *The Invisible World: Early Modern Philosophy and the Invention of the Microscope* (Princeton University Press, 1995), p. 102.
- 72 Hooke, *Micrographia*, b2<sup>r</sup>.
- 73 cf. Sprat, *History*, p. 85, on the social conditions for discovering truth: 'By this union of eyes, and hands . . . there will be a full comprehension of the object in all its appearances'.
- 74 Robert Hooke, 'General Scheme' in *Posthumous Works of Robert Hooke*, ed. Richard Waller (1705), p. 19.
- 75 Ibid., p. 28; for context see Adam Fox, 'Printed Questionnaires, Research Networks, and the Discovery of the British Isles, 1650–1800', *Historical Journal* 53 (2010): 593–621, at 597–598.
- 76 Hooke, 'General Scheme', p. 28; cf. 62, 'I find it very common for Tradesmen, or such as have been much versed about any thing, to give the worst kind of Description of it'.
- 77 Ibid.
- 78 Bowood House, Petty MSS H[8]16, printed as appendix in Michael Hunter, *Establishing the New Science*, pp. 311–313.
- 79 Robert Boyle, *Some Considerations touching the Usefulness of Experimental Naturall Philosophy . . . Second Tome, Containing the Later Section of the Second Part* (1671), in *Works*, vol. 6, p. 396.
- 80 'Proemial Essay' to *Certain Physiological Essays* (1669), *Works*, vol. 3, p. 31; Steven Shapin and Simon Schaffer, *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life* (Princeton University Press, 1985; reissue 2011), pp. 60–65.
- 81 Steven Shapin, 'Pump and Circumstance: Robert Boyle's Literary Technology', *Social Studies of Science* 14 (1984): 481–520; Shapin and Schaffer, *Leviathan and the Air-Pump*, pp. 256–260; see also John T.

- Harwood, 'Science Writing and Writing Science: Boyle and Rhetorical Theory', in *Robert Boyle Reconsidered*, ed. Michael Hunter, (Cambridge University Press, 1994), pp. 37–56, at 43–48; and Lawrence M. Principe, 'Virtuous Romance and Romantic Virtuoso: The Shaping of Robert Boyle's Literary Style', *Journal of the History of Ideas* 56 (1995): 377–397.
- 82 See Boyle, *Works*, vol. 6, p. 418–422.
- 83 'Of Doeing by Physical Knowledg', Boyle, *Works*, vol. 6, pp. 489–505, at 489.
- 84 Boyle, *Works*, vol. 5, p. 27.
- 85 Swift, *CE*, vol. 15, p. 235; Marjorie Hope Nicolson makes this connection in *Science and Imagination* (Cornell University Press, 1956), p. 118.
- 86 For contemporary satirical response to Boyle see Patrick Carroll, *Science, Culture, and Modern State Formation* (University of California Press, 2006), pp. 40–42.
- 87 *Diary of Robert Hooke, M.A., M.D., F.R.S., 1672–1680*, ed. Henry Robinson and Walter Adams (London: Taylor & Francis, 1935), pp. 337–338.
- 88 For example Moxon's *Tutor to Astronomie and Geographie* (1659).
- 89 Pepys, *Diary*, vol. 4, p. 302; vol. 5, p. 136.
- 90 Moxon printed John Palmer's *The Catholique Planispher* (1658), an astronomical chart with moving parts; and Sir John Napier's, *Enneades arithmeticae; the Numbring Nines* (1684), printed for Moxon 'at the sign of Atlas in Ludgate-street. Where also these numbring [*sic*] rods, (commonly call'd Napiers Bones) are made and sold'; and his own *The Use of the Astronomical Playing-cards* (1676), together with the cards themselves.
- 91 Joseph Moxon, *Mechanick Exercises. Or, the Doctrine of Handy-works* (1677 [published 1678]), A4<sup>r</sup>.
- 92 *Ibid.*, A3<sup>v</sup>; the first number on smithing, pp. 1–16, begins with the building of the forge.
- 93 Joseph Moxon, *Mechanick Exercises: or, the doctrine of handy-works. Applied to the art of printing. The second volumne [*sic*]* (1683), p. 7.
- 94 Joseph Moxon, *Mechanick Exercises: or, The Doctrine of Handy-works*, 2 vols. (1693), vol. 1, [A3<sup>v</sup>], passage not in first edition.
- 95 *Mechanick Exercises* (1677), pp. 119–120, regarding the relationship of carpenter to architect; cf. *Ibid.* p. 154.
- 96 See Evelyn, *Diary*, vol. 3, pp. 64–65, on 'that admirable Artist Reeves, famous for Perspectives, & turning curiosities in Ivorie'; see also Robert Hooke to Robert Boyle, 21 October 1664, *Correspondence of Robert Boyle*, vol. 2, p. 362, on a job that only Reeve could perform, 'and I think he only, of all the turners I have met with'.
- 97 *Mechanick Exercises* (1677), p. 222.
- 98 *Ibid.*, pp. 228 ff., 233.
- 99 Joseph Moxon, *Mechanick Dyalling* (1668 [actually 1678]), pp. 39–44.
- 100 For a similar reading with less emphasis on cognitive implications see Lisa Maruca, *The Work of Print: Authorship and the English Text Trades, 1660–1760* (University of Washington Press, 2007), pp. 39–44.

- 101 Adrian Johns, *Nature of the Book: Print and Knowledge in the Making* (University of Chicago Press, 1998), pp. 80–83; Rhodri Lewis, ‘The Publication of John Wilkins’s Essay (1668): Some Contextual Considerations’, *Notes and Records of the Royal Society* 56 (2002): 133–146, at 141–142.
- 102 *Mechanic Exercises* (1683), p. 6; Dee’s preface was reprinted in Thomas Rudd’s 1651 translation of Euclid. Moxon printed Sir Jonas Moore’s *Short Introduction into the Art of Species* (1660), intended as an introduction to the *Elements*.
- 103 *Mechanic Exercises* (1683), p. 7; Robert Hooke makes an even broader analogy between architecture and the new science in ‘A General Scheme’, *Posthumous Works*, p. 18.
- 104 Dee, ‘Mathematical Preface’, a.iiij<sup>v</sup>.

### Chapter 3. The Scriblerian Mock Arts: Eighteenth-Century Satires of Didacticism

- 1 For the defensiveness and pessimism of Swift and Scriblerian satire see Howard Weinbrot, *Menippean Satire Reconsidered: From Antiquity to the Eighteenth Century* (Johns Hopkins University Press, 2005), especially pp. 115–193.
- 2 See Stephen Gaukroger, *The Collapse of Mechanism and the Rise of Sensibility: Science and the Shaping of Modernity, 1680–1760* (Oxford: Clarendon Press, 2010), pp. 57–64, and Alan Gabbey, ‘Cudworth, More and the Mechanical Analogy’, in *Philosophy, Science, and Religion in England 1640–1700*, ed. Richard Kroll, Richard Ashcraft and Perez Zagorin (Cambridge University Press, 1992), pp. 109–127; for the Swift connection, Michael R. G. Spiller, ‘The Idol of the Stove: The Background to Swift’s Criticism of Descartes’, *RES* 25, no. 97 (1974): 15–24; for the classic reassertion of the significance of practical mathematical instruments in Enlightenment constructions of the mechanical see J. A. Bennett, ‘The Mechanics’ Philosophy and Mechanical Philosophy’, *History of Science* 24 (1986): 1–28.
- 3 Locke, *Essay*, pp. 76–77 (I.iii.14).
- 4 Brean S. Hammond, ‘Scriblerian Self-Fashioning’, *Yearbook of English Studies* 18 (1988): 108–124, at 118.
- 5 Mary Astell, *An Essay in Defence of the Female Sex. In which are Inserted the Characters of [...] a Poetaster [...] &c.* (1696), p. 79.
- 6 Pope, *Corr.*, vol. 1, p. 21 (Walsh to Pope, 9 September 1706).
- 7 *CWJS*, vol. 1, p. 152; see Marcus Walsh’s note on Descartes at p. 481.
- 8 *Ibid.*, p. 66.
- 9 Pope, *Prose*, vol. 1, p. 115.
- 10 *CWJS*, vol. 15, p. 268.
- 11 Edward Young, *Conjectures on Original Composition. In a Letter to the Author of Sir Charles Grandison* (1759), pp. 8–9.

- 12 See Martha Woodmansee, 'The Genius and the Copyright: Economic and Legal Conditions of the Emergence of the "Author"', *Eighteenth-Century Studies* 17 (1984): 425–448.
- 13 Swift's writings in instructional modes occupy different points on a spectrum of irony: from the wholly satirical (e.g., the academy at Lagado in *Gullivers Travels* [part III, chapters 5–6] or the art of interpreting city cries in *An Examination of Certain Abuses*, *PW* vol. 12, pp. 217–232), to the resigned-but-earnest (e.g., the *Letter to a Young Gentleman, Lately Enter'd into Holy Orders*, *PW* vol. 9, pp. 61–82), to that special class of wholly serious projects just tintured with irony (e.g., the *Project for the Advancement of Religion*, *PW* ii. 41–63, or the *Proposal for Correcting [...] the English Tongue*, *PW*, vol. 4, pp. 3–21).
- 14 For earlier sketches of the 'noble Art of Cookery' see Ned Ward, *The London Spy Compleat* (1700), part XII, pp. 6, 8; Pope himself connected Bramston and Miller's poem, together with Walter Harte's *Essay on Satire, Particularly on the Dunciad* (1730); see Pope to Caryl, 6 February 1731, Pope, *Corr.* vol. 3, p. 173; see James McLaverty, 'Lawton Gilliver: Pope's Bookseller', *Studies in Bibliography* 32 (1979): 101–124, at 111–112.
- 15 For Breval see Paul Baines and Pat Rogers, *Edmund Curll, Bookseller* (Oxford University Press, 2007), pp. 107–108.
- 16 See especially the second part of Eustache de Refuge's *Traicté de la cour, ou instruction des courtisans* (1616), translated into English as *The Art of Complaisance: or, The Means to Oblige in Conversation* (1673); and Pierre Ortigue de Vaumorière, *L'art de plaire dans la conversation* (1688), translated in 1691.
- 17 For Collier and Ovidian 'arts' see Timothy Dykstal, 'Provoking the Ancients: Classical Learning and Imitation in Fielding and Collier', *College English* 31 (2004): 102–122, at 114–117.
- 18 See Clare Brant, 'Artless and Artful: John Gay's *Trivia*', in *Walking the Streets of Eighteenth-Century London: John Gay's Trivia* (1716), ed. Clare Brant and Susan E. Whyman (Oxford University Press, 2007), 105–119.
- 19 For theoretical discussion of specification in arts see Michael Polanyi, *Personal Knowledge: Towards a Post-Critical Philosophy* (University of Chicago Press, 1958; pbk, 1974), pp. 53–62.
- 20 See Rose-Mary Sargent, 'Learning from Experience: Boyle's Construction of an Experimental Philosophy', in *Robert Boyle Reconsidered*, ed. Michael Hunter (Cambridge University Press, 2003), pp. 57–79, at 71.
- 21 Temple, *Works*, vol. 1, pp. 151–169, at 152, 159; 153.
- 22 Swift, *CE*, vol. 1, p. 173.
- 23 *Ibid.*, p. 4.
- 24 Richard Head, *The Canting Academy, or, The Devils Cabinet Opened* (1673), pp. 84, 87; three years later Head published *Proteus redivivus: or the Art of Wheeling, or Insinuation* (1675).
- 25 The *Art of Canting* is the only one of the twelve imaginary treatises mentioned in the 'Mechanical Operation' that is not in the 'Tale of a Tub' proper; James



- L. Clifford speculates ('Swift's Mechanical Operation of the Spirit', in *Pope and his Contemporaries*, ed. James L. Clifford and Louis Landa [Oxford University Press, 1949], pp. 135–146, at 141) that the list's sixth treatise, 'An Analytical Discourse upon Zeal, Histori-theo-physi-logically considered' is 'The Mechanical Operation' itself, but since the 'Discourse' is described later in the *Tub* (p. 92) as 'containing three large Volumes in Folio', this is unlikely.
- 26 Swift, *CE*, vol. 1, pp. 4, 180;
  - 27 See Marcus Walsh, 'Swift's *Tale of a Tub* and the Mock Book', in *Jonathan Swift and the Eighteenth-Century Book*, ed. Paddy Bullard and James McLaverty (Cambridge University Press, 2013), pp. 101–118.
  - 28 Lists of books 'by the same author' are found, for example, in John Evelyn's *Sylva* (1670), Henry More's *Paralipomena prophetica* (1685), Matthew Hale's *Discourse of the Knowledge of God* (1688), and John Ray's *Persuasive to a Holy Life* (1700).
  - 29 Publications by Boyle containing auto-catalogues include *Essays [...] of Effluviiums* (1673), *The Excellency of Theology* (1674), and *Medicinal Experiments* (1693). *A Catalogue of the Philosophical Books and Tracts Written by the Honourable Robert Boyle* appeared as a separate title in 1689. See also Boyle, *Works*, vol. 14, which prints seventeen diverse 'Lists of Boyle's Unpublished Writings, 1650–1744', pp. 327–358.
  - 30 See Anne-Pascale Pouey-Mounou and P. J. Smith, eds., *Early Modern Catalogues of Imaginary Books* (Leiden: Brill, 2019), especially the editors' introduction and essay-editions by Ronnie Ferguson (pp. 230–256) and Claudine Nédelec (pp. 215–229); for an edition and commentary on Donne's 'Courtier's Library' see Piers Brown, "'Hac ex consilio meo via progredieris': Courtly Reading and Secretarial Mediation in Donne's *The Courtier's Library*", *Renaissance Quarterly* 61 (2008): 833–866.
  - 31 For example, Ronnie Ferguson, ed., 'Sir Thomas Urquhart's Translation (1653) of Rabelais's Imaginary Library of St. Victor (1542)', in *Early Modern Catalogues of Imaginary Books*, pp. 240–248: [12] 'Ars honeste fartandi in societate, per Marcum Corvinum' and [25] 'Tartaretus de modo cacandi'; Brown, 'Courtier's Library', pp. 861–863: '9. What you please out of what you please; Or the art of decyphering and finding some treason in any intercepted letter, by Philips' and '25. The Spiritual Art of Enticing Women, or Egerton's Sermons Beneath Undergarments'; and 'Catalogue of the Books of Mithophilact' in *Scarron's City Romance, Made English* (1671, mis-titled translation of Furetière's *Roman bourgeois*), pp. 221–224: 'A Treatise of Chiromancy, for the hands of Apes, a Work neither seen nor once imagined before', and 'Rubricology, or the Art of Inventing Titles; Demonstrating, That a handsome Title is the best Broker to make a Book sell'.
  - 32 Swift, *CE*, vol. 1, p. 169.
  - 33 *Ibid.*, pp. 174–175.
  - 34 *Ibid.*, p. 173.
  - 35 Swift, *Poems*, vol. 1, pp. 203–204; cf. 'The Beasts Confession' (vol. 1, p. 605), line 135, 'He scorns to make his Art a Trade.'

- 36 Swift to Bolingbroke, 30 December 1719, Swift, *Corr.* vol. 2, p. 317; cf. Pope to Strafford, 6 July 1725, *Corr.* vol. 2, p. 309, 'I have long been convinced that [no] publick Professors of Gardening, (any more than any publick Professors of Virtue) are equal to the Private Practisers of it'. Thanks to Marcus Walsh for the second reference.
- 37 See *Essay on Criticism*, lines 74–75, in Pope, *TE*, vol. 1, p. 247; cf. Dennis's remark that Pope's couplet rehearses 'the common Subject that Pedants give their Boys to make Themes and Declamations upon', in Dennis, *Works*, vol. 1, p. 404.
- 38 Swift, *CE*, vol. 1, pp. 40, 110, 129; 156–158, 160, 164.
- 39 For a fanciful anecdote from Pope about Swift's habits of deletion/inscription see Swift, *Corr.* vol. 1, p. 646.
- 40 Daniel Defoe, *Present State of the Parties in Great Britain* (1712), p. 323.
- 41 *Spectator*, vol. 2, pp. 428–432 (no. 239, 4 December 1711), at 431
- 42 *Ibid.*, vol. 3, pp. 95–100, at 97–98 (no. 305, 19 February 1712); for de Torcy's political academy and Bolingbroke's participation see Nick Childs, *A Political Academy in Paris 1724–1731: The Entresol and Its Members* (Oxford: Voltaire Foundation, 2000), pp. 87–96, 97–100.
- 43 For abbreviating punctuation as a sign of modernity in Addison and Swift see Anne Toner, *Ellipsis in English Literature: Signs of Omission* (Cambridge University Press, 2015), pp. 57–64.
- 44 John Arbuthnot, *Proposals for Printing a Very Curious Discourse, in Two Volumes in Quarto, Intituled, Pseudologia Politikē; or, a Treatise of the Art of Political Lying, with an Abstract of the First Volume of the said Treatise* (1712); for an attempt to link the Proposal with Pope's *Peri Bathous* see Conal Condren, *Satire, Lies, and Politics: The Case of Dr Arbuthnot* (Basingstoke: Macmillan, 1997), appendix b, 168–175.
- 45 For the theme of the artist besieged by audience in Horace, Boileau and 'Arbuthnot' see Elias F. Mengel, 'Pope's Imitation of Boileau in Arbuthnot', *Essays in Criticism* 38 (1988): 295–307, at 296–297.
- 46 Swift, *CE*, vol. 1, p. 176.
- 47 William King, *The Art of Cookery, in Imitation of Horace's Art of Poetry* (1708), p. 105.
- 48 Pope, *TE*, vol. 1, p. 240 (part 1, lines 13–14).
- 49 For a summary of Plato on technical knowledge (and Socrates on its inadequacy) see Paul Woodruff, 'Plato's Early Theory of Knowledge', in *Epistemology*, ed. S. Everson, *Companions to Ancient Thought*, vol. 1 (Cambridge University Press, 1990), pp. 60–84, at 68–77; for Aristotle on the integrity of internal ends in arts see Eugene Garver, *Aristotle's Rhetoric: An Art of Character* (University of Chicago Press, 1994), pp. 18–51 and 209–13.
- 50 Pope, *TE*, vol. 1, p. 271, lines 285–288.
- 51 See Roger D. Lund, 'The Eel of Science: Index Learning, Scriblerian Satire, and the Rise of Information Culture', *Eighteenth-Century Life*, 22 (1998), pp. 18–42; David Allan, *Commonplace Books and Reading in Georgian England* (Cambridge University Press, 2010), pp. 52–54.

- 52 Pope, *TE*, vol. 1, p. 245, lines 60–61.
- 53 Swift, *CE*, vol. 1, p. 84.
- 54 D. W. Jefferson, 'Tristram Shandy and the Tradition of Learned Wit', *Essays in Criticism* 1 (1951): 225–248.
- 55 Burton, *Anatomy*, vol. 1, p. 3; cf. Thomas Fuller's character of the 'Universal Artist', using Burton's tag, in *The Holy State* (1642), pp. 72–75 at 72.
- 56 Pope in conversation with Spence, *Anecdotes*, vol. 1, p. 56.
- 57 'An Elegy on Mr. *Patrige*, the Almanack-maker', Swift, *Poems*, vol. 1, pp. 97–101, lines 19–22.
- 58 'Vanbrug's House' (1703 MS draft), Swift, *Poems*, vol. 1, pp. 78–81, lines 59–60.
- 59 See 'The History of Vanbrug's House' (1706 version) and 'V—'s House *Built from the Ruins of White-Hall that was Burnt*' (1708 revision), Swift, *Poems*, vol. 1, pp. 85–88, 105–110.
- 60 King, *Art of Cookery*, p. 123; cf. Horace, *Ars poetica*, lines 408–418.
- 61 Joseph Addison, *Spectator*, vol. 3, pp. 58–64, at 64 (no. 297, 9 February 1712).
- 62 Swift, *CE*, vol. 15, pp. 265–266.
- 63 'Heads for a Treatise upon Learning', in Prior, *Works*, vol. 1, pp. 578–586, at 584.
- 64 For the separation (and slippage) between the banausic *techne* arts mastered through learned skill and aristocratic *praxis* arts mastered through the ethical traits of courage, perseverance and virtue see Pamela O. Long, *Openness, Secrecy, Authorship: Technical Arts and the Culture of Knowledge from Antiquity to the Renaissance* (Johns Hopkins University Press, 2001), pp. 16–45, especially 17–20; cf. Alison Burford, *Craftsmen in Greek and Roman Society* (Cornell University Press, 1972), pp. 82, 89.
- 65 In doing so it may be that they are following the example of Jean de La Bruyère, who wrote in *Les Caractères*, ed. Marc Escola (Paris: Champion, 1999), of criticism as a 'métier [...] pas une science' ('Des ouvrages de l'esprit', 63); cf. 'De La Chaire', 23 on the absurdity of writing without 'apprenticeship' in the trade, and 'Des jugements' 20, the character of 'Eurypyle'.
- 66 Prior, *Works*, vol. 1, p. 585.
- 67 'Peri Bathous', Pope, *Prose*, vol. 2, pp. 171–276, at 189.
- 68 For the penetration of the virtuosos's 'curious sight' into the 'privatest recess of [Nature's] imperceptible littleness' see Abraham Cowley, 'To the Royal Society', stanza 7, in *Poems*, ed. A. R. Waller (Cambridge University Press, 1905), p. 451; for the rehabilitation of *curiosité* see William Eamon, *Science and the Secrets of Nature* (Princeton University Press, 1994), pp. 314–318.
- 69 Steven Zwicker, *Lines of Authority: Politics and English Literary Culture, 1649–1689* (Cornell University Press, 1993), pp. 60–89, at 67, notes there is no edition of *The Compleat Angler* 1676 and Moses Browne's bowdlerised version of 1750, but Walton's bibliographers (see Rodolphe L. Coigne, *Izaak Walton: A New Bibliography, 1653–1987* [New York: Cummins, 1989]) ignore

- the recycling of Walton's text through this period in compilations like Cox's *Gentleman's Recreation. In Four Parts* (1694) and Blome's *Gentleman's Recreation. In Two Parts* (1686).
- 70 Isaac Walton, *The Compleat Angler, 1653–1676*, ed. Jonquil Bevan (Oxford: Clarendon Press, 1983), p. 304; cf. *Ibid.* 170–171 for the analogy in this respect between books on fishing and those on fencing.
  - 71 Gay, *Poetry and Prose*, vol. 1, p. 139, book 1, lines 149–153.
  - 72 *Ibid.*, p. 152, book 2, lines 301–306.
  - 73 *Ibid.*, p. 167, book 3, lines 255–258.
  - 74 Swift, *PW*, vol. 4, p. 12, on young wits from Oxford imitating the French *moraliste* style, 'This they call *knowing the World*, and *reading Men and Manners*'.
  - 75 Gay, *Poetry and Prose*, vol. 1, p. 137, book 1, lines 81–82; vol. 1, p. 155, book 2, lines 405–6; vol. 1, p. 156, book 2, line 475; for a different ambiguous usage see 'V—'s House', Swift, *Poems*, vol. 1, p. 108, lines 75–78, '[Jove] spake, and grudging, lent his Ayd; | Th' experience't Bricks that knew their Trade, | (As being Bricks at Second Hand,) | Now move, and now in Order Stand.'
  - 76 *Oxford Francis Bacon*, vol. 11, p. 159 (aphorism 101).
  - 77 See Bennett, 'The Mechanics' Philosophy', pp. 1–28; but for a sceptical account of John Evelyn's Baconianism see Michael Hunter, 'John Evelyn in the 1650s: A Virtuoso in Quest of a Role', in *John Evelyn's 'Elysium Britannicum' and European Gardening*, ed. Therese O'Malley and Joachim Wolschke-Bulmahn (Washington: Dumbarton Oaks, 1998), pp. 79–106, at 87–88.
  - 78 Gay, *Poetry and Prose*, vol. 1, p. 160, book 2, lines 589–590.
  - 79 King, *Art of Cookery*, 24–5.
  - 80 'Life of Pericles', tr. Adam Littleton, in *Plutarch's Lives Translated from the Greek by Several Hands*, ed. John Dryden, 5 vols. (1683–1686), vol. 1, pp. 497–595, at 500–501; for Plutarch on *techne* and *praxis* see Long, *Openness, Secrecy, Authorship*, pp. 77–78.
  - 81 Gay, *Poetry and Prose*, vol. 1, pp. 147–148, book 2, lines 152–153.
  - 82 *Ibid.*, pp. 147, 148–149, book 2, lines 143, 187–188.
  - 83 *Ibid.*, p. 149, book 2, lines 217–220.
  - 84 David Nokes, *John Gay: A Profession of Friendship* (Oxford University Press, 1995), pp. 161–168.
  - 85 Swift to Gay, 12 June 1714, Swift, *Corr.*, vol. 1, p. 615.
  - 86 Gay to Arbuthnot or Swift, 16 August 1714, Gay, *Letters*, pp. 13–14; cf. *Craftsman* no. 65, vol. 2, pp. 144–145, for an essay derived from de Wicquefort and de Calliers on the dangers of practicing 'the Art of Tricking' in politics.
  - 87 There are verbal echoes that confirm Gay's borrowing from *Spectator* 305 – the phrase 'young Machivillians' appears in both essay (as 'young Machiavils') and letter, see *Spectator*, vol. 3, p. 99; the *Académie politique* survived from 1712–1720, see Joseph Klaitz, 'Men of Letters and Political Reform in France at the End of the Reign of Louis XIV: The Founding of the Académie Politique', *Journal of Modern History* 43 (1971): 577–597.

- 88 Michael P. Fitzsimmons, *The Place of Words: The Académie Française and Its Dictionary during an Age of Revolution* (Oxford University Press, 2017), pp. 8–9.
- 89 19 February 1712, *Spectator*, vol. 3, pp. 98–99; for a later elaboration of Addison's skit see *Craftsman* no. 170, Nicholas Amhurst's project for a 'Protestand political academy', *Craftsman*, vol. 5, pp. 140–145.
- 90 Swift, *CE*, vol. 9, p. 392.
- 91 *Ibid.*, vol. 2, p. 136.
- 92 *Ibid.*, vol. 9, p. 228 (22 June 1711); Swift to King, 12 July 1711, Swift, *Corr.*, vol. 1, p. 362.
- 93 Swift, *CE*, vol. 1, p. 26; it is evident that Swift has Richelieu's academy in mind here from a final layer of reference. He borrows in turn from Sir William Temple's discussion of 'the Academy set up by Cardinal Richelieu to amuse the wits of that age and country' in 'Of Poetry', *Five Miscellaneous Essays*, ed. Samuel H. Monk (University of Michigan Press, 1950), pp. 197–198.
- 94 The embryo of this idea may be the 'Art of *Political Wagering*' mentioned in *A Tale of a Tub*, Swift, *CE*, vol. 1, p. 84; the possibility that this 'Art' may be linked to Petty's researches into mathematical probability is explored in R. C. Olson, 'Swift's Use of the Philosophical Transactions in Section V of *A Tale of a Tub*', *Studies in Philology* 49 (1952): 459–467, at 462–463.
- 95 Swift, *Examiner*, pp. 19–26 (no. 15, 9 November 1710), at p. 23.
- 96 Edward Ward, *The Secret History of Clubs* (1709), pp. 221–223, at 221; the verses do not appear in Ward's earlier *History of London Clubs, or, the Citizen's Pastime* [...] *Part I* (1709), which claims that of 'all the unlawful Societies or Clubs [...] the Lying one ought to have the Preference; because it is the Spring and Fountain from whence all the rest have their very being', p. 2.
- 97 See Montaigne, *Essays*, '1:9 On Liars', p. 34; *ODEP*, p. 457 (L219).
- 98 Swift, *Examiner*, p. 23.
- 99 *The Medley* no. 8, 20 November 1710, in Swift, *Examiner*, p. 43; another Whig paper, *The Observer*, dedicated space to answering *The Examiner* from 1 November and focused on *Examiner* no. 15 over two issues between 8 and 15 November 1710.
- 100 *Plain Dealer*, 12 July 1712, p. 2; a similar advertisement appeared in *Plain Dealer*, 5 July 1712; the seventeen issues of the 1712 *Plain Dealer* appear in *Miscellaneous Works of Dr. William Wagstaffe* (1726).
- 101 *Journal to Stella*, 9 October 1712, Swift, *CE*, vol. 9, p. 449.
- 102 Arbuthnot, *Pseudologia Politikē*, p. 3; though possibly a typographical error, the reading '*Eucyclopædia*' is maintained in volume 2 of the *Pope-Swift Miscellanies* (1727), p. 299, so it is retained here.
- 103 Arbuthnot, *Pseudologia Politikē*, p. 7.
- 104 Swift, *CE*, vol. 9, p. 449.
- 105 No. 457, 14 August 1712, *Spectator*, vol. 4, p. 114.
- 106 Pope to Gay, 23 October [?], *Corr.*, vol. 1, p. 195.

- 107 Spence, *Anecdotes*, vol. 1, p. 56 (no. 135).
- 108 Swift, *Corr.*, vol. 3, p. 92.
- 109 See Simon Varey, 'The Publication of the Late Craftsman', *Library*, 5th ser., 33 (1978): 230–233.
- 110 *Craftsman*, vol. 1, p. 6.
- 111 Philip Dormer Stanhope, fourth Earl of Chesterfield, *Characters of Eminent Personages* (1777), pp. 18–19; J. H. Plumb writes (without direct reference to Chesterfield) of 'the same technical competence, the same clarity, the same simplicity [...] Walpole's abilities were most clearly recognized in his political *expertise*; in the dexterity with which he managed the House of Commons', *Sir Robert Walpole: The King's Minister*, 2 vols. (London: Cresset Press, 1960), vol. 2, pp. 234, 2, with Plumb's emphasis.
- 112 'An Account of the Court of the Empire of Japan', Swift, *PW*, vol. 5, p. 101.
- 113 *Craftsman*, vol. 1, p. 6.
- 114 *Ibid.*, p. 44.
- 115 *Ibid.*, p. 50.
- 116 *Ibid.*, vol. 3, p. 92.
- 117 *Ibid.*, p. 93.
- 118 See Cicero, *Pro Cnaeo Plancio*, 62, used as the epigram for *Craftsman*, no. 99.
- 119 *Craftsman*, vol. 2, pp. 12–15, signed 'D', so probably by Amhurst.
- 120 *Craftsman*, vol. 3, pp. 190–195, signed 'R', assigned tentatively to Gay or Pope in Simon Varey, ed., *Contributions to The Craftsman* (Oxford: Clarendon Press, 1982), p. xxvi.
- 121 *Craftsman*, vol. 1, pp. 91, 182; vol. 2, p. 78.
- 122 See Foxon, *Pope and the Book Trade*, p. 107; the other Pope-patronised poems included Lord Lyttelton's *Epistle to Mr Pope* (1730) and James Miller's *Harlequin Horace* (1731).
- 123 Pope, *Corr.*, vol. 3, p. 173.
- 124 James Bramston, *The Art of Politicks, in Imitation of Horace's Art of Poetry* (1729), p. 39.
- 125 For Anne taking her motto 'Semper Eadem' from Elizabeth I see James A. Winn, *Queen Anne, Patroness of Arts* (Oxford University Press, 2014), p. 251.
- 126 Bramston, *Art of Politicks*, p. 8.
- 127 *Ibid.*, p. 41.
- 128 Pope, *Corr.* vol. 2, p. 468.
- 129 Spence, *Anecdotes*, vol. 1, p. 57 (no. 138); cf. 'Peri Bathous', *Prose*, vol. 2, p. 186; for 'Necessity' and 'Usefulness' see p. 190.
- 130 For *Gulliver's Travels*' rival claim to be the earliest Scriblerian publication see *Memoirs of Scriblerus*, pp. 48–53 – though *Gulliver* cannot be described as a collaborative work.
- 131 Evidence that word of the Scriblerus projects leaked to the public between 1714 and 1727 can be found in the spurious *Memoirs of the Life of Scriblerus* (1722/3); the notice in the *Monthly Catalogue, Being an Exact Account of all Books and Pamphlets Published* for March 1723 to the *Memoirs of the Life of*



*Joachin Scriblerus, and his Seven Sons* [...] written by Dr. S—t, probably refers to this satire.

- 132 Arbuthnot to Swift, 26 June 1714, Swift, *Corr.* vol. 1, pp. 625–626; Pope reported that *Peri Bathous* was ‘in great forwardness’ on 30 June 1727 and ‘ready’ by 28 December 1714. Pope, *Corr.*, vol. 2, pp. 439; Swift, *Corr.*, vol. 3, p. 150.
- 133 Even the wily Benjamin Motte was flummoxed by Pope’s machinations; see Motte to Swift, 31 July 1735, Swift, *Corr.*, vol. 4, p. 153.
- 134 See Pope, *Prose*, vol. 2, pp. 186–187, where the ‘Lowlands of Parnassus’ passage is drawn from Swift’s ‘Battel of the Books’, *CWJS*, vol. 1, pp. 144–145; pp. 190, where the ‘hang on lead’ image is from Swift’s ‘Weights so heavy to their Heels’, *CWJS*, vol. 1, p. 21; p. 189, where ‘peccant’, ‘purulent’ and ‘Evacuation’ are from *Gulliver’s Travels* III.vi (*CWJS*, vol. 15, p. 276) and IV.vi (*CWJS*, vol. 15, pp. 378–379).
- 135 See *Miscellanies in Four Volumes* (printed for Charles Bathurst, 1742), vol. 2, ‘Contents’, lists the ‘Art of Sinking’ as ‘By Dr. ARBUTHNOT and Mr. POPE’.
- 136 Pope, *Corr.* vol. 2, p. 468.
- 137 Leonard Welsted and James Moore Smythe, *One Epistle to Mr. A. Pope* (1730), p. vii; Pope, *TE*, vol. 4, p. 95.
- 138 With this caveat I follow the arguments made by Gregory Lynall in *Swift and Science: The Satire, Politics and Theology of Natural Knowledge, 1690–1730* (Houndmills: Palgrave Macmillan, 2012), *passim*, and pp. 14–16.
- 139 *Pseudologia Politikē* ch. 1 (on nature of soul of man) corresponds with *Peri Bathous* ch. 2 (on bathos as natural to taste of man); *PP* ch. 2 (on political lying as true art) with *PB* ch. 4 (on bathos as true art); *PP* ch. 5 (on species and classes of lies) with *PB* ch. 6 (on kinds of different genius in bathos); *PP* ch. 8 (project for society of lying) with *PB* ch. 13 (project for society for the advancement of bathos).
- 140 Edward Hyde, Earl of Clarendon, *A Brief View and Survey of the Dangerous and Pernicious Errors in Mr. Hobbes’s book, entitled Leviathan* (Oxford, 1676), p. 61; Thomas Hobbes, *Elements of Philosophy* (1656), p. 104; cf. Hobbes, *CE*, vol. 4, p. 104, ‘naturall wit, consisteth principally in [...] Celerity of Imagining, (that is, swift succession of one thought to another)’.
- 141 William Whiston, *A New Theory of the Earth [...] with a Large Introductory Discourse concerning [...] the Mosaick history of the Creation* (1696), pp. 232–233, 245–247, 255.
- 142 Arbuthnot, *Mathematical Learning*, p. 21; for Arbuthnot’s hostility to Whiston, Burnet and John Woodward see Lester M. Beattie, *John Arbuthnot: Mathematician and Satirist* (New York: Russell and Russell, 1935) pp. 203, 215–216; see also Arbuthnot to Swift, 17 July 1714, Swift, *Corr.*, vol. 2, pp. 11–12, for Whiston spoiling a planned Scriblerus project by publishing something more ridiculous than the intended satire.
- 143 John Arbuthnot, *An Essay Concerning the Effects of Air on Human Bodies* (1733), pp. 30, 75.
- 144 Arbuthnot, *Mathematical Learning*, p. 48.

- 145 Pope, *Prose*, vol. 2, p. 224.
- 146 Ibid., p. 224.
- 147 William Petty, *Another Essay on Political Arithmetick* (1682), pp. 36–37.
- 148 Arbuthnot praises Petty's political arithmetic in *Mathematical Learning*, pp. 31–32.
- 149 Pope, *Four Book Dunciad*, pp. 363–364; this narrative was first set out in the dedication to Richard Savage's *Collection of Pieces [...] Published on the Occasion of the Dunciad* (1732), attributed by Samuel Johnson (probably on Savage's authority) to Pope in Johnson, *Lives*, vol. 4, pp. 32–33.
- 150 Pope, *Prose*, vol. 2, pp. 190–191.
- 151 Ephraim Chambers, *Cyclopædia: or, an Universal Dictionary of Arts and Sciences*, 2 vols. (1728), i. 143 *q.v.* 'ART'; *q.v.* 'FLYING' and 'DIVING'.
- 152 Maximillian E. Novak, *Daniel Defoe: Master of Fictions* (Oxford University Press, 2001), p. 95.
- 153 Another friend of Arbuthnot, the physician Richard Mead, mentions Halley's diving experiments in *A Short Discourse concerning Pestilential Contagion* (1720), p. 44, 'and breathing an Air much more condensed than the natural, he observed himself to breathe more slowly than usual'; for a popular account of Halley's diving experiments contemporary with *Peri Bathous* see Ephraim Chambers, *Cyclopaedia*, 2 vols. (1728), vol. 1, 'Diving'; for Arbuthnot's friendships with Halley and Mead see Beattie, *Arbuthnot*, pp. 8–17, 242–262.
- 154 *Four Book Dunciad*, p. 191, book 2, line 281; p. 101, book 1, line 28.
- 155 Pope, *Prose*, vol. 2, p. 196.
- 156 *Spectator*, vol. 1, p. 2 (no. 1, 1 March 1711); *OED* also gives *Tatler*, vol. 2, p. 228, no. 123 (by Addison, 21 January 1710): 'I look upon the Passion which I saw in this unhappy People to be of the same Nature with those unaccountable Antipathies which some Persons are born with.'

#### **Chapter 4. Anthropologies of the Mechanical Arts: *Robinson Crusoe* and *Gulliver's Travels***

- 1 Pope, *Dunciad Four Books*, pp. 110, 169–170; Pope, *Prose*, vol. 2, p. 197; Pope found later that the first half of *Robinson Crusoe* was 'good' (Spence, *Anecdotes*, vol. 1, p. 213).
- 2 Swift referred to Defoe in *A Letter Concerning the Sacramental Test* (1709) as 'the Fellow that was pilloried, I have forgot his Name' (Swift, *PW*, vol. 2, p. 113).
- 3 See comments by Jonathan Smedley, Sir Walter Scott and William Monck Mason excerpted in *Swift: The Critical Heritage*, ed. Kathleen Williams (London: Routledge, 1970), pp. 91, 299–300 and 339–40.
- 4 Swift, *CE*, vol. 1, pp. 34–39.
- 5 Ibid., vol. 1, p. 68; cf. 106, 171.
- 6 Defoe, *Satire*, vol. 3, p. 52.

- 7 For example, Defoe copied Harris's entry on compasses directly into *A History of Discoveries and Improvements* (1725–1726), Defoe, *Travel*, vol. 4, pp. 186–190 (and see note on 322); see also *Didactic Writings*, vol. 7, p. 54; it should be noted, however, that Harris had himself copied these passages from Robert Boyle.
- 8 Defoe, *Satire*, vol. 3, p. 65.
- 9 *Ibid.*, vol. 3, p. 31; cf. pp. 51, 69–70.
- 10 *Examiner*, p. 35 (16 November 1710); there is no direct evidence, however, that Swift identified the author of *The Review* as the author of *The Consolidator*.
- 11 Defoe, *Review*, vol. 7.2, p. 521–522 (16 December 1710).
- 12 Jan de Vries selects Defoe as laureate of his 'Industrious Revolution'. See 'The Industrial Revolution and the Industrious Revolution', *Journal of Economic History* 54 (1994): 249–270, at 258.
- 13 Defoe, *Economic Writings*, vol. 8, p. 41; see *Tour* on knitting frames in Nottingham and Leicester, *Travel*, vol. 3, pp. 19, 53.
- 14 Defoe, *Economic Writings*, vol. 8, p. 183.
- 15 Defoe, *Travel*, vol. 4, p. 179.
- 16 *Ibid.*, vol. 4, p. 196.
- 17 Defoe, *Economic Writings*, vol. 7, p. 294; see also the last pamphlet published in his lifetime, Defoe, *A Brief State of the Inland or Home Trade, of England* (1730), p. 6.
- 18 Defoe, *Economic Writings*, vol. 7, p. 282; the aphorism had appeared in Defoe's *Hymn to the Pillory* (1703), *Satire*, vol. 1, p. 243, and follows similar formulations in *Essay on Projects* ('I account that more properly an improvement', *Economic Writings*, vol. 8, p. 41).
- 19 Virginia Woolf, 'Robinson Crusoe', in *The Collected Essays of Virginia Woolf*, 4 vols. (London: Hogarth Press, 1966–1967), vol. 1, pp. 69–75, at 74.
- 20 Cynthia S. Wall, *The Prose of Things: Transformations of Description in the Eighteenth Century* (University Press of Chicago, 2006), p. 112.
- 21 Ilse Vickers, *Defoe and the New Sciences* (Cambridge University Press, 1996), p. 127.
- 22 Defoe, *Novels*, vol. 1 p. 58; cf. *Ibid.*, vol. 2, p. 8.
- 23 *Ibid.*, vol. 1, p. 68.
- 24 Defoe, *Didactic Writings*, vol. 8, p. 36.
- 25 Defoe, *Novels*, vol. 1, p. 110.
- 26 Defoe, *Economic Writings*, vol. 7, p. 128; for a similar statement see *Didactic Writings*, vol. 6, p. 48.
- 27 Defoe, *Novels*, vol. 1, pp. 221, 107–108.
- 28 *Ibid.*, vol. 1, p. 163.
- 29 See *Plan of the English Commerce*, in *Economic Writings*, vol. 7, p. 144, 'in Russia and Muscovy [...] they had no other Way to cut out a large Plank, but by felling a great Tree, and then with a multitude of Hands and Axes hew away all the Sides of the Timber, till they reduc'd the middle to one large Plank'.

- 30 Defoe, *Review*, vol. 3.1, p. 13 (3 January 1706).
- 31 *Ibid.*, vol. 8.1, p. 89 (1 May 1711).
- 32 Defoe, *Didactic Writings*, vol. 7, p. 37 (the passage is quoted in *OED*, 'Fund', n. 6).
- 33 Defoe, *Novels*, vol. 1, pp. 145–146, 156; see also 163 ('a very ugly clumsy thing'), 168 ('a most barbarous Shape').
- 34 *We Have Never Been Modern*, p. 7.
- 35 Nigel Thrift, 'Afterwords', in *Non-Representational Theory: Space, Politics, Affect* (Abingdon: Routledge, 2008), p. 112.
- 36 Neil Chudgar, 'Swift's Gentleness', *ELH* 78 (2011): 137–161, at p. 141; see also Kristin Gerten, 'Mingling with Matter: Tactile Microscopy and the Philosophic Mind in Brobdingnag and Beyond', *Eighteenth Century: Theory & Interpretation* 54 (2013): 497–520; Chudgar and Gerten respond to a perceived passing-over of Gulliver's sense-world in Carol Houlihan Flynn, *The Body in Swift and Defoe* (Cambridge University Press, 1990).
- 37 Swift, *CE*, vol. 15, p. 29; cf. p. 330, where Gulliver fails in Crusoeian style to learn 'the Lesson of knowing when I was well' (Swift, *PE*, vol. 10, p. 90).
- 38 Defoe, *Novels*, vol. 1, p. 68; cf. Swift, *CE*, vol. 15, p. 30, 'My Father now and then sending me small Sums of Money, I laid them out in learning Navigation, and other Parts of the Mathematicks'; in *Gulliver Decypher'd* (1727) an early reader of Swift noticed how the technical vocabulary Swift uses to describe the storm at the beginning of Part II (pp. 118–119) is reminiscent of *Robinson Crusoe*.
- 39 Swift, *CE*, vol. 15, pp. 351, 416.
- 40 *Ibid.*, vol. 15, p. 429; the word 'uncouth' perhaps echoes Defoe, *Novels*, vol. 1, p. 245: '[They] were ten times more confounded when they saw me, and the uncouth Figure that I made.'
- 41 Swift, *CE*, vol. 15, p. 34.
- 42 *Ibid.*, vol. 15, p. 39.
- 43 *Ibid.*, vol. 15, p. 57.
- 44 William Shakespeare, *The Taming of the Shrew*, ed. Brian Morris (London: Methuen, 1981), act 1, scene 2, line 111, page 189; see Wayne A. Rebhorn, 'Petruchio's "Rope Tricks": *The Taming of the Shrew* and the Renaissance Discourse of Rhetoric', *Modern Philology* 92 (1995): 294–327.
- 45 Swift, *CW*, vol. 15, pp. 58–59; cf. Swift's friend Matthew Prior, who writes, 'Round ORMOND's Knee Thou ty'st the Mystic String, | That makes the Knight Companion to the King' (*Carmen Seculare*, in Prior, *Works*, vol. 1, p. 175).
- 46 Swift, *CE*, vol. 15, p. 40.
- 47 For anthropological perspectives on thread technology and writing see Tim Ingold, *Lines: A Brief History* (London: Routledge, 2007), pp. 120–151.
- 48 *Spectator*, vol. 3, p. 522.
- 49 See Chloe Wigston Smith, *Women, Work, and Clothes in the Eighteenth-Century Novel* (Cambridge University Press, 2013), pp. 34–36, 65–73.

- 50 Swift, *CE*, vol. 15, p. 135.
- 51 *Ibid.*, vol. 15, pp. 82, 413.
- 52 *Ibid.*, vol. 15, pp. 416, 424.
- 53 For handkerchiefs see Swift, *CW*, vol. 15, pp. 55, 59–60, 127, 129, 131, 161, 174, 207, 224, 353.
- 54 Swift, *CE*, vol. 15, pp. 39–40.
- 55 It is recalled at the end of Part I when Gulliver escapes by the good fortune – mechanical expertise has nothing to do with it – of finding a boat, a set of paddles for which ‘cost me ten Days making’, p. 108.
- 56 *Plutarch’s Lives*, trans. Bernadotte Perrin, 11 vols. (Harvard University Press, 1961), vol. 5, p. 473.
- 57 Swift, *CE*, vol. 15, p. 75.
- 58 Bruno Latour, ‘The Force and the Reason of Experiment’, in *Experimental Inquiries: Historical, Philosophical and Social Studies of Experimentation in Science*, ed. H. E. Le Grand (Dordrecht: Kluwer, 1990), pp. 49–80, at 50.
- 59 For a direct reference to Abraham Bose’s ‘Picture of *Hobbes’s Leviathan*’ see Swift, ‘Mechanical Operation’, *CW*, vol. 1, p. 179; for Swift with Thomas Hobbes and Latour see Jonathan Lamb, *The Things Things Say* (Princeton University Press, 2011), p. 144, and Latour, *We Have Never Been Modern*, pp. 15–35.
- 60 Cassius Dio, *Roman History*, tr. Earnest Cary, 9 vols. (Harvard University Press, 1914–1927), vol. 9, p. 189.
- 61 Melchisédech Thévenot, *The Art of Swimming* (1699), sig. A10<sup>v</sup>–A11<sup>r</sup>.
- 62 Swift, *CE*, vol. 15, p. 74.
- 63 *Swift Library*, vol. 1, pp. 530–531; vol. 2, pp. 1467–1469; e.g., Swift, *Examiner*, pp. 192, 334.
- 64 See Kevin Greene, ‘Attitudes to Invention and Innovation in Greek and Roman Writers’, in *Oxford Handbook of Engineering and Technology in the Classical World*, ed. John Peter Oleson (Oxford University Press, 2009), pp. 801–802.
- 65 Swift, *CE*, vol. 15, p. 92.
- 66 *Ibid.*, vol. 15, p. 148.
- 67 *Ibid.*, vol. 15, p. 195.
- 68 John Arbuthnot, *Essay on the Usefulness of Mathematical Learning* (Oxford, 1701), p. 3; see Bernard de Fontenelle, ‘The Usefulness of Mathematical Learning’, in *Miscellanea Curiosa*, ed. Edmond Halley, 3 vols. (1708), vol. 1, sigs A4<sup>r</sup>–A8<sup>v</sup>; and Swift, *CW*, vol. 1, pp. 157, 496.
- 69 Swift, *CE*, vol. 15, p. 255; for the false ‘Analogy’ between mathematics and politics see p. 23.
- 70 *Ibid.*, vol. 15, p. 266.
- 71 *Ibid.*, vol. 15, p. 256.
- 72 *Ibid.*, vol. 15, p. 270.
- 73 Sprat, *History*, p. 245.

- 74 Swift, *CE*, vol. 15, p. 266; see R. H. Syfret, 'Some Early Critics of the Royal Society', *Notes and Records of the Royal Society of London* 8 (1950): 20–64, at 38–41, 45.
- 75 Swift, *CE*, vol. 15, p. 268.
- 76 For the closest matches see Martin Gierl, 'Science, Projects, Computers and the State: Swift's Lagadian and Leibniz's Prussian Academy', in *The Age of Projects*, ed. Maximillian E. Novak (University of Toronto Press, 2008), pp. 306–310; Nicholson proposes no parallel for the language machine in 'Scientific Background'.
- 77 Michael Hunter, *Science and Society in Restoration England* (Cambridge University Press, 1981), pp. 75–77, and Paolo Rossi, *The Birth of Modern Science*, tr. Cynthia de Nardi Ipsen (Oxford: Blackwell, 2000), pp. 15–17.
- 78 Robert Hooke, *Micrographia: or Some Physiological Descriptions of Minute Bodies made by Magnifying Glasses* (1665), sig. B2v.; see also Sprat, *History*, pp. 74–75; Joseph Glanvill, *Plus Ultra, or, The Progress and Advancement of Knowledge* (1668), pp. 52–53; and William Wotton, *Reflections upon Ancient and Modern Learning* (1697), pp. 184–198.
- 79 Wotton, *Reflections*, p. 185.
- 80 For travel and industrial reportage see Francis Bacon, 'Letter from Thomas Bodley' and 'Of Travel', in *Amazons, Savages, and Machiavels: Travel and Colonial Writing in English, 1550–1630: An Anthology*, ed. Matthew Dimmock and Andrew Hadfield, 2nd ed. (Oxford University Press, 2001), pp. 21, 22.
- 81 See Robert Markley, "'Land enough in the World": Locke's Golden Age and the Infinite Extensions of "Use"', *South Atlantic Quarterly* 98 (1999): 817–837.
- 82 Defoe, *Novels*, vol. 2, p. 144.
- 83 Swift, *CE*, vol. 15, pp. 412–413.
- 84 See Gottfried Semper, 'Style in the Technical and Techtonic Arts', in *The Four Elements of Architecture and Other Writings*, trans. H. F. Mallgrave and W. Herrman (Cambridge University Press, 1989), pp. 218–219.
- 85 Joseph Moxon, *Mechanick Exercises: Or, The Doctrine of Handyworks* (1677), vol. 1, A4<sup>r</sup>; *Swift Library*, vol. 2, p. 1298.
- 86 Locke, *Essay*, p. 646.
- 87 Defoe, *Novels*, vol. 1, pp. 84, 97.
- 88 Swift, *CE*, vol. 15, p. 389.
- 89 *Ibid.*, vol. 15, pp. 416–417.
- 90 *Ibid.*, vol. 15, p. 92.
- 91 Defoe, *Novels*, vol. 1, p. 110.
- 92 Swift, *CE*, vol. 15, p. 265.
- 93 Swift, *CW*, vol. 14, pp. 148–149.
- 94 Swift, *CE*, vol. 15, pp. 266, 269.
- 95 Margaret Anne Doody, 'Insects, Vermin and Horses: *Gulliver's Travels* and Virgil's *Georgics*', in *Augustan Studies*, ed. Douglas Lane Patey and Timothy Keegan (Delaware University Press, 1985), pp. 145–174.
- 96 *Ibid.*, p. 152.



## Chapter 5. Ingenuity, Industry, Experience: Eighteenth-Century Georgic

- 1 *Spectator*, vol. 2, pp. 467–468 (no. 249, 15 December 1711); see Ritchie Robertson, *Mock-Epic Poetry from Pope to Heine* (Oxford University Press, 2009), pp. 36–70.
- 2 For a corresponding overview of these satirical forms see Richard Terry, *Mock-Heroic from Butler to Cowper: An English Genre and Discourse* (London: Routledge, 2005), pp. 6–9.
- 3 Leah Kronenberg, *Allegories of Farming from Greece and Rome: Philosophical Satire in Xenophon, Varro and Virgil* (Cambridge University Press, 2009), pp. 4–13, 132–183; on georgic themes in Horace's formal satire see Gary B. Miles, *Virgil's Georgics: A New Interpretation* (University of California Press, 1980), pp. 49–63.
- 4 Mandeville, *Fable*, vol. 1, p. 7; see George Hind, 'Mandeville's Fable of the Bees as Menippean Satire', *Genre* 1 (1968): 307–316; Louis Schneider, *Paradox and Society: The Work of Bernard Mandeville* (New York: Routledge, 1987), pp. 194–231, on Mandeville's irony and satire.
- 5 On *The Fable of the Bees* and georgic see Thomas Stumpf, 'Mandeville, Asceticism, and the Spare Diet of the Golden Age', in *Mandeville and Augustan Ideas: New Essays*, ed. Charles W. A. Prior (Victoria: ELS Editions, 2000), pp. 97–116.
- 6 See Juan Christian Pellicer, 'Christopher Smart's "The Hop-Garden": A Satirical Parody of John Philips's "Cyder"?' , *Notes and Queries* 51 (2004): 400–406.
- 7 See Dustin Griffin, 'Redefining Georgic: Cowper's *Task*', *ELH* 57 (1990): 865–879; Conrad Brunström, *William Cowper: Religion, Satire, Society* (Bucknell University Press, 2004), pp. 42–67.
- 8 Spence, *Anecdotes*, vol. 1, p. 319 (no. 786, from John Dennis).
- 9 Joseph Addison, 'An Essay on the Georgics', in Dryden, *Works*, vol. 5, p. 151.
- 10 Addison, 'Georgics', pp. 146–147.
- 11 Seneca, *Epistles, Volume II: Epistles 66–92*, tr. Richard M. Gummere (Harvard University Press, 1920), pp. 318–319 (LXXXVI.16, 'nec agricolas docere voluit, sed legentes delectare').
- 12 Michael C. J. Putnam, *Virgil's Poem of the Earth: Studies in the Georgics* (Princeton University Press, 1979), p. 7: 'We must eradicate from our minds any lingering notions that the poem is utilitarian'; L. P. Wilkinson, *The Georgics of Virgil: A Critical Survey* (1969; Bristol Classical Press, 1997), p. 3; cf. M. S. Spurr, 'Agriculture and the *Georgics*', *Greece and Rome* 33 (1986): 164–187.
- 13 Jethro Tull, *A Supplement to the Essay on Horse-Hoing Husbandry*, 2nd ed. (1740), p. 220, quoted by Frans de Bruyn, 'Reading Virgil's *Georgics* as a Scientific Text: The Eighteenth-Century Debate between Jethro Tull and Stephen Switzer', *ELH* 71 (2004): 61–689, at p. 669.

- 14 For example, Gervaise Markham, *The English Husbandman* (1613), sig. A1<sup>r</sup> on Virgil's methods 'onely belonging to the Italian climbe, & nothing agreeable to ours'.
- 15 Thomas Fuller, *The History of the Worthies of England* (1662), 'Somersetshire', pp. 28–29.
- 16 Addison, 'Essay', pp. 147–148.
- 17 John Dennis and Joseph Trapp also contributed translations from the *Georgics*. See attributions in *The Dryden–Tonson Miscellanies, 1684–1709*, ed. S. Gillespie and D. Hopkins, 6 vols. (London: Routledge, 2008), vol. I, p. cviii; vol. II, p. viii; vol. VI, p. ix.
- 18 Dryden, *Works*, vol. 5, pp. 160–161, translating *Georgics* I. 121–128; for a conspicuous deployment of the tag see *The Writings and Speeches of Edmund Burke, Vol. 8: The French Revolution: 1790–1794*, ed. L. G. Mitchell (Oxford University Press, 2014), p. 215.
- 19 *Works of Virgil, in Latin and English*, tr. Christopher Pitt et al. 4 vols. (1753), vol. 1, p. 181.
- 20 On the metaphor see Paddy Bullard, 'Swift's Razor', *Modern Philology* 113 (2016): 353–372; more generally see Paul J. Korshin, 'The Evolution of Neoclassical Poetics: Cleveland, Denham and Waller as Poetic Theorists', *Eighteenth-Century Studies* 2 (1968): 102–138.
- 21 Swift, *PW*, vol. 4, p. 245.
- 22 *OED*, 'industry, *n.*': <sup>†</sup>1, 'Intelligent or clever working' and <sup>†</sup>2, 'An application of skill, ingenuity, or cleverness'.
- 23 See Virgil, *Georgics* (Dryden), p. 155 n.
- 24 *Ibid.*, p. 182 (*Georgics*, II. 35–37): 'Up, therefore, husbandmen, learn the culture proper to each after its kind; your wild fruits tame by tillage, and let not your soil lie idle.' Latin: 'Quare agite o proprios generatim discite cultus, agricolae, fructusque feros mollite colendo, neu segnes iaceant terrae.'
- 25 A precedent for this usage of 'Genius' is Knightly Chetwood's 'Preface to the Pastorals' in Dryden's *Virgil*: 'Extraordinary *Genius*'s have a sort of Prerogative, which may dispence them from Laws, binding to *Subject-Wits*' (Virgil, *Georgics* [Dryden], p. 49); the earliest usage given in *OED* of definition 8b ('exceptionally intelligent person') is Eustace Budgell's *Spectator* no. 162 (5 September 1711).
- 26 *Oxford Francis Bacon*, vol. 4, p. 132; see Raymond Williams, 'Culture' in *Keywords: A Vocabulary of Culture and Society* (Oxford University Press, 1976), pp. 76–82.
- 27 For Atterbury's role in the publication of both Dryden's *Virgil* and Philips's *Cyder* see Juan Christian Pellicer, 'Harleian Georgic from Tonson's Press: The Publication of John Philips's *Cyder*, 29 January 1708', *The Library*, 7th series, 7 (2006): 185–198, at p. 189.
- 28 Philips, *Cyder*, p. 38 (book I, lines 315–318).
- 29 John Milton, *Paradise Lost*, ed. Helen Darbishire (Oxford University Press, 1963) p. 240 (book 10, lines 1082–1083).

- 30 Joseph Moxon, *Mechanick Exercises: Or, the Doctrine of Handy-Works* (1693), pp. 179, 206.
- 31 Philips, *Cyder*, p. 39.
- 32 For systematic aspects of Thomson's personifications see Heather Keenleyside, 'Personification for the People: On James Thomson's "The Seasons"', *ELH* 76 (2009): 447–472, at 453.
- 33 See for example Philips, *Cyder*, p. 31 (book I, lines 114–115): 'Let thy Ground | Not lye unlabour'd', imitating *Georgics* II. 37, as Dryden does at p. 182; for Virgil on 'labor improbus' (*Georgics*, I.145–146) the most influential modern reading is Putnam, *Virgil's Poem of the Earth*, 31–36; for other readings cf. Richard Jenkyns, 'Labor improbus', *Classical Quarterly* 43 (1993): 243–248; see also Monica Gale, *Virgil on the Nature of Things: The Georgics, Lucretius and the Didactic Tradition* (Cambridge University Press, 2006), pp. 61–63.
- 34 Philips, *Cyder*, p. 40 (book I, lines 359–361, 364–370).
- 35 On the elusive ironies of *Cyder* see John Chalker, *The English Georgic: A Study in the Development of a Form* (London: Routledge & Kegan Paul, 1969), p. 40.
- 36 William Blith, *The English Improver Improved, or, the Survey of Husbandry Surveyed* (1653), p. 60.
- 37 Samuel Johnson, *The Lives of the Most Eminent English Poets*, ed. Roger Lonsdale, 4 vols. (Oxford University Press, 2006), vol. IV, p. 104.
- 38 *OED*, 'race *n.6*', 8b.; 'To Oldham', lines 20–21, Dryden, *Works*, vol. 2, p. 175; cf. Stephen Switzer, *The Practical Fruit-Gardener* (1724), p. 306: 'The Vine is endued with that noble Raciness of Taste.'
- 39 Joseph Addison, 'A Translation of All Virgil's 4th Georgic', *Annual Miscellany for the Year 1694, Being the Fourth Part of Miscellany Poems* (1694), pp. 58–87, at 66; for a later georgic deployment see Robert Dodsley, 'Agriculture', in *Public Virtue: A Poem* (1753), p. 65 (canto III, line 120), 'The tasteful apple, rich with racy juice'.
- 40 But cf. Philip Connell, *Secular Chains: Poetry and the Politics of Religion from Milton to Pope* (Oxford University Press, 2016), pp. 177–209, who finds ambivalence in Thomson's dissident Whig polemic.
- 41 Thomson, *Seasons*, pp. 168–169 (*Autumn*, lines 633, 636, 641–642).
- 42 *Ibid.*, pp. 169 (*Autumn*, lines 643, 645 and *n.*).
- 43 *Ibid.*, pp. 4–5 (*Spring*, lines 32–33, 71–77).
- 44 For 'shining Share' see *Georgics* I. 45–46, 'sulco attritus splendescere vomer', the blade scoured to gleaming by the furrow; for the incumbent master see *Georgics* I. 213, 'iamdudum incumbere aratris', to lean into the plough; *Georgics* I. 98, 'rursus in obliquum verso perrumpit aratro', turns the plough crosswise through what he raised.
- 45 Thomson, *Seasons*, p. 24, (*Spring*, lines 439, 459); cf. p. 138 (*Summer*, lines 1687–1688): 'A faint erroneous Ray, | Glanc'd from th' imperfect Surfaces of Things.'

- 46 Thomson to David Mallet, 11 August 1726, in *James Thomson (1700–1748): Letter and Documents*, ed. Alan Dugald McKillop (University of Kansas Press, 1958), 45.
- 47 Thomson, *Seasons*, pp. 146–147 ('Autumn', lines 43–52, 72–76).
- 48 *Sylvæ, Or, The Second Part of Poetical Miscellanies* (1685), p. 188.
- 49 Ephraim Chambers, *Cyclopædia: or, An Universal Dictionary of Arts and Sciences*, 2 vols. (1728), vol. I, pp. 143–144.
- 50 Thomson, *Seasons*, p. 149 ('Autumn', lines 78–79).
- 51 Pope, *TE*, vol. 1, p. 52.
- 52 John Barrell, *The Idea of Landscape and the Sense of Place 1730–1840: An Approach to the Poetry of John Clare* (Cambridge University Press, 1972), p. 24.
- 53 Virgil, *Georgics* (Dryden), p. 161 (I. line 206); Philips, *Cyder*, p. 21 (I. lines 357–360).
- 54 Virgil, *Georgics* (Dryden), p. 201 (II, lines 622–625, 630–632), translating *Georgics* II. 444–453.
- 55 Connell, *Secular Chains* p. 203.
- 56 William Derham, *Physico-Theology: or, a Demonstration of the Being and Attributes of God* (1713), p. 226.
- 57 *Georgics* I. lines 197–203.
- 58 Thomson, *Seasons*, p. 248 ('Winter', line 970).
- 59 Pope, *Essay on Man*, pp. 62–63 (epistle III, lines 169–176, 179–180, 183–186).
- 60 Virgil, *Georgics*, IV. lines 228–230; Thomson, *Seasons*, pp. 194–195 ('Autumn', lines 1172–1207).
- 61 Derham, *Physico-Theology*, pp. 370–371 and n., quoting *Georgics* IV. 219–224.
- 62 Derham, *Physico-Theology*, p. 227; cf. pp. 213–214, where Derham proves that animals have no reason 'because we find no varying, but that every Species doth naturally pursue at all times the same way, without any Tutorage or Learning: whereas *Reasons*, without Instruction, would often vary, and do that by many Methods, which *Instinct* doth by one alone'.
- 63 Thomson, *Seasons*, p. 140–141 (*Summer*, lines 1765–1767).
- 64 Juan Christian Pellicer has found evidence that Tonson was channeling funds from Robert Harley, who was in turn using presentation copies of *Cyder* as part of a campaign to reconcile Jacobite-leaning Country Tories to his own Court Tory position. See Pellicer, 'Harleian Georgic', pp. 186–190; for further accounts see Bertrand A. Goldgar, *Walpole and the Wits: The Relation of Politics to Literature, 1722–1742* (University of Nebraska Press, 1976), pp. 134–162; and, for the context with Thomson, see Christine Gerrard, *The Patriot Opposition to Walpole: Politics, Poetry, and National Myth, 1725–1742* (Oxford University Press, 1994), pp. 46–67.
- 65 This is Raymond Williams's dismissive, influential reading in *The Country and the City* (London: Vintage, 2016), pp. 96–102.

- 66 Thomson, *Seasons*, p. 30 (*Spring*, lines 904ff.), present in editions from 1728–1738, deleted in 1744.
- 67 Ralph M. Williams, ‘Thomson and Dyer: Poet and Painter’, in *The Age of Johnson: Essays Presented to Chauncey Brewster Tinker*, ed. Frederick W. Hilles and W. S. Lewis (Yale University Press, 1949), pp. 209–216.
- 68 For eighteenth-century georgic in historical context see Paddy Bullard, ‘Introduction: A Survey of English Georgic Writing, 1521–2021’, in *A History of English Georgic Writing*, ed. Paddy Bullard (Cambridge University Press, 2022), pp. 1–36.
- 69 Karen O’Brien, ‘Imperial Georgic, 1660–1789’, in *The Country and the City Revisited: England and the Politics of Culture, 1550–1850*, ed. Gerald MacLean, Donna Landry and Joseph P. Ward (Cambridge University Press, 1999), pp. 160–179, at 161.
- 70 David Fairer makes this point regarding Dyer in “Where Fuming Trees Refresh the Thirsty Air”: The World of Eco-Georgic’, *Studies in Eighteenth-Century Culture* 40 (2011): 201–218, at p. 204; see Dustin Griffin, *Patriotism and Poetry in Eighteenth-Century Britain* (Cambridge University Press, 2002), p. 196, for a similar assessment.
- 71 Clare Bucknell, ‘The Mid-Eighteenth-Century Georgic and Agricultural Improvement’, *Journal for Eighteenth-Century Studies* 36 (2013): 335–352, at p. 340.
- 72 See *The Correspondence of Robert Dodsley*, ed. James E. Tierney (Cambridge University Press, 1988), pp. 101 n.1, 118–119, 120.
- 73 Christopher Donaldson, ‘Another Smart Letter’, *Notes and Queries* 59 (2012): 338–340.
- 74 Juan Christian Pellicer, ‘Georgic at Mid-Eighteenth Century and the Case of Dodsley’s “Agriculture”’, *RES* 54 (2003): 67–93, at 69.
- 75 *The Georgics of Virgil. Attempted in English Verse* (1750), an anonymous translation of the first Georgic; *The Works of Virgil*, ed. Joseph Warton, 4 vols. (1753); and *The Georgics of Virgil*, tr. Thomas Neville (Cambridge, 1767), which Dodsley helped distribute.
- 76 See *Correspondence of Dodsley*, pp. 264–265, 273.
- 77 These included Arnold’s *Commerce*, American adventurer James Sterling’s *Epistle to the Hon. Arthur Dobbs* (1752), Nathaniel Weeke’s description of colonial agriculture in *Barbadoes: A Poem* (1754) and *A Descriptive Poem on the Mines at Whitehaven* (1755) by John Dalton, another associate of William Shenstone’s Warwickshire circle. A later addition to this group is another work associated with the Shenstone circle, William Mason’s four-book horticultural georgic *The English Garden*, published by James Dodsley between 1772 and 1781.
- 78 For example, John Barrell, *English Literature in History 1730–80: An Equal, Wide Survey* (London: Hutchinson, 1983), p. 108: ‘Georgic was the dominant mode of the poetry of rural life; possibly, after the death of Pope in 1744, the dominant mode of poetry.’
- 79 For Thomson and georgic see John Chalker, *The English Georgic: A Study in Development and Form* (London: Routledge, 1969), pp. 93–98, 104–109;

- Mark Rose, 'The Author as Proprietor: Donaldson v. Becket and the Genealogy of Modern Authorship', *Representations* 23 (1988): 51–85.
- 80 Grainger's *Sugar-Cane* is an apparent exception, but the duodecimo edition of 1766 was a Dublin piracy by William Sleater with a false London imprint ('London: printed, and sold by the booksellers').
- 81 See Thomas Blackwell's letter, 15 January 1756, *Correspondence of Dodsley*, p. 217.
- 82 *The Fleece* appeared on 17 March 1757 (advertisement, *London Chronicle*, 17–19 March 1757, issue 34); it still featured in Dodsley's advertisement in *Public Advertiser*, 15 September 1758, issue 7445.
- 83 *The Art of Preserving Health* appeared in some twenty-four eighteenth-century impressions and editions, *The Oeconomy of Love* (for early editions of which the Coopers acted as trade publishers) in thirty-eight; the 1754 octavo fourth edition of the *Art* was 1,000 copies, the sixth of 1765, 750 copies (*Bowyer Ledgers*, items 3,852 and 4,542); the 1763 octavo eleventh edition of *The Oeconomy*, published by Dodsley's pupil John Hinxman, was 1,000 copies (*Bowyer Ledgers*, item 4,429); for georgic themes in these poems see David Fairer, 'Persistence, Adaptations and Transformations in Pastoral and Georgic Poetry', in *The Cambridge History of English Literature, 1660–1780*, ed. John Richetti (Cambridge University Press, 2005), 259–286, at 282–283.
- 84 William Shenstone, ed., *Works in Verse and Prose*, 3 vols. (1764–1769), vol. 3, p. 73; Dodsley's quarto first edition of *Pleasures* sold at four shillings (advertisement, *Daily Gazetteer*, 16 January 1744, issue 3080); an octavo edition, priced two shillings, appeared in May (*Daily Gazetteer*, 17 May 1744, issue 3,185).
- 85 For the society's foundation see D. G. C. Allan, *William Shipley: Founder of the Royal Society of Arts* (London: 1968), and Anton Howes, *Arts and Minds: How the Royal Society of Arts Changed a Nation* (Princeton University Press, 2020), pp. 1–28, 61–88.
- 86 Pope, *TE*, vol. 3.ii, p. 6; for Hales, Pope and the society see D. G. C. Allan and Robert E. Schofield, *Stephen Hales, Scientist and Philanthropist* (London: Scholar Press, 1980), pp. 100–107, 119–120.
- 87 Henry Plomer et al., *A Dictionary of the Printers and Booksellers Who Were at Work in England, Scotland and Ireland from 1726 to 1775* (Oxford University Press, 1932), p. 275.
- 88 See Henry Baker's *Plan of the Society of Arts* (1755) and his memorandum, 'Advantages Arising from the Society for Encouraging Arts', printed anonymously in *Gentleman's Magazine* 26 (1756), c. 62. (original MS is in RSA Guard-book 1, p. 83, dated 28 January 1756); see also Gerard L'Estrange Turner, 'Henry Baker, FRS, Founder of the Bakerian Lecture', *Notes and Records of the Royal Society* 29 (1974–1975): 53–79.
- 89 Minutes of the Society of Arts, 6 April 1757, quoted by James Tierney, 'Robert Dodsley: First Printer and Stationer to the Society', *Journal of the RSA* (1983): 480–483 and 563–566, at 480.

- 90 Dodsley to Folkestone, c.17 March 1756, *Correspondence of Dodsley*, 220–221; see Clayton Atto, ‘The Society for the Encouragement of Learning’, *The Library* 4th ser., 19 (1938): 263–288, at p. 264.
- 91 Henry Baker, memorandum, 7 April 1756, Royal Society of Arts MSS, RSA/PR/GE/110/2/106, verso.
- 92 Dodsley to George Box, c. 21 June 1757, *Correspondence of Dodsley*, 281–282; Dodsley had published Sheridan’s *British Education*, which outlines a curriculum based on the instruction of elocution, a year before in 1756.
- 93 William Bailey, *A Treatise on the Better Employment, and More Comfortable Support, of the Poor in Workhouses* (1758); Bailey was also involved (from 1768) with the Society’s collection of mechanical models, see *Transaction of the Society for the Encouragement of Arts, Volume 1* (1783), pp. 50, 52.
- 94 Dyer, *Fleece*, p. 61 (book III, lines 234–258).
- 95 James Burgh, *Crito: or, Essays on Various Subjects*, 2 vols. (1766–1767), vol. 1, p. 37.
- 96 The classic account of this moment is Franklin F. Mendels, ‘Proto-Industrialization: The First Phase of the Industrialization Process’, *Journal of Economic History*, 32 (1972): 241–261; for a summary of debates surrounding Mendels’s hypothesis see Maxine Berg, *The Age of Manufactures, 1700–1820: Industry, Innovation and Work in Britain*, 2nd ed. (London: Routledge, 1994), pp. 66–72.
- 97 Allan, *William Shipley*, p. 43, quoting Shipley’s 1751 ‘Proposal for Raising by Subscription a Fund [...] for the Promoting of Improvements in the Liberal Arts and Sciences, Manufactures, &c.’ from 1751.
- 98 Allan, *Shipley*, p. 44.
- 99 Of the georgic poets, however, only the names Robert Dodsley and James Grainger appeared in the *List of the Society for the Encouragement of Arts* for 1760 and 1765; a slightly later poem with georgic stylings (agricultural themes, concluding section on apiculture) that is also a panegyric of the Society of Arts is George Cocking, *Arts, Manufactures and Commerce: A Poem* (1769).
- 100 Joel Mokyr, *The Enlightened Economy: An Economic History of Britain, 1700–1850* (Yale University Press, 2009), p. 43.
- 101 Allan, *William Shipley*, p. 43.
- 102 Philips, *Cyder*, p. 38 (book I, lines 316–318).
- 103 Joseph Warton, ‘Reflections on Didactic Poetry’, in *Works of Virgil*, tr. Christopher Pitt et al., 4 vols. (1753), vol. 1, pp. 393–440, at 400–401; this was an idea that he borrowed from the Abbé Dubos on ‘les sujets dogmatiques’ in the *Réflexions critiques*: ‘L’esprit ne sçauroit jouïr deux fois du plaisir d’apprendre la même chose, comme le cœur peut jouïr deux fois du plaisir de sentir la même émotion.’
- 104 Addison, ‘Essay on the Georgics’, in Dryden, *Works*, vol. 5, pp. 147–148.
- 105 *Ibid.*, p. 149.
- 106 Richard Bentley, *Matter and Motion Cannot Think: or, A Confutation of Atheism [...] being the Second of the Lecture Founded by the Honourable Robert Boyle* (1692), p. 34.



- 107 See for example Bernard de Fontenelle, 'Of Pastorals', tr. Pierre Motteux, in *Monsieur Bossu's Treatise of the Epick Poem containing many Curious Reflexions* (1695), pp. 277–295, at 286; Knightly Chetwood argues against Fontenelle's identification of Virgil's debt to Lucretius in his 'Preface to the Pastorals' included by Dryden in the *Works of Virgil* – see Dryden, *Works*, vol. 5, pp. 41–42: 'There is not the least mention of *Chance* in that whole passage, nor of the *Clinamen Principiorum* [atomic swerve], so peculiar to *Epicurus's* Hypothesis'; for a modern scholar on Virgil's Lucretianism, with particular reference to the *Georgics*, see Philip Hardie, *Lucretian Receptions: History, the Sublime, Knowledge* (Cambridge University Press, 2009), pp. 41–54.
- 108 Dryden, *Works*, vol. 5, p. 161 (*Georgics*, I, lines 203–206).
- 109 Virgil, *Eclogues. Georgics. Aeneid Books 1–6*, tr. H. Rushton Fairclough, rev'd G. P. Goold (Harvard University Press, 1999), pp. 108–109.
- 110 Dyer, *Fleece*, p. 48 (book 1, lines 441–444).
- 111 Ibid., p. 89 (book 2, lines 554–556); cf. for example Lucretius, *De Rerum Natura*, tr. W. H. D. Rouse, rev. Martin F. Smith (Harvard University Press, 2014), pp. 504–505 (VI, lines 160–163).
- 112 Dyer, *Fleece*, p. 99 (book 3, lines 79–81); cf. p. 70 (book 2, lines 190–191): 'What changes cannot toil, | With patient art, effect?'
- 113 Virgil, *Georgics* (Dryden), p. 247 (*Georgics*, IV. 174–175: 'illi inter sese magna vi braccia tollunt | in numerum, versantque tenaci forcipe ferrum': 'They, with mighty force, now one, now another, raise their arms in measured cadence, and turn the iron with gripping tongs').
- 114 Putnam, *Virgil's Poem of the Earth*, p. 257.
- 115 Dyer, *Fleece*, p. 139 (book 4, line 306).
- 116 James Grainger, *The Sugar-Cane: A Poem in Four Books* (1764), p. 30 (book 1, lines 410–415).
- 117 Richard Jago, *Edge-Hill*, in *Poems, Moral and Descriptive*, ed. John Scott Hylton (1784), p. 100.
- 118 Dodsley, 'Agriculture', p. 19.
- 119 Dyer, *Fleece*, pp. 96–97 (book 3, lines 25–33).
- 120 Dryden, *Works*, vol. 5, pp. 160–161.

## Chapter 6. Manuals of Mock Arts: *The Art of Ingeniously Tormenting and Tristram Shandy*

- 1 Sterne to Dodsley, 23 May 1759, *Correspondence of Robert Dodsley 1733–1764*, ed. James E. Tierney (Cambridge University Press, 1988), pp. 415–416.
- 2 See Sarah Fielding to Samuel Richardson, 8 January 1748/9, *The Correspondence of Henry and Sarah Fielding*, ed. Martin C. Battestin and Clive T. Probyn (Oxford University Press, 1993), p. 123; Thomas Keymer, 'Jane Collier, Reader of Richardson, and the Fire Scene in *Clarissa*', in *New Essays on Samuel Richardson*, ed. Albert J. Rivero (New York: St Martin's Press, 1996), pp. 141–161, 146; see also Christopher Fanning, 'On Sterne's

- Page: Spatial Layout, Spatial Form, and Social Spaces in *Tristram Shandy*, *Eighteenth-Century Fiction* 10 (1998): 429–450.
- 3 Thomas Keymer, *Sterne, The Moderns, and the Novel* (Oxford University Press, 2002), p. 62; cf. Florida editors' judgement that 'Sterne does not seem to have been influenced by the work', *FE*, vol. 7, p. 82 n.7.
  - 4 *Monthly Review*, 8 (1753), p. 274, 'It is written after the manner of dean Swift's directions to servants'; D. W. Jefferson, 'Tristram Shandy and the Tradition of Learned Wit', *Essays in Criticism* 1 (1951): 225–248; *Correspondence of Dodsley*, p. 415.
  - 5 Jane Collier, *An Essay on the Art of Ingeniously Tormenting*, ed. Audrey Bilger (Peterborough, Ontario: Broadview, 2003), p. 56.
  - 6 *Ibid.*, p. 52.
  - 7 *FE*, vol. 1, p. 343 (IV.xiv).
  - 8 See for example Walter's joke about Obadiah's fathering a mule on his mare, *FE*, vol. 2, p. 421 (V.iii) and Uncle Toby's accidental argumentum ad hominem, *FE*, vol. 1, p. 124 (II.x).
  - 9 On these features see Judith Hawley, "Hints and Documents" 2: A Bibliography for *Tristram Shandy*, *The Shandean* 4 (1992): 49–65.
  - 10 For example (in advertisements added to Philip Francis's *Constantine: A Tragedy*, 1754), Edward Young's *The Complaint, Or, Night Thoughts*, offered as an octavo or 'The same Book in a neat Pocket Volume, 12mo', and James Thomson's 'SEASONS, printed in a Pocket Volume. Price bound Three Shillings'; Aaron Hill and William Bond, *The Pain Dealer: Being Select Essays on Several Curious Subjects*, 2 vols. (1734), pp. 212–218, at 214 (No. 27, 22 June 1724).
  - 11 Ian Campbell Ross, *Laurence Sterne: A Life* (Oxford University Press, 2001), p. 299; *FE*, vol. 2, p. 446 (V.xvi).
  - 12 *York Courant* (12 February 1760), No. 1790, quoted by Lewis P. Curtis, 'The First Printer of Tristram Shandy', *PMLA* 47 (1932): 777–789, p. 780.
  - 13 'It is, indeed, a little book', wrote Samuel Richardson, 'and little is its merit'. 'Little did we imagine', Owen Ruffhead commented a year later in the *Monthly Review*, 'that the diminutive volumes then before us, would swell into such importance with the public.' Alan B. Howes, ed., *Sterne: The Critical Heritage* (London: Routledge, 1974), p. 128 (Richardson to Mark Hildesley, reporting 'the sentiments of a young lady'), p. 47 (unsigned review, *Monthly Review*, 24 (February 1761), pp. 101–116); Keymer records further complaints about *Tristram Shandy*'s slenderness in *Sterne, The Moderns*, pp. 61–62.
  - 14 Lynette Hunter, 'Books for Daily Life: Household, Husbandry, Behaviour', in *The Cambridge History of the Book in Britain*, volume IV, 1557–1695, ed. John Barnard and D. F. McKenzie (Cambridge, 2002), 514–532, 516.
  - 15 J. Paul Hunter, *Before Novels: The Cultural Contexts of Eighteenth-Century English Fiction* (New York, 1990), p. 253.
  - 16 Elizabeth L. Eisenstein, *The Printing Press as an Agent of Change* (Cambridge University Press, 1979), pp. 239–244.

- 17 *A Catalogue of a Curious and Valuable Collection of Books, Among which are included the Entire Library of the late Reverend and Learned Laurence Sterne* (York, 1768), item 1658; for caveats on using the catalogue, W. G. Day, 'Sterne's Books', *The Library* 31 (1976): 245.
- 18 *The Augustine Catechism: The Enchiridion on Faith, Hope, and Love*, tr. Bruce Harbert (New York: New City Press, 1999), p. 135.
- 19 *Saint Augustine his Enchiridion to Laurence* (1607), sig. A2<sup>v</sup>.
- 20 Erasmus, *Manual for a Christian Soldier* (1687), p. 30.
- 21 Greek text with Latin translation was published as *Preces privatae Græcè & Latine*, ed. John Lamphire (Oxonii, 1675); an earlier, flawed English translation appeared in 1647.
- 22 Andrewes, *Manual of the Private Devotions*, tr. Richard Drake (1648), sig. A8<sup>v</sup>–A9<sup>f</sup>; another manuscript of the *Preces*, now in the Bodleian Library, Oxford, was given by Andrewes to William Laud. Laud's own *Officium quotidianum: or, A Manual of Private Devotions* appeared in 1649, marketed as a Royalist talisman in the year of King Charles's execution, and four years after his own.
- 23 Joseph Hall, *The Arte of Diuine Meditation Profitable for all Christians to Knowe and Practis* (1606), p. 41; cf. *FE*, vol. 2, p. 116.
- 24 Jeremy Taylor, *Rule and Exercises of Holy Living* (1650), p. 14; advice repeated by Nathaniel Spinckes in an introduction to *The True Church of England Man's Companion in the Closet* (1721), p. xviii, Sterne's library catalogue, item 1491.
- 25 Andrewes, *Manual*, sig. A10<sup>r-v</sup>.
- 26 Taylor, *Holy Living*, pp. 264–265.
- 27 *All the Works of Epictetus, which are now Extant*, tr. Elizabeth Carter (1758), p. 438; *FE*, vol. 1, p. vii.
- 28 *FE*, vol. 1, p. 253 (III.xxviii).
- 29 Sterne's library, item 1671.
- 30 Henry More, *An Account of Virtue: or, Dr. Henry More's abridgment of morals* (1690), pp. 1, 27; cf. *All the Works of Epictetus*, p. 54 (*Discourses*, I.xv): 'For the Subject-matter of a Carpenter is Wood; of a Statuary, Brass; and so, of the Art of Living, the Subject-matter is each Person's own Life.'
- 31 Sterne, *FE*, vol. 1, p. 421 (V.iii); on Walter's systematic philosophising see Judith Hawley, 'Tristram Shandy, Philosopher', *Textual Practice* 31 (2017): 233–246, at pp. 234–237.
- 32 John Barker, *Strange Contraries: Pascal in England during the Age of Reason* (McGill-Queen's University Press, 1975); Alexander Pope, *An Essay on Man*, ed. Tom Jones (Princeton University Press, 2016), 'Introduction', pp. lxiii–lxiv, 24, 77; Swift to Pope, 26 November 1725, in Swift, *Corr.*, vol. 3, p. 623; Anthony McKenna, 'Quelques aspects de la reception des Maximes en Angleterre', in *Images de la Rochefoucauld: actes du Tricentenaire*, ed. Jean Lafond and Jean Mesnards (Paris: Presses Universitaires, 1984), pp. 77–94; *Spectator*, no. 77 (Eustace Budgell), vol. 1, pp. 329–333; no. 231 (Addison), vol. 2, pp. 399–400; and no. 564 (Budgell), vol. 5, p. 526.

- 33 Aaron Hill and William Bond, *The Pain Dealer: Being Select Essays on Several Curious Subjects*, 2 vols. (1734), 212–218, at p. 215.
- 34 Samuel Richardson, *A Collection of the Moral and Instructive Sentiments, Maxims, Cautions, and Reflexions* (1755), p. ix.
- 35 Ibid., ‘Preface’, p. viii; see Pope, *Essay on Man*, pp. lxx–l, 45–6.
- 36 John White, *A Rich Cabinet, with Variety of Inventions* (1651), sig. C<sup>r</sup>.
- 37 Hannah Woolley, *The Queen-like Closet; or, Rich Cabinet Stored* (1670), 379.
- 38 Mary Evelyn, *Mundus Muliebris: or, the Ladies Dressing Room Unlock’d, and her Toilette Spread* (1690), pp. 22–23.
- 39 Melinda Radd, ‘Satire’, in *The Cambridge Companion to Women’s Writing in Britain, 1660–1789*, ed. Catherine Ingrassia (Cambridge University Press, 2015), pp. 147–163, at 149–154; see also Tita Chico, *Designing Women: The Dressing Room in Eighteenth-Century English Literature and Culture* (Bucknell University Press, 2005), p. 81.
- 40 John Evelyn, *Kalendarium hortense, or, The Gard’ners Almanac* (1666), 8–9.
- 41 John Rawlett, *The Christian Monitory, Containing an Earnest Exhortation to an Holy Life* (1686), pp. 3–4.
- 42 Nicholas Stone, *Enchiridion of Fortification, or A Handfull of Knowledge in Martiall Affaires* (1645), pp. 4–5.
- 43 William Wotton, *Reflections Upon Ancient and Modern Learning* (1694), p. 341.
- 44 On the intricate textual history of Halifax’s ‘Maxims of State’ see ‘Introduction: Published Political Pamphlets’, Halifax, *Works*, vol. 1, pp. 113–121; on the importance of *Political Aphorisms: or, The True Maxims of Government Displayed* (1691), see Richard Ashcraft and M. M. Goldsmith, ‘Locke, Revolution Principles, and the Formation of Whig Ideology’, *Historical Journal* 26 (1983): 773–800.
- 45 I discuss some of these manuals in ‘Manuals’, in *The Oxford Handbook of English Prose, 1660–1714*, ed. Nicholas McDowell and Henry Power (Oxford University Press, 2024).
- 46 Mary Fissell, ‘Popular Medical Writing’, in *Cheap Print in Britain and Ireland to 1660*, ed. Joad Raymond (Oxford University Press, 2011), pp. 417–430, at 427–428.
- 47 Sterne, *FE*, vol. 1, pp. 117–118 (I.vii), and note in vol. 3, p. 149; Sterne quotes from the *Masterpiece*’s ‘third version’, i.e., an edition later than the twenty-third of 1749, the first to include ‘Aristotle’s Book of Problems’, from which the quoted passage derives.
- 48 For Aristotle’s *Masterpiece* and popular medical writing see Roy Porter and Lesley Hall, *The Facts of Life: The Creation of Sexual Knowledge in Britain, 1650–1950* (Yale University Press, 1995), pp. 33–64; Mary Fissell, ‘Hairy Women and Secret Truths: Gender and the Politics of Knowledge in Aristotle’s *Master-piece*’, *William and Mary Quarterly* 60 (2003): 43–74.
- 49 Jane Collier, ‘*A Copy of My Sister’s Common Place Book Transcribed by Me Margaret Collier*’ (1748–1755), MS in the Hilda Londry Collection, described by Michael Londry, ‘Our Dear Miss Jenny Collier’, *TLS* (5 March 2004): 13–14.

- 50 *Correspondence of Dodsley*, Appendix B, p. 514; the sum is equivalent to what Dodsley gave Samuel Johnson for *Rasselas* in 1759.
- 51 *Ingeniously Tormenting*, p. 42.
- 52 Thomas Marriott, *Female Conduct: Being an Essay on the Art of Pleasing* (1759), p. xviii; see Nancy Armstrong and Leonard Tennenhouse, eds., *The Ideology of Conduct: Essays on Literature and the History of Sexuality* (London: Methuen, 1987), pp. 1–24; Nancy Armstrong, *Desire and Domestic Fiction: A Political History of the Novel* (Oxford University Press, 1987), pp. 214–215.
- 53 See Jane Collier, *An Essay on the Art of Ingeniously Tormenting*, ed. Judith Hawley (Bristol: Thoemmes Press, 1994), pp. xxix–xxxiii, including the identification of a possible verbal echo; *Ingeniously Tormenting*, p. 29, 167–175.
- 54 Like all Halifax's writing, *Advice to a Daughter* is epigrammatical: 'You must be very undextrous', for example, 'if when your *Husband* shall resolve to be an *Ass*, you do not take care he may be your *Ass*', pp. 42–43.
- 55 *Ingeniously Tormenting*, p. 41.
- 56 Defoe, *Economic Writings*, vol. 7, p. 282: The English 'are better to improve than to invent'; cf. *Hymn to the Pillory* (1703), *Satire*, vol. 1, p. 243, and *Essay on Projects*: 'I account that more properly an improvement', *Economic Writings*, vol. 8, p. 41.
- 57 *Ingeniously Tormenting*, p. 43; see pp. 70, 83, 87.
- 58 *Ibid.*, p. 127.
- 59 *Ibid.*, p. 91.
- 60 *Ibid.*, p. 53.
- 61 *Ibid.*, p. 109.
- 62 Walton, *Compleat Angler*, p. 304.
- 63 *Ingeniously Tormenting*, pp. 64–65, 58, 68–69.
- 64 Jonathan Swift, *CE*, vol. 2, p. 462.
- 65 *Ingeniously Tormenting*, p. 58.
- 66 *Ibid.*, p. 67.
- 67 *Ibid.*, p. 107; see Swift, *Poems*, vol. 2, p. 710.
- 68 Swift, *Poems*, vol. 2, p. 554.
- 69 *Ingeniously Tormenting*, pp. 58, 98, 101, 129.
- 70 *Ibid.*, p. 52; the pun is Collier's: 'This [...] is what they call being smart in company; and, if I might be forgiven the heinous sin of a pun, I should suppose that expression arose from the smarting pain you give to another by this mortifying sort of wit', p. 115.
- 71 *Cry*, pp. 46–47, 50; François de Fénelon, *Telemachus, Son of Ulysses*, tr. Patrick Riley (Cambridge University Press, 1994), p. 194.
- 72 François de la Rochefoucauld, *Collected Maxims and Other Reflexions*, tr. E. H. and A. M. Blackmore, and Francine Giguère (Oxford University Press, 2007), p. 27 (v: 84); *Cry*, pp. 50, 66 (quoting v: 74, p. 23, directly), 72 (which corresponds more roughly with v. 68 and 69).
- 73 *Cry*, pp. 106–107, 154; La Bruyère, quoted on p. 47.
- 74 *Cry*, pp. 157–158, 185, 210.

- 75 Sarah Fielding later shows some interest in the *moralistes* in her critical ‘Preface’ to *The History of the Countess of Dellwyn*, 2 vols. (1759), vol. 1, xvii and xxxiii–iv, where she cites La Rochefoucauld and La Bruyère – her quotations, however, cannot be traced back to the original texts.
- 76 *Cry*, pp. 210, 100; cf. 337, 351, for a disastrous experiment in ‘artful refinement’ by the ‘simple’ Ferdinand.
- 77 On the ‘Shandy family archive’ of these texts see Karen Harvey, ‘The Manuscript History of *Tristram Shandy*’, *RES*, ns, 65 (2014): 281–301; for an inventory, see Judith Hawley ‘“Hints and Documents”, 1: A Bibliography for *Tristram Shandy*’, *The Shandean* 3 (1991), pp. 9–35, at 33–35.
- 78 ‘The “Rabelaisian Fragment”’, Sterne, *FE*, vol. 9, pp. 152–175, at 165.
- 79 Sterne, *FE*, vol. 1, p. 215; vo. 2, p. 445.
- 80 *Ibid.*, vol. 2, p. 562 (VI.xxxvi).
- 81 *Ibid.*, vol. 1, p. 166 (II.xvii).
- 82 *Ibid.*, vol. 6, p. 76, where an old French officer pockets a small pamphlet.
- 83 One of the models for the *Tristrapaedia* is Obadiah Walker’s preaching manual *Of Education*. See John M. Turnbull, ‘The Prototype of Walter Shandy’s *Tristrapaedia*’, *RES* 2 (1926): 212–215.
- 84 Sterne, *FE*, vol. 2, p. 491 (VI.i); Peter de Voogd notes that editors of later editions missed the joke and emended ‘set’ to ‘seat’, in ‘Tristram Shandy as Aesthetic Object’, *Word & Image* 4 (1988): 63–77, at p. 65.
- 85 Sterne, *FE*, vol. 1, pp. 42 (I.xiv) and 359 (IV.xxii); ‘Shall we for ever make new books, as apothecaries make new mixtures, by pouring only out of one vessel into another?’, Tristram asks at *FE*, vol. 1, p. 408 (V.i), a line doubly ironically double-plagiarised, since its words are borrowed from Bacon’s *Anatomy* (see *FE*, vol. 3, p. 338–339), while the idea of ironically plagiarising a warning against plagiarism is itself plagiarised from Swift’s *Verses on the Death of Dr Swift* (Swift, *Poems*, vol. 2, p. 565, lines 317–318).
- 86 *FE*, vol. 1, pp. 445–446 (V.xvi); cf. p. 471 (V.xxxiii) for Walter claiming to write concisely.
- 87 On how language ‘appears to hold the power to *act*, to perform material effects on the body’ in Sterne’s novel, see Ross King, ‘Tristram Shandy and the Wound of Language’, *Studies in Philology* 92 (1995): 291–310, at p. 294.
- 88 *Spectator*, vol. 1, pp. 505–507 (No. 124, 23 July 1711).
- 89 Sterne, *FE*, vol. 1, p. 5 (I.iv).
- 90 *Ibid.*, vol. 1, p. 138 (II.xv).
- 91 *Ibid.*, vol. 1, p. 200 (III.x).
- 92 *Ibid.*, vol. 1, p. 285 (III.xlii).
- 93 9 September 1760, *Ibid.*, vol. 7, p. 168.
- 94 *Ibid.*, vol. 2, p. 736 (IX.i).
- 95 *Ibid.*, vol. 1, p. ix.
- 96 *Ibid.*, vol. 1, pp. 463–464 (V.xxix).
- 97 The context for Sterne’s interest in gesture is surveyed by Alexis Tadić in *Sterne’s Whimsical Theatres of Language* (Aldershot: Ashgate, 2003), pp. 49–76.

- 98 Wolfgang Iser, *Laurence Sterne: Tristram Shandy*, tr. David H. Wilson (Cambridge University Press, 1988), p. 45.
- 99 Sterne, *FE*, vol. 1, pp. 98 (II.ii) and 253 (III.xxviii).
- 100 *Ibid.*, vol. 1, p. 469–470 (V.xxxii).
- 101 Helen Williams, *Laurence Sterne and the Eighteenth-Century Book* (Cambridge University Press, 2021), pp. 169–191.
- 102 The fullest discussion of Sterne's manicules is Williams, *Sterne*, pp. 17–34.
- 103 Sterne, *FE*, vol. 1, pp. 131 (III.xii); 141 (II.xvii); 238 (III. 'Author's Preface'); three further manicules are at 375 (IV.xxv), 376 (IV.xxvi) and 514 (VI.xi).
- 104 *Ibid.*, vol. 1, p. 5 (I.iv).
- 105 *Ibid.*, vol. 1, p. 337 (IV.x); cf. 317 (IV. 'Slawkenbergius's Tale'), the narrator being a lover of rules.
- 106 *Ibid.*, vol. 1, p. 213 (III.xii).
- 107 Ephraim Chambers, *Cyclopædia: or, an Universal Dictionary of Arts and Sciences* (1728), vol. 1, p. 142b; this is not one of the forty-three borrowings from Chambers identified in *FE*; cf. Judith Hawley, 'Sterne and the *Cyclopaedia* Revisited', *Shandean* 15 (2004): 57–77.
- 108 Sterne, *FE*, vol. 1, p. 233 (III. 'Preface').
- 109 Gabriel Josipovici, *Touch* (Yale University Press, 1996), p. 24.
- 110 Cf. for *Tristram Shandy* as text that normalises technological constructions of the human body, William C. Mottolese, 'Tristram Cyborg and Toby Toolmaker: Body, Tools, and Hobbyhorse in *Tristram Shandy*', *SEL* 47 (2007): 679–701, at 683.
- 111 Sterne, *FE*, vol. 1, p. 51 (I.xviii).
- 112 *Ibid.*, vol. 1, p. 351 (IV.xviii).
- 113 *Ibid.*, vol. 2, p. 677 (VIII.xvi); cf. p. 562 (IV.xxxvi).
- 114 *Ibid.*, vol. 1, p. 66 (I.xx).
- 115 *Ibid.*, vol. 6, pp. 16–17; this line is another example of ironic double-plagiarism, like the borrowing from Burton at *FE*, vol. 1, p. 408 – Sterne took these lines from Joseph Hall's *Quo Vadis?* (1617); see Gardner D. Stout, 'Sterne's Borrowings from Bishop Joseph Hall's *Quo Vadis?*' *ELN* 2 (1965): 196–200.
- 116 Ross, *Laurence Sterne*, p. 218.
- 117 For Sterne and commonplacing see David Allan, *Commonplace Books and Reading in Georgian England* (Cambridge University Press, 2010), pp. 139–141.
- 118 Sterne, *FE*, vol. 1, pp. 103–104 (II.iii).
- 119 *Ibid.*, vol. 1, p. 72 (I.xxi).
- 120 *OED*, s.v. '-ical (suffix)'.
- 121 The Florida editors (*FE*, vol. 3, p. 382) track down the epigram to Walker's manual, p. 115; see also John M. Turnbull, 'The Prototype of Walter Shandy's *Tristrapaedia*', *RES* 2 (1926): 212–215.
- 122 Sterne, *FE*, vol. 1, pp. 104 (II.iii), 445 (V.xvi); cf. 170 (II.xix) for Walter on the 'minutiæ of philosophy'.



- 123 Ibid., vol. 2, pp. 575–576 (VII.i).
- 124 Ibid., vol. 2, pp. 656–657 (VIII.ii).
- 125 John Harris, *Lexicon technicum* (1708), ‘Aposeopesis’, taken from *The Art of Speaking by Messieurs du Port Royal* (1676), p. 105; Ephraim Chambers, *Cyclopædia*, 2 vols. (1728; 4th ed. 1741), vol. 1, ‘Aposeopesis’.
- 126 Sterne, *FE*, vol. 1, pp. 115–116 (II.vi); see Christopher Fanning, ‘Small Particles of Eloquence: Sterne and the Scriblerian Text’, *Modern Philology* 100 (2003): 360–392.
- 127 Sterne, *FE*, vol. 1, pp. 217–218 (III.xiii–xiv).
- 128 Ibid., vol. 1, pp. 384 (IV.xxvii).
- 129 Ibid., vol. 1, p. 667 (IV.ix).
- 130 Ibid., vol. 2, p. 743 (IX.iv).
- 131 Gordon W. Hewes surveys this topic in Enlightenment philosophy in ‘A History of Speculation on the Relation between Tools and Language’, in *Tool, Language and Cognition in Human Evolution*, ed. Kathleen R. Gibson and Tim Ingold (Cambridge University Press, 1993), pp. 20–31, at 23–24, but does not cover the Warburtonian context; the standard discussion of gesture in early-modern rhetoric is Jean-Claude Schmitt, *La raison des gestes* (Paris: Gallimard, 1990).
- 132 William Warburton, *Divine Legation of Moses Demonstrated*, 2 vols. (1738), vol. 2, p. 83; Warburton’s claims are the focus of Thomas Rutherforth’s *Determinatio questionis theologicæ* (1746), controverted in turn by Joseph Edwards in *An Answer to a Late Discourse of Dr Rutherforth’s* (1746).
- 133 Warburton cites *I Kings* 19, 27, 51, 5 and 37; for commentary see Etienne de Condillac, *Essay on the Origin of Human Knowledge*, tr. Karl Ameriks (Cambridge University Press, 2006), p. 118.
- 134 Sterne, *FE*, vol. 1, p. 264 (III.xxxiv).
- 135 Johnson, *Dictionary*, vol. 2, ‘Pro’perty *n.f.*, 7. ‘Something useful; an appendage. | I will draw a bill of *properties*, such as our play wants. | *Shakesp. Midsummer’s Night’s Dream* | Greenfield was the name of the *property* man in that time, who furnished implements for the actors.’
- 136 *The Wesleyan Edition of the Works of Henry Fielding: Miscellanies by Henry Fielding, Esq.*, Vol. 3, ed. Bertrand A. Goldgar and Hugh Amory (Oxford University Press, 1997), p. 68n.; ‘old hat often felt’ stands for female pudenda, a joke explored with exhaustive thoroughness in the poem ‘Old Hat’, in the proto-Shandean miscellany *Button, and Button-hole: with a Character of the Drabs, and the Change of Old-Hat* (1723), pp. 7–8.
- 137 Sterne, *FE*, vol. 1, p. 432 (V.vii).
- 138 Maurice Merleau-Ponty, *Phenomenology of Perception*, tr. Colin Smith (1945; London: Routledge, 2002) p. 176.
- 139 Sterne, *FE*, vol. 1, p. 141 (II.xvii).
- 140 Shaftesbury, *Characteristicks*, vol. 1, p. 105, and draft ‘Project of Second Characters, or the Language of Forms’, in MS notebook, PRO, London, 30/24/27/15; for ‘Ruling Passion’ see Pope, *TE*, vol. 3.ii, pp. 30, 67, 106.
- 141 Richard Sennett, *The Craftsman* (London: Penguin, 2008), pp. 84–85, 95.

- 142 Sterne, *FE*, vol. 1, p. 12 (I.vii).  
 143 Ibid., vol. 9, p. 10; cf. further references to painting and fiddling at Ibid., vol. 1, pp. 102 (II.iii) and 356 (IV.xx).  
 144 Ibid., vol. 2, p. 500 (VI.vi).  
 145 Ibid., vol. 1, p. 254 (III.xxviii).

## Chapter 7. The Art of Teaching to Invent: Maria Edgeworth and the Lunar Society

- 1 Johnson gave the essay first ranking in lists of Edgeworth's writings written in October 1795, *Johnson Letterbook*, p. 17.
- 2 For *Belinda*'s inclusion in Anna Letitia Barbauld's 'British Novelists' series as a mark of its special status see Aileen Douglas, 'Maria Edgeworth and Anna Letitia Barbauld: Print, Canons, and Female Literary Authority', *European Romantic Review* 31 (2020): 699–713, at 703–708.
- 3 Maria Edgeworth, *Belinda*, ed. Kathryn J. Kirkpatrick (Oxford University Press, 1994), p. 37; this is consistent with the complicated acts of self-reference traced by Emily Hodgson Anderson, 'Self-Citation in Maria Edgeworth's *Helen*', *Studies in English Literature 1500–1900* 52 (2012): 797–818.
- 4 Maria Edgeworth, *Tales and Miscellaneous Pieces*, 14 vols. (London, 1825), vol. 2, p. 42.
- 5 Frances Burney, *Evelina: Or, the History of a Young Lady's Entrance into the World*, ed. Edward A. Bloom (Oxford University Press, 1982), p. 83.
- 6 Maria Edgeworth and Richard Lovell Edgeworth, *Practical Education*, 2 vols. (1798), vol. 1, p. 263; cf. vol. 2, pp. 587, 595 for further stipulations on didactic fiction.
- 7 Marilyn Butler, *Maria Edgeworth: A Literary Biography* (Oxford: Clarendon Press, 1972), pp. 270–274 for examples; Butler quotes De Staël on p. 223.
- 8 *Practical Education*, vol. 2, p. 542.
- 9 Butler, *Edgeworth*, pp. 32–35, 58–64, 270; Jenny Uglow, *The Lunar Men: The Friends Who Made the Future* (London: Faber and Faber, 2002), pp. 460–461, 478–479; James Chandler, 'Edgeworth and the Lunar Enlightenment', *Eighteenth-Century Studies* 45 (2011): 87–104.
- 10 See Peter M. Jones, *Industrial Enlightenment: Science, Technology and Culture in Birmingham and the West Midlands 1760–1820* (Manchester University Press, 2008), pp. 82–94; Joel Mokyr, *The Enlightened Economy: An Economic History of Britain 1700–1850* (Yale University Press, 2009), pp. 49, 55–59.
- 11 James Keir, *An Account of the Life and Writings of Thomas Day, Esq.* (London: John Stockdale, 1791), pp. 27–28.
- 12 Edgeworth, *Belinda*, pp. 19, 57.
- 13 Yoon Sun Lee, 'Bad Plots and Objectivity in Maria Edgeworth', *Representations* 139 (2017): 34–59, at 42–43; cf. Butler, *Edgeworth*, p. 267, on truth-claims in literature.

- 14 Edgeworth, *Belinda*, p. 115.
- 15 For Edgeworth's curriculum of experimental literature for children see *Practical Education*, vol. 1, p. 341.
- 16 For groups aligned with but separate from the Lunar society see for example Tim Fulford, 'Knowledge-Production in a Provincial Network of the 1790s: The Educational Work of Thomas Beddoes, Thomas Wedgwood, Maria Edgeworth, and S. T. Coleridge', *Journal for Eighteenth-Century Studies* 45 (2022): 427–445; Peter Clark, *British Clubs and Societies 1580–1800: The Origins of an Associational World* (Oxford University Press, 2000), pp. 438–441, 452–460.
- 17 *Memoirs of Richard Lovell Edgeworth, Concluded by his Daughter*, 2 vols. (1820), vol. 1, pp. 85–86; see Uglow, *Lunar Men*, pp. 324, 415: 'Each fused ideas of technology [...] with use of the poet's language or the artist's skill.'
- 18 See *Memoirs of the Literary and Philosophical Society of Manchester*, first series, 5 vols. (1785–1802), vol. 1, pp. 7–29, 54–71, 144–158; vol. 3, pp. 124–158, 241–261; vol. 4, pp. 45–86, 96–108, etc.
- 19 Josiah Wedgwood to Thomas Bentley, 9 September 1770, quoted by Neil McKendrick, 'Josiah Wedgwood and Factory Discipline', *Historical Journal* 4 (1961): 30–55, at p. 34 (he also makes 'Artists' of 'mere Men').
- 20 Maria Edgeworth, *Harry and Lucy Concluded*, 4 vols. (1825), vol. 1, pp. xvii–xviii; Edgeworth, *Works*, vol. 12, p. xvi.
- 21 In *Practical Education*, vol. 1, pp. 317 and 332, Anna Barbauld's primary model is supplemented by Comtesse de Genlis, Marie-Elizabeth de la Fite and Charlotte Smith.
- 22 Maria Edgeworth, *Letters for Literary Ladies. To Which is Added, an Essay on the Noble Science of Self-Justification* (1795), pp. 6–7; for the exchange is 'an attempt to reconstruct the ten-year correspondence between Day and [Richard Lovell] Edgeworth' – see Butler, *Edgeworth*, p. 173; the first gentleman's Burkeanism is also evident from the discussion on p. 15 of 'prejudice', a keyword in Burke's *Reflections*.
- 23 Edgeworth, *Letters*, pp. 47, 52; for a reading through contemporary debates about domesticity see Harriet Guest, *Small Change: Women, Learning, Patriotism, 1750–1810* (University of Chicago Press, 2000), pp. 316–317.
- 24 Edgeworth, *Letters*, p. 24.
- 25 George Lyttelton, *Advice to a Lady* (1733), p. 5; see Mitzi Myers, 'My Art Belongs to Daddy? Thomas Day, Maria Edgeworth, and the Pre-Texts of *Belinda*', in *Revising Women: Eighteenth-Century "Women's Fiction" and Social Engagement*, ed. Paula R. Backscheider (Johns Hopkins University Press, 2000), pp. 104–146, at 141.
- 26 Montagu, *Essays and Poems*, p. 264.
- 27 *Memoirs of Edgeworth*, vol. 1, p. 342, where it is further associated with Samuel Johnson.
- 28 Richard Blackmore, *A Satyr Against Wit* (1700), p. 15.
- 29 Edgeworth, *Works*, vol. 1, p. 74; Edgeworth, *Professional Education*, p. 6; for the contemporary controversy over Blackmore on wit see the verse flytes in

- Richard C. Boys, ed., *Sir Richard Blackmore and the Wits* (University of Michigan Press, 1949); for Blackmore, burlesque satire and *The Dunciad* see Thomas Jemielity, 'A Mock-Biblical Controversy: Sir Richard Blackmore in the Dunciad', *Philological Quarterly* 74 (1995): 249–277.
- 30 See *Practical Education*, vol. 2, p. 658; cf. 374–375 on the unsuitability of satirical literature for children.
- 31 Edgeworth, *Letters*, pp. 19–21.
- 32 The wittiest treatment of wit in *Belinda* is by Jordana Rosenberg, 'The Bosom of the Bourgeoisie: Edgeworth's *Belinda*', *ELH* 70 (2003): 575–596; this chapter treats wit less as Rosenberg's self-defining essence and more as the social performance of literary-satirical attitudes.
- 33 For Lady Delacour's wit as a para-literary achievement see Heather MacFadyen, 'Lady Delacour's Library: Edgeworth's *Belinda* and Fashionable Reading', *Nineteenth-Century Literature* 48 (1994): 423–439, at p. 425.
- 34 Edgeworth, *Belinda*, p. 232.
- 35 See *Ibid.*, appendix, pp. 479–483.
- 36 *Ibid.*, p. 75.
- 37 For Delaval as the source of these scenes see Butler, *Edgeworth*, p. 243.
- 38 Edgeworth, *Belinda*, p. 483.
- 39 *Ibid.*, p. 23; Kirkpatrick identifies the image as Fuseli's diploma piece at the Royal Academy, 'Thor Battering the Midgard Serpent' (1790); another possible identification is with 'Satan's First Address to Eve', which Fuseli added to his Milton gallery in 1800. See Luisa Calé, *Fuseli's Milton Gallery: 'Turning Readers into Spectators'* (Oxford University Press, 2007), p. 56.
- 40 See for example Joseph Priestley's experiments with electrical and phosphoric light in *The History and Present State of Electricity*, 2nd ed. (1769), pp. 17, 68–75, 458; Priestley's history of phosphoric experiments was revised by Thomas Wedgwood in his paper 'Experiments and observations on the production of light from different bodies', *Philosophical Transactions* 82 (1792): 28–47.
- 41 *Life and Letters of Maria Edgeworth*, ed. Augustus J. C. Hare (London: Arnold, 1894), p. 31 (18 November 1793).
- 42 Edgeworth, *Belinda*, p. 477; another high-profile quotation of Pope's absurd lines is Burke's *Speech on Conciliation*, in *Writings and Speeches of Edmund Burke*, Vol. III: *Party, Parliament and the American War*, ed. W. M. Elofson (Oxford: Clarendon Press, 1996), p. 131.
- 43 *Memoirs of Edgeworth*, vol. 1, p. 189.
- 44 Frans de Bruyn, 'The Philosophical Quixote', in *Cambridge Guide to the Eighteenth-Century Novel, 1660–1820*, ed. April London (Cambridge University Press, forthcoming).
- 45 *The Philosophical Quixote; or, Memoirs of Mr David Wilkins*, 2 vols. (1782), vol. 1, pp. 22–24, 30.
- 46 This point is circumstantial. I have found no direct evidence that Hill knew Day or Edgeworth in his correspondence (1767–1810, Berkshire Record Office, D/EZ47) or in the letters he received from Cowper, collected by

- Rev. John Johnstone, which are at Buckinghamshire Archives, D-Cow/1/1/1); Hill lived at Wargrave Hill.
- 47 Cowper, *Letters*, vol. 5, pp. 100–108.
  - 48 Cowper, *Poems*, vol. 2, p. 168 (*Task*, Book 3, lines 210–220).
  - 49 Ibid., vol. 2, p. 172 (*Task*, book 3, line 341), adapting Virgil, *Georgics* IV, line 564; ‘to deceive’ recalls Horace, *Epistles* I.xviii.103, ‘secretum iter et fallentis semita vitae’, a common classical tag in discussions of retirement.
  - 50 Dustin Griffin, ‘Redefining Georgic: Cowper’s *Task*’, *ELH* 57 (1990): 865–879, at 870–871.
  - 51 ‘Mrs Elizabeth Hamilton’, *The Times* (5 October 1816), p. 3; for Maria’s encounter with Hamilton at the home of Dugald Stewart see Jane Rendall, ‘Correspondence and Community: Maria Edgeworth’s Scottish Friends’, *European Romantic Review* 31 (2020): 681–698.
  - 52 *Memoirs of Edgeworth*, vol. 1, pp. 160–108, comment at 165.
  - 53 Darwin to Boulton, summer 1776, *Letters of Erasmus Darwin*, ed. Desmond King-Hele (Cambridge University Press, 1981), p. 40–41.
  - 54 Darwin to RLE, 24 April 1790, *Letters of Darwin*, p. 201–203; Maria regretted that her father did not follow this advice, *Memoirs of Edgeworth*, vol. 2, p. 137.
  - 55 *Memoirs of Edgeworth*, vol. 1, p. 376.
  - 56 Darwin, *A Plan for the Conduct of Female Education* (1797), pp. 118–126; for Maria’s authorship of the booklist see Joseph Johnson to Darwin, 20 July 1799, *Johnson Letterbook*, p. 60; in the *Plan* Darwin attributes it to ‘ladies, whose opinions I had reason to regard’ (p. 118), and it aligns convincingly with texts cited or recommended by the Edgeworths in *Practical Education*.
  - 57 *Letters of Darwin*, p. 338.
  - 58 Edgeworth, *Letters*, p. 65.
  - 59 Edward S. Reed, *From Soul to Mind: The Emergence of Psychology* (Yale University Press, 1997), pp. 13–17; Alan Richardson, *British Romanticism and the Science of the Mind* (Cambridge University Press, 2001), pp. 12–16, 36–38.
  - 60 Erasmus Darwin, *Zoonomia; Or, The Laws of Organic Life*, 2 vols. (1794–1796), vol. 1, pp. 12–13, 185–197.
  - 61 On Darwin’s rejection of earlier psychological theories focused on mechanical instincts see Ben S. Bradley, ‘Darwin’s Intertextual Baby: Erasmus Darwin as Precursor in Child Psychology’, *Human Development* 37 (1994): 86–102, at 91–95.
  - 62 Darwin, *Zoonomia*, vol. 1, p. 49.
  - 63 Ibid., vol. 1, p. 190.
  - 64 Ibid., ‘Preface’, pp. 1–3.
  - 65 *The Poems of Thomas Gray, William Collins, Oliver Goldsmith*, ed. Roger Lonsdale (London: Longman, 1969), p. 131 (*Elegy*, lines 75–76).
  - 66 Darwin, *Zoonomia*, p. 196.
  - 67 Ibid., p. 193; on Darwin’s stammer see *Memoirs of Edgeworth*, p. 164, and *Practical Education*, p. 83.

- 68 Darwin, *Zoonomia*, pp. 49–53; *Practical Education*, vol. 1, pp. 81–2.
- 69 *Practical Education*, vol. 2, p. 695.
- 70 *Ibid.*, vol. 2, pp. 538–539.
- 71 Michael Polanyi, *Personal Knowledge: Towards a Post-Critical Philosophy* (University of Chicago Press, 1958; paperback edition, 1974), pp. 55–57: ‘We may describe such a performance as *logically unspecifiable*, for we can show that in a sense the specification of the particulars would logically contradict what is implied in the performance or context in question’ (p. 56).
- 72 *Memoirs of Edgeworth*, vol. 1, p. 173.
- 73 Dugald Stewart, *Elements of the Philosophy of the Human Mind*, 3 vols. (1792–1827), vol. 1, pp. 122–123; Edgeworth seems to be paraphrasing this sentence in an otherwise untraceable quotation from Stewart in *Practical Education*, vol. 1, p. 80.
- 74 Daniel Kahneman, *Thinking, Fast and Slow* (London: Penguin, 2012), pp. 15–60.
- 75 *Practical Education*, vol. 1, p. 80.
- 76 *Ibid.*, vol. 2, p. 658.
- 77 Edgeworth, *Belinda*, p. 14.
- 78 *Practical Education*, vol. 2, p. 713, a ‘maxim’ placed at the head of the treatise’s ‘Summary’; this is consistent with what Maria (writing under her father’s name) wrote in *Essays on Professional Education*, 2nd ed. (1812), p. 10: ‘In fact, genius seems to be nothing more than invention; a power which must be preceded by the habit of observation and attention; so that it is an abuse of terms to call that natural, which is the result of cultivation, labour, precept.’
- 79 Darwin, *Zoonomia*, p. 358.
- 80 Edgeworth, *Belinda*, p. 138.
- 81 *Ibid.*, p. 91.
- 82 Benjamin Franklin, *Experiments and Observations on Electricity*, 4th ed. (1769), p. 467; see also ‘On the Art of Swimming’, in *Works of the Late Doctor Benjamin Franklin*, 2 vols. (1793), vol. 2, pp. 105–111, which contains warnings about cold-water swimming in hot weather or after exercise – precisely the error made by Hervey.
- 83 ‘Life, Written by Himself’, in *Works of Benjamin Franklin*, vol. 1, pp. 128–129.
- 84 Edgeworth, *Belinda*, p. 91.
- 85 ‘random’ (for *Roderick Random*) appears with no capital in the 1802 second edition, which Kathryn Kirkpatrick uses as copy text for the OUP Worlds Classics edition of *Belinda*. It was correctly capitalised in the 1801 first edition, and in later editions.
- 86 *Practical Education*, vol. 1, pp. 103–104.
- 87 Edgeworth, *Belinda*, p. 111.
- 88 *Ibid.*, p. 113.
- 89 For this and similar comments see Butler, *Maria Edgeworth*, pp. 230–231.
- 90 ‘Morals of Chess’, *Works of Benjamin Franklin*, vol. 2, pp. 33–42, at 36.

- 91 Chandler, 'Edgeworth and Lunar Enlightenment', pp. 95–99; Yoon Sun Lee, 'Bad Plots and Objectivity in Maria Edgeworth', *Representations* 139 (2017): 34–59.
- 92 Joseph Priestley, *An Essay on a Course of Liberal Education for Civil and Active Life* (1765), pp. 147–148.
- 93 Erasmus Darwin, *The Botanic Garden: A Poem, in Two Parts* (1791), pp. v–vii.
- 94 *Practical Education*, vol. 2, p. 644.
- 95 Edgeworth, *Belinda*, pp. 26, 180–182, 209.
- 96 *Ibid.*, pp. 25, 73.
- 97 *Ibid.*, p. 236.
- 98 *Ibid.*, p. 367.
- 99 *Ibid.*, p. 108.
- 100 *Ibid.*, p. 276.
- 101 See Shaftesbury, *Characteristicks*, vol. 1, p. 181: 'The same *Numbers*, *Harmony*, and *Proportion* will have place in *Morals*; and are [...] the just Foundations of an Art and Science' ('Soliloquy', III.iii); cf. Francis Hutcheson, *An Essay on the Nature and Conduct of the Passions and Affections*, ed. Aaron Garrett (Indianapolis: Liberty Fund, 2002), p. 74.
- 102 Shaftesbury, *Characteristicks*, vol. 1, pp. 11 ('Letter Concerning Enthusiasm', II); 70–73 ('Sensus communis', IV.i).
- 103 Edgeworth, *Belinda*, p. 7.
- 104 For a reading of reading in *Belinda* as more positive 'symbolic labour' see Richard De Ritter, "'Leisure to be Wise': Edgeworthian Education and the Possibilities of Domesticity", *Journal for Eighteenth-Century Studies* 33 (2010): 313–333, at 326–328.
- 105 Edgeworth, *Belinda*, pp. 270–271.
- 106 *Ibid.*, p. 227.
- 107 *Ibid.*, pp. 379–380.
- 108 See Deborah Ross, *The Excellence of Falsehood: Romance, Realism, and Women's Contribution to the Novel* (University Press of Kentucky, 1991), especially pp. 66–93, 94–109. Quixotism diversifies into (among other things) useful knowledge, friendship and benevolence in *The Philosophical Quixote* (1782), *The Amicable Quixote: or, The Enthusiasm of Friendship* (1788) and *William Thornborough, the Benevolent Quixote* (1791).
- 109 Edgeworth, *Belinda*, p. 408.
- 110 *Ibid.*, p. 362.
- 111 *Ibid.*, p. 369, 474; for the motif of falling in love with a picture being 'thread-bare, by its having been employed in thousands of novels and romances', see Marianne-Agnès Pillement, *History of the Marchioness de Pompadour*, 2 vols. (1758), vol. 2, p. 6.
- 112 For example, Edgeworth, *Belinda*, pp. 195–196, 326.
- 113 *Ibid.*, p. 373.
- 114 *Ibid.*, p. 408.
- 115 *Ibid.*, p. 477.



- 116 Ibid., p. 477; Mrs Margaret Delacour counter-quotes from Richardson's *Sir Charles Grandison* to the effect that it is better to hear how people become happy 'than to be told in the huddled style of an old fairy tale – *and so they were all married*'.
- 117 Edgeworth, *Belinda*, p. [3]; cf. Mitzi Myers, 'Shot from the Canons: Or, Maria Edgeworth and the Cultural Production and Consumption of the Late-Eighteenth Century Writer', in *The Consumption of Culture, 1600–1800: Image, Object, Text*, ed. Ann Bermingham and John Brewer (London: Routledge, 1995), pp. 193–214, at 199.
- 118 Anna Letitia Barbauld, *Selected Poetry and Prose*, ed. William McCarthy and Elizabeth Kraft (Peterborough, ON: Broadview, 2002), p. 409.
- 119 See Butler, *Maria Edgeworth*, pp. 273–274, 381.
- 120 Later Edgeworth did write on mechanical invention in *Harry and Lucy, Concluded*, vol. 1, pp. 152–170 (steam engine), 199–234 (cotton manufacture); vol. 2, pp. 276–292 (printing press), 164–178 (foundry, apparently Colebrookdale); vol. 3, pp. 256–270 (Sir Rupert's lathe and workshop).
- 121 To Margaret Ruxton, 11 April 1795, *Life and Letters of Maria Edgeworth*, p. 38.
- 122 To Francis Jeffrey, 18 December 1806, quoted by Butler, *Maria Edgeworth*, p. 272.
- 123 *Memoirs of Edgeworth*, vol. 2, p. 190.
- 124 Catherine Gallagher, *Nobody's Story: The Vanishing Acts of Women Writers in the Marketplace, 1670–1820* (University of California Press, 1995), p. 273.