

State of the Field: Sensory History¹

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In 2007 Mark Smith, a leading light in the field, noted that it was ‘a good moment to be a sensory historian’.² From the perspective of 2021 things are perhaps even better. In many respects academic and public engagement with the past has become more sensuous. The idea that the senses are biological, universal, and unchanging has been replaced – in many academic disciplines – with a firmly-held belief that perception is historically constituted, specific to time and place, and therefore has a history. When it comes to research an increasing number of historians are taking up a sensory ‘habit’, mining the sources of the past for information about past ways of sensing.³ In doing so they are reconfiguring our understanding of historical people, places, and themes that range from revolutions and racism to technology and environmental change.⁴ In pedagogy, historians are encouraging students to get ‘hands on’ in order to better comprehend historical sensory habits and explore both our intimacy with and distance from past ways of perceiving the world.⁵ In fact, education’s own sensory history is the subject of growing interest.⁶ In museums and heritage the ocular-centric institutions that emerged during the nineteenth century, ruled by the demand to look but not touch, have been replaced with object-handling, sound-installations, pedal-operated sniffing devices, and opportunities to taste recreated food and drink based on historical recipes.⁷ In all these ways, we have become re-sensitized to past perceptual worlds.

Within academic history the evidence for sensory history’s increasing influence can be found in many places.⁸ Multi-volume edited collections have scanned the long-durée history of the senses and situated historical approaches within the wider interdisciplinary field of sensory studies.⁹ Centres for the history of the senses and sensory scholarship have cropped up, supplemented by

¹ This publication was made possible by funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement 101004469, project name ‘ODEUROPA’.

² Mark Smith, ‘Producing Sense, Consuming Sense, Making Sense: Perils and Prospects for Sensory History’, *Journal of Social History*, 40:4 (2007), p.841.

³ Mark Smith, *Sensing the Past* (Berkeley, 2007), p.5.

⁴ For the themes mentioned here see: Jan Plamper, ‘Sounds of February, Smells of October: The Russian Revolution as Sensory Experience’, *American Historical Review*, 126:1 (2021), 140-165; Andrew Kettler, *The Smell of Slavery: Olfactory Racism and the Atlantic World* (Cambridge, 2020); Jonathan Sterne, *The Audible Past: Cultural Origins of Sound Reproduction* (Durham, 2003); Joy Parr, *Sensing Changes: Technologies, Environments, and the Everyday, 1953-2003* (Vancouver, 2010).

⁵ For some examples see Anna Harris, *A Sensory Education* (London, 2021), pp. 119-125.

⁶ See the special issue on ‘Educational Soundscapes’ in *Paedagogica Historica*, 53:5 (2017); Ian Grosvenor, ‘Back to the future or towards a sensory history of schooling’, *History of Education*, 41:5 (2012), 675-687; Gary McCulloch, ‘Sensing the Realities of English middle-class education: James Bryce and the Schools Inquiry Commission, 1856-1868’, *History of Education*, 40:5 (2011), 599-613.

⁷ On the sensory history of the museum see Constance Classen, *The Museum of the Senses: Experiencing Art and Collections* (London, 2017); Elizabeth Edwards et al. (eds.), *Sensible Objects: Colonialism, Museums, Material Culture* (Oxford, 2006); for an introduction to the senses and contemporary museums see Nina Levent and Alvaro Pascual-Leone (eds.), *The Multisensory Museum* (Lanham, 2014).

⁸ For a similar survey of these locations see Smith, *A Sensory History Manifesto* (University Park, 2021).

⁹ See the multivolume Constance Classen (ed.), *A Cultural History of the Senses*, 6 vol. (London, 2014); David Howes (ed.), *Senses and Sensation: Critical and Primary Sources*, 4 vol. (London, 2018).

networks that are busy bringing parts of the field together.¹⁰ Interdisciplinary journals devoted to the senses have been complimented by a range of special issues, roundtables, and conversations devoted to exploring, expanding, and refining sensory history.¹¹ Edited volumes and monographs have exploded in number, helped by a small number of book series devoted specifically to sensory history.¹² Yet if sensory history has recently come of age, its move into adulthood has been beset with new questions about its future methodological fate. In the last couple of years several books have begun to reflect on precisely these queries. Debates about how we excavate historical ‘experience’ have, once again, been disinterred and dusted off for further examination. The status of academic history’s relationship with the sensorial offerings of the museum and heritage sector has also been challenged.¹³

However, these debates are not new. In 2007, when Mark Smith wrote the first major survey of the field, sensory history had begun to crystallise into something that was both recognisable and increasingly influential within the historical discipline.¹⁴ This had been rather a long time coming. Outside of academic history, social and technological shifts had spurred many influential nineteenth- and early-twentieth-century thinkers to reflect on the changeability of the senses. As David Howes and others have shown, more than a whiff of early thinking about the historicity of the senses can be detected within contemporary scholarship on the sensate past.¹⁵ According to Karl Marx mid-nineteenth century factories were places in which ‘every organ of sense is injured in an equal degree’. He suggested that for the bourgeoisie, private property produced conditions in which the hearing, sight, and taste were perverted. The abolition thereof would lead to the emancipation of the senses. Marx’s reflections on the alienation and deprivation of the senses induced by industrial capitalism led him to assert in 1844 that ‘the forming of the five senses is a labour of the entire history of the world down to the present’.¹⁶ Production, consumption, and the material realities of daily life all moulded the senses. Another early example of sensate historical thinking comes from early reflections on modern media. In 1935, pondering new technologies that allowed for the mass reproduction of artworks, Walter Benjamin was led to argue that ‘the

¹⁰ For centres see Concordia’s Centre for Sensory Studies and Amsterdam’s Centre for Cross-Disciplinary Emotion and Sensory Studies; for a selection of networks see the Odeuropa Network, <https://odeuropa.eu/network/>, [accessed 01/09/2021]; Early Modern Soundscapes, <https://emsoundscapes.co.uk/> [accessed 1/09/2021]; Senses and Health/Care Environments, <https://hospitalsenses.co.uk/2019/11/15/wellcome-trust-network/> [accessed 1/09/2021]; Nottingham Sensory Studies Network, <https://www.nottingham.ac.uk/research/groups/nottingham-sensory-studies-network/index.aspx>, [accessed 1/09/2021]; Cambridge Russian Sensory History Network, <https://www.crush.group.cam.ac.uk/about> [accessed 1/09/2021]; AHRC Sensory Cities Network, <http://www.sensorycities.com/>, [accessed 1/09/2021].

¹¹ For just some of these see the essays in *The American Historical Review*, 116:2 (2011); *The Journal of American History*, 95:2 (2008); Carolyn Birdsall et al., ‘Forum: The Senses’, *German History*, 32:3 (2014), 256-273.

¹² A very brief selection of recent volumes includes Matthew P Romaniello and Tricia Starks (eds.), *Russian History through the Senses: From 1700 to the Present* (London, 2016); Emilie Murphy, Robin Macdonald and Elizabeth L. Swann (eds.), *Sensing the Sacred in Medieval and Early Modern Culture* (London, 2018); Paul Cornish and Nicholas J. Saunders (eds.), *Modern Conflict and the Senses* (London, 2017); Daniela Hacke and Paul Musselwhite (eds.), *Empire of the Senses: Sensory Practices of Colonialism in Early America* (Leiden, 2017). For book series see the Routledge ‘Sensory Formations’ and ‘The Senses in Antiquity’ series, the Bloomsbury ‘Sensory Studies’ series, the Pennsylvania State University Press ‘Perspectives on Sensory History’ series, and the University of Illinois Press ‘Studies in Sensory History’ series.

¹³ Rob Boddice and Mark Smith, *Emotion, Sense, Experience* (Cambridge, 2020); Mark Smith, *A Sensory History Manifesto* (University Park, 2021); historians would also do well to watch out for interdisciplinary debates about the senses that are sure to be covered in David Howes, *The Sensory Studies Manifesto* (Toronto, forthcoming).

¹⁴ This survey was Smith, *Sensing the Past*.

¹⁵ See especially David Howes, *Sensual Relations: Engaging the Senses in Culture and Theory* (Ann Arbor, 2003).

¹⁶ Karl Marx, ‘Economic and Philosophic Manuscripts of 1844’, in *Karl Marx: Early Writings* (London, 1992), pp. 40-1.

way in which human perception is organized... is conditioned not only by nature but by history'.¹⁷ The fate of the senses has often been – and continues to be – linked to forms of technology that have modified the sensory environment or how individuals and groups perceive.¹⁸

Finally, to take one more influential example, in 1930 Sigmund Freud formulated one of the most famous expressions of an idea that reached back through nineteenth-century psychology, eighteenth-century stadial theories, and seventeenth-century travel literature: that taboos around smell were a mark of civilization.¹⁹ The idea that past environments and bodies were more sensorially offensive than the present is part of a long tradition that remains influential today.²⁰ That tradition has also been supplemented by the work of Norbert Elias, whose work in the 1930s was translated into English and had an enormous influence at the moment when sensory history was emerging to prominence in the 1980s and 1990s.²¹ The emphasis that Elias placed on the careful regulation of the senses and body's sensible attributes as part of a 'civilizing process' that extended from the early modern period into the twentieth century can be detected in Constance Classen's work on sensory manners in the museum and Stephen Mennell's history of taste and dining.²² As Elizabeth Harvey notes, we can also draw a line from Freud and Elias to post-structuralist feminist thought of Julia Kristeva and Luce Irigaray. Both authors have traced the historical and philosophical development of the relationship between the maternal, patriarchal, and the sensory in ways that were deeply influential on the way sensory historians have engaged with touch and ideas about gendered sensory hierarchies.²³

These authors did not produce sensory histories as we know them today. However, they all demonstrate that thinking historically about the senses (as the product of geographical, temporal, and cultural context rather than universal biology) had been happening for a long time, often beyond 'our' own discipline, and in ways that have had a sometimes explicit and often unacknowledged influence on the way we think about the sensate past. Sensory history has grown up alongside a bigger, interdisciplinary, sibling from which it has often borrowed methodologies and historical narratives: the field of sensory studies. In the course of the 1980s and 1990s this field began to draw in many of the new work being done in several disciplines on the role of the senses in culture and society.²⁴

¹⁷ Walter Benjamin, 'The Work of Art in the Age of its Reproducibility', in *Selected Writings: 1935-1938* (Cambridge, 1996), p. 103.

¹⁸ For some exemplar histories of the senses and technology see Jonathan Sterne, *The Audible Past: Cultural Origins of Sound Reproduction* (Durham, 2003); David Parisi, *Archaeologies of Touch: Interfacing with Haptics from Electricity to Computing* (Minneapolis, 2018).

¹⁹ On the wider context for Freud's ideas see Anne Harrington and Vernon Rosario, 'Olfaction and the Primitive: Nineteenth-Century Medical Thinking on Olfaction', in Michael J. Serby and Karen L. Chobor (eds.), *Science of Olfaction* (New York, 1992), pp. 3-25; Howes, *Sensual Relations*, pp. 175-203.

²⁰ For example, see the discussion of Victorian views of Medieval towns in Carole Rawcliffe, *Urban Bodies: Communal Health in Late Medieval English Towns and Cities* (Woodbridge, 2013); for a book that plays on the sensory discomfort of the urban past, whilst still being based on extensive archival research see Emily Cockayne, *Hubbub: Filth, Noise, and Stench in England 1600-1770* (New Haven, 2007).

²¹ Norbert Elias, *The Civilizing Process*, trans. Edmund Jephcott (Oxford, 1994).

²² Constance Classen, 'Museum Manners: The Sensory Life of the Early Museum', *Journal of Social History*, 40:4 (2007), pp. 895-6; Stephen Mennell, *All Manners of Food: Eating and Taste in England and France from the Middle Ages to the Present* (Chicago, 1996).

²³ Elizabeth D. Harvey, 'Introduction: The "Sense of all Senses"', in Elizabeth D. Harvey (ed.), *Sensible Flesh: On Touch in Early Modern Culture* (Philadelphia, 2003), pp. 6-8; Constance Classen, *The Color of Angels: Cosmology, Gender, and the Aesthetic Imagination* (London, 1998).

²⁴ For lists of conferences, books, scholars, and curricula devoted to sensory studies, Concordia's 'Sensory Studies' website is a valuable resource: <https://www.sensorystudies.org/> [accessed 07/09/2021]; for specific works from the 1980s and 1990s see Steven Feld, *Sound and Sentiment: Birds, Weeping, Poetics and Song in Kaluli Expression* (Philadelphia,

Historians had first begun to take the senses seriously in the early twentieth century. The early Dutch cultural historian Johan Huizinga wrote evocatively though generally and often with limited evidence, about the sense-scapes of Europe in the late Middle Ages.²⁵ The French historians of the *Annales* school, including Lucien Febvre and Robert Mandrou offered initial reflections on the possibilities offered by histories of feeling. Febvre's work reflected on the problems with applying contemporary psychology to the past, argued for the social and political importance of feeling, and suggested that the early modern period witnessed a profound transformation in the use of the senses as people moved from hearing and smelling the world to understanding it primarily through sight.²⁶ Echoing Febvre, Robert Mandrou deployed the evidence of poets to argue that sixteenth-century Frenchmen were people 'of sound rather than of sight'.²⁷

These three early historians – Huizinga, Febvre, and Mandrou – gesture to many of the themes, narratives, and methodological issues that still resonate among sensory historians today. In a 1929 essay on cultural history, Huizinga commented on the difficulty of resurrecting the past 'as it was lived'.²⁸ However, in 1878 he had experienced a historical re-enactment of the 1506 entry of Count Edzard of East Friesland into Groningen. He later remembered that he was 'gripped by my first contact with the historical past, and it was deep and unwavering'.²⁹ Huizinga's remarks point to a methodological debate that is still live within sensory history: whether historical recreations, re-enactments, and the historian's own senses are valuable tools in understanding the sensory past. Several sensory scholars have cautioned against assuming we can unproblematically disinter and re-experience the sensory past. Recreations are often materially different: as Holly Dugan notes, whilst seventeenth-century musk was the raw material from an animal, the musk we smell in perfumes today tends to be a synthetic, laboratory-produced, equivalent.³⁰ The 'recordings' of past sensory worlds that we have been bequeathed in images, objects, or texts are not transparent but heavily mediated and artfully crafted. Jonathan Sterne reminds us that listening to a late-nineteenth or early twentieth-century recording does not offer direct access to the auditory past, but allows us to listen to an event in which people created sound *for* recording technologies that required particular forms of engagement to function properly.³¹ Finally, Mark Smith has argued that attempts at sensory recreation or re-enactment fail to address the fundamental methodological point that our senses today are differently attuned to sensation and meaning from our historical forebears. From this perspective, the very idea that the senses have a history – and are therefore culturally and temporally specific – militates against forms of recreation. The social, cultural, and embodied gap between the context of past sensory production and contemporary sensory consumption is supposedly simply too great to bridge.³²

Lucien Febvre's early claim for a shift in the ratio or hierarchy of the senses, as historical actors came to depend on one sense more and on other senses less, has also become a recurring narrative

1982); David Howes, *The Varieties of Sensory Experience: A Sourcebook in the Anthropology of the Senses* (Toronto, 1991); Paul Rodway, *Sensuous Geographies* (London, 1994); J. D. Porteous, *Landscapes of the Mind: Worlds of Sense and Metaphor* (Toronto, 1990).

²⁵ Johann Huizinga, *The Autumn of the Middle Ages*, trans. Rodney J. Payton, Ulrich Mammitzsch (Chicago, 1997).

²⁶ This was characteristic of many early sensory historians. For a discussion of Huizinga, Febvre, and Mandrou, see Smith, *A Sensory History Manifesto*.

²⁷ Robert Mandrou, *Introduction to modern France, 1500-1640* (New York, 1977), p. 51.

²⁸ See Smith, *A Sensory History Manifesto*, p. 16.

²⁹ Caro Verbeek, 'A Whiff of Time – What Our Noses Can Tell us About the Past', in *Fleeting Scents in Colour* (Amsterdam, 2021), p. 27.

³⁰ Holly Dugan, *The Ephemeral History of Perfume: Scent and Sense in Early Modern England* (Baltimore, 2011) p. 10.

³¹ Sterne, *The Audible Past*, p. 240.

³² Mark Smith, 'Echo', in David Novak and Matt Sakakeeny (eds.), *Keywords in Sound* (Durham, 2015), pp. 55-64.

topos in sensory histories. The narrative involving the rise of sight and the devaluation of the non-visual senses from the early modern period onwards has had some influential backers. In the 1960s the media-studies scholars Walter Ong and Marshall McLuhan both published books that set out, in slightly different ways, a ‘great-divide-theory’ of history in which the rise of the printing press transformed the west from an oral/aural to textual/visual culture.³³ This narrative has received plentiful criticism from sensory historians, of which two strands are worth highlighting here. Firstly, perception is not a ‘zero-sum game’ where some senses simply drop out of use or are replaced by the heightened importance of one sense.³⁴ To put it another way, the dawn of modernity did not see our ears, noses, and tongues drop off and our bodies replaced by a floating, disembodied, eye. Whilst not denying the importance of single-sense studies – especially for the relatively understudied senses of touch and taste – some sensory historians have therefore called for more work that is inter-sensory or multi-sensory in its focus.³⁵ One area that has particularly benefitted from this approach is the study of medieval and early modern religion. Sensory historians of early modern religion have successfully demolished stubborn old distinctions between a sensual Catholicism and the sensorially austere Protestantism that supposedly emerged from the Reformation.³⁶ Instead, they have traced the ingenuity and variety of new practices of sensing implied by shifting liturgical cultures or deliberately drilled into worshippers through new religious institutions.³⁷ The early modern history of Christianity is only one example of a broader scholarship tracing the sensory history of religion that has sought, for example, to challenge twinned narratives about the secularization and desensitization concomitant with nineteenth and twentieth-century modernity.³⁸

Particular groupings of the senses have become important in particular historical contexts and sensory historians should be attentive to the way those clusters shift.³⁹ The conceptualisation of the number of and relationship between the senses has certainly differed over time and space. In late medieval and early modern thought, the external senses were joined by a varying number of internal senses.⁴⁰ In fact, in the nineteenth and twentieth centuries the idea of the inner senses did not disappear but was re-imagined through concepts such as the ‘muscle sense’ and sensory-motricity.⁴¹ Jonathan Crary controversially argued that the rise of psycho-physics in the mid-nineteenth-century saw the ‘separation of the senses’ for the first time into distinctive organs that

³³ Marshal McLuhan, *The Gutenberg Galaxy: The Making of Typographic Man* (Toronto, 1962); Walter Ong, *The Presence of the Word* (New Haven, 1967); for a discussion of the difference between their approaches see Smith, *Sensing the Past*, pp. 8-12.

³⁴ Mark Jenner, ‘Follow Your Nose: Smell, Smelling and Their Histories’, *American Historical Review*, 116:2 (2011), p. 345.

³⁵ For recent works that engage with a multi- or inter-sensory approach see Chris M. Woolgar, *The Senses in Late Medieval England* (New Haven, 2006); Jacob M. Baum, *The Reformation of the Senses: The Paradox of Religious Belief and Practice in Germany* (Chicago, 2019); Hannah Platts, *Multisensory Living in Ancient Rome: Power and Space in Roman Houses* (London, 2019); Adam Mack, *Sensing Chicago: Noisemakers, Strikebreakers, and Muckrakers* (Chicago, 2015).

³⁶ Matthew Milner, *The Senses and the English Reformation* (Farnham 2011); Baum, *The Reformation of the Senses*.

³⁷ Anna Kviclova, *Listening and Knowledge in Reformation Europe: Hearing, Speaking and Remembering in Calvin’s Geneva* (Basingstoke, 2018); Christine Göttler, Wietse de Boer (eds.), *Religion and the Senses in Early Modern Europe* (Leiden, 2013); Marcia B. Hall and Tracy E. Cooper (eds.), *The Sensuous in the Counter-Reformation Church* (Cambridge, 2013)

³⁸ Sally M. Promey (ed.), *Sensational Religion: Sensory Cultures in Material Practice* (London, 2014)

³⁹ For an example of work in this direction see David Howes and Marc Lalonde, ‘The history of sensibilities: Of the standard of taste in mid-eighteenth-century England and the circulation of smells in post-revolutionary France’, *Dialectical Anthropology*, 16 (1991), 125-135; Lissa Roberts, ‘The death of the sensuous chemist: The ‘new’ chemistry and the transformation of sensuous technology’, *Studies in History and Philosophy of Science*, 26:4, (1995), 503-529.

⁴⁰ Simon Kemp, ‘The Medieval Theory of the Inner Senses’, *The American Journal of Psychology*, 106:4 (1993), 559-576.

⁴¹ Mark Paterson, *How We Became Sensorimotor: Movement, Measurement, Sensation* (Minneapolis, 2021).

detected particular stimuli.⁴² New technologies such as the telegraph, photograph, and phonograph drew on the idea that the functions of the senses could be separated and isolated.⁴³ This leads us to a second criticism of the ‘great-divide-theory’: its technological determinism. The idea that printing, sound-recording, and other media-related technologies have radically altered our modes of perception has been unpicked and critiqued. Instead, a more nuanced interrogation of the relationship between senses and technologies has emerged. With a theoretical background in Science and Technology Studies, interdisciplinary scholars have explored topics ranging from the history of municipal water analysis, the emergence of the twentieth-century flavours industry, and the sensory skills at work in automobile design and upkeep.⁴⁴

During the same decades that Ong and McLuhan were active, the French theorist Michel Foucault offered up several historical narratives in which vision was cited as *the* sense of modernity. Foucault argued that the slow evolution of natural history and other scientific disciplines from the seventeenth century onwards saw smelling and hearing eclipsed by vision and forms of tabular classification.⁴⁵ In another work he suggested that late eighteenth-century prison-reformers placed a new emphasis on the disciplining, surveilling, gaze, that would become central to modern forms of governance and selfhood.⁴⁶ Foucault’s interest in vision was exemplary of a wider critical attention to the ocular, visual, and ‘scopic’ in twentieth-century French thought.⁴⁷ Scholars have subsequently questioned Foucault’s story about the rise of sight in modern science. For example, they have pointed to anxieties about the reliability of vision in the seventeenth century, the continued importance of the non-visual senses to medical and natural historical work, and the importance of aesthetic, ‘subjective’, experience to early scientific method.⁴⁸ However, Foucauldian ideas about discipline, governmentality, and the senses have continued to influence historians connecting touch, vision, and aurality to the disciplinary projects of the nineteenth-century state.⁴⁹

Finally, Mandrou’s claim that literary evidence might offer a particularly rich ground for the excavation of historical sensation has subsequently been justified by a wide range of excellent work on the senses by literary scholars.⁵⁰ But his statement that poets ‘were endowed with a sensibility

⁴² Jonathan Crary, *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century* (Cambridge, 1990); for a fuller exploration of psychophysics and its implications for ideas about race, gender, and the senses see the excellent Erica Fretwell, *Sensory Experiments: Psychophysics, Race, and the Aesthetics of Feeling* (Durham, 2020); for critiques of Crary see Luisa Calè and Patrizia Di Bello, ‘Introduction: Nineteenth-Century Objects and Beholders’, in Luisa Calè and Patrizia Di Bello (eds.), *Illustrations, Optics and Objects in Nineteenth-Century Literary and Visual Cultures* (Basingstoke, 2010), pp. 1-21; Michael J. Schmidt, ‘Visual Music: Jazz, Synaesthesia and the History of the Senses in the Weimar Republic’, *German History*, 32:2 (2014), 201-223.

⁴³ For a discussion of this relating to sound see Sterne, *Audible Past*.

⁴⁴ Christy Spackman and Gary A. Burlingame, ‘Sensory politics: The tug-of-war between potability and palatability in municipal water production’, *Social Studies of Science*, 48:3 (2018), 350-371; Nadia Berenstein, ‘Designing flavors for mass consumption’, *The Senses and Society*, 13:1 (2018), 19-40; Karen Bijsterveld et al., *Sound and Safe: A History of Listening Behind the Wheel* (Oxford, 2013).

⁴⁵ Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (London, 1977).

⁴⁶ Michel Foucault, *Discipline and Punish: The Birth of the Prison* (New York, 1977).

⁴⁷ Martin Jay, *Downcast Eyes: The Denigration of Vision in Twentieth-Century French Thought* (Berkeley, 1993).

⁴⁸ Stuart Clark, *Vanities of the Eye: Vision in Early Modern European Culture* (Oxford, 2007); Lissa Roberts, ‘The Senses in Philosophy and Science: Blindness and Insight’, in Anne C. Villa (ed.), *A Cultural History of the Senses in the Age of Enlightenment* (London, 2016), pp. 109-132; Steven Shapin, *Never Pure* (Baltimore, 2011), especially pp. 235-286; Alex Wragge-Morley, *Aesthetic Science: Representing Nature in the Royal Society of London, 1650-1720* (Chicago, 2020).

⁴⁹ Peter Stallybrass and Allon White, *The Politics and Poetics of Transgression* (Ithaca, 2011), pp. 125-148; Christopher Otter, *The Victorian Eye: A Political History of Light and Vision in Britain, 1800-1910* (Chicago, 2008); Ana Maria Ochoa Gautier, *Aurality: Listening and Knowledge in Nineteenth-Century Columbia* (Durham, 2014).

⁵⁰ For further reflections on the special historical relationship between poetry and the senses see Susan Stewart, *Poetry and the Fate of the Senses* (Chicago, 2002); for further examples see Alice Barnaby, *Light Touches: Cultural Practices*

which was perhaps no keener than that of the average man, but which expressed itself more readily' raises some knotty methodological issues about what types of sources sensory historians might best use and the precise relationship between sensory 'experience' and the traces we find (and fail to find) in the archive.⁵¹ It also raises the question about whose sensory experiences we are historicising and how representative or generalizable they might be. Huizinga, Mandrou and Lefebvre were making vast generalisations about the sensory habits of entire historical societies from slim evidence. Today, historians have become more careful in not taking the part for the whole. Whilst Enlightenment philosophers might have dismissed the senses other than vision, it is difficult to gauge whether they either represented or influenced varieties of everyday forms of sensing. We would probably learn more about the latter from cant – since dictionaries of slang contain many sensory metaphors and euphemisms – than Kant. To take a twentieth-century example, instead of generalizing a kind of perceptual-zeitgeist from largely middle-class sources, James Mansell has emphasised the need to 'remain wary of universalizing the middle-class sensory habitus' and focus instead on excavating different modes of sensing among different social groups in any given time and place.⁵² One response has been to excavate the sensory biographies of particular individuals. Historians have examined the use of touch and taste by seventeenth-century physicians, the ears of past intellectuals, and the surveilling senses of the nineteenth-century sanitarian.⁵³

This work has been alert to the need to distinguish between the self-described sensory habits of individuals or groups and the sensory stereotypes appended to them by others. That caution has been inspired by the pioneering sensory historian Alain Corbin, whose work in the 1980s and 1990s marked sensory-history's maturation into a new form of social and cultural history. Corbin was especially attentive to the role of the senses in social stereotypes and power dynamics at work in historical societies. For example, in a chapter discussing sensory history's methods in his *Time, Desire, Horror*, Corbin noted that whilst eighteenth-century sailors were described as insensitive, physically rough, and lacking in sensory acuity, these descriptions came from middle-class naval doctors who wished to reinforce the divide between their own sensory habits and the bodies of those that they treated.⁵⁴ As one would expect from Corbin's perceptive comments, the senses have offered new inroads for thinking about class and social distinction. Examinations of the sounds of streets sellers in nineteenth-century Paris, the olfactory encounters described in Victorian novels, and the sensory stereotyping of early twentieth century immigrant workers have all extended our understanding of class and its intersection with other forms of distinction.⁵⁵

of Illumination, 1800-1900 (London, 2016); Santanu Das, *Touch and Intimacy in First World War Literature* (Cambridge, 2005); Elizabeth L. Swann, *Taste and Knowledge in Early Modern England* (Cambridge, 2020); Catherine Maxwell, *Scents and Sensibility: Perfume in Victorian Literary Culture* (Oxford, 2017); Philipp Schweighauser, *The Noises of American Literature, 1890-1985* (Gainesville, 2006).

⁵¹ Mandrou cite in Smith, *Sensory History Manifesto*; or a discussion of this see William Tullett, *Smell in Eighteenth-Century England: A Social Sense* (Oxford, 2019), pp. 10-20.

⁵² James G. Mansell, 'Ways of hearing: sound, culture and history', in Michael Bull (ed.), *The Routledge Companion to Sound Studies* (London, 2019), p. 350.

⁵³ Mark Jenner, 'Tasting Lichfield, Touching China: Sir John Floyer's Senses', *The Historical Journal*, 53:3 (2010), 647-670; Niall Atkinson, 'Thinking through Noise, Building toward Silence: Creating a Sound Mind and Sound Architecture in the Premodern City', *Grey Room*, 60 (2015), 10-35; Bruce Curtis, "'I Can Tell by the Way You Smell": Dietetics, Smell, Social Theory', *The Senses and Society*, 3:1 (2008), 5-22.

⁵⁴ Alain Corbin, 'Charting the Cultural History of the Senses', in David Howes (ed.), *Empire of the Senses: The Sensual Culture Reader* (Berg, 2005), p. 133.

⁵⁵ Aimée Boutin, *City of Noise: Sound and Nineteenth-Century Paris* (Chicago, 2015); Janice Carlisle, *Common Scents: Comparative Encounters in High-Victorian Fiction* (Oxford, 2004); Daniel E. Bender, 'Sensing Labor: The Stinking

Corbin's two most influential works of sensory history focussed on smells and bells respectively. His 1982 *Le miasme et la jonquille* was published in an English translation in 1986 as *The Foul and the Fragrant*.⁵⁶ In this book Corbin introduced the idea of tracking 'thresholds of tolerance', the history of a society's changing understanding of those smells (or sounds, tastes, touches, and sights) that were either pleasant and acceptable or disgusting and objectionable. Drawing chiefly on French evidence, Corbin argued that from the 1750s onwards western modernity was bound up with the deodorizing of bodies and places. Thresholds of tolerance for smells were gradually lowered as smells came to symbolise an array of negative properties. Corbin has recently extended this line of thinking – though in reverse – to sound by arguing that during the course of the nineteenth and twentieth centuries silence became harder to find as our world became noisier.⁵⁷ Such arguments find common cause with contemporary academic and self-help-cum-literary works that trump the need to find silence in an increasingly noisy world.⁵⁸

To some extent, grand arguments about lowering sensory thresholds, or arguments that the past was more or less sensorially offensive than the present, were to sensory historians what the scientific revolution was for historians of science – they was a glowing example of why sensory history was so important and how revealing it could be.⁵⁹ However, historians have questioned whether deodorization has been a goal or product of modernity and whether archival records really show a growing sensitivity to urban noise.⁶⁰ The binary formulation of foul and fragrant smells has been criticised and attention has shifted to case studies of smells that include – among others – ambergris, sulphur, and the durian fruit.⁶¹ Historians have also moved beyond narratives that talk in terms of progressive, modernizing, tales of sensorial refinement. Whilst European and American colonists talked a good game about the benefits of sensory civilisation in the nineteenth and early twentieth century, the reality is that – as Aimée Boutin notes in her perceptive manifesto for how we should 'do' urban sensory history – inventions ranging from the flushing toilet to the automobile were busy rendering life in the colonial metropole noisier, smellier, uglier, and full of tactile dangers.⁶²

Working-Class after the Cultural Turn', in Donna T. Haverty-Stacke and Daniel J. Walkowitz (eds.), *Rethinking U.S. Labor History: Essays on the Working-Class Experience 1756-2009* (London, 2010), pp. 243-265.

⁵⁶ Alain Corbin, *The Foul and the Fragrant: odor and the French social imagination* (Cambridge, 1986).

⁵⁷ See Alain Corbin, *A History of Silence: From Renaissance to the Present Day*, trans. Jean Birrell (Cambridge: Polity, 2018).

⁵⁸ For example, see Stuart Sim, *Manifesto for Silence: Confronting the Politics and Culture of Noise* (Edinburgh: Edinburgh University Press, 2007); Erling Kagge, *Silence: In the Age of Noise* (London: Penguin, 2018).

⁵⁹ For the idea that the scientific revolution helped to give meaning to the careers and professional identities of historians of science, see Mario Biagioli, 'The Scientific Revolution is Undead', *Configurations*, 6:2 (1998), 141-148.

⁶⁰ See Tullett, *Smell in Eighteenth-Century England*; William Tullett, 'Re-odorization, Disease, and Emotion in Mid-Nineteenth-Century England', *The Historical Journal*, 62:3 (2019), 765-788; Phillip Hahn, 'Sound Control: Policing Noise and Music in German Towns, ca. 1450-1800', in Ulrike Krampl et al (eds.), *Les cinq sens de la ville: Du Moyen Age à nos jours* (Tours, 2013), pp. 355-367.

⁶¹ Clare Brant, 'Fume and Perfume: Some Eighteenth-Century Uses of Smell', *The Journal of British Studies*, 43:4 (2004), 444-463; Jonathan Reinartz, *Past Scents: Historical Perspectives on Smell* (Chicago, 2014), p. 210; Mark Jenner, 'Civilization and Deodorization? Smell in Early Modern English Culture', in Peter Burke et al. (eds.), *Civil Histories* (Oxford, 2000), pp. 138-143; Sophie Read, 'Ambergris and Early Modern Languages of Scent', *The Seventeenth Century*, 28:2 (2013), 221-237; Emily Friedman, *Reading Smell in Eighteenth-Century Fiction* (Lewisburg, 2016), pp. 99-118; Andrea Montanari, 'The Stinky King: Western Attitudes toward the Durian in Colonial Southeast Asia', *Food, Culture & Society*, 20:3 (2017), 395-414.

⁶² Aimée Boutin, 'How to do Urban Sensory History', *Urban History*, 45:2 (2018), 409-415; on colonial ideas about sensory civilisation see Andrew Rotter, *Empire of the Senses: Bodily Encounters in Imperial India and the Philippines* (Oxford, 2019); on the olfactory offenses of modernity see Jenner, 'Follow Your Nose', pp. 340-1; on noise abatement and automobiles see James Mansell, *The Age of Noise in Britain: Hearing Modernity* (Chicago, 2017); Karin Bijsterveld, *Mechanical Sound: Technology, Culture, and Public Problems of Noise in the Twentieth Century* (Cambridge, 2008).

This critique also finds support in, albeit similarly linear, narratives that have emphasised the *regressive* environmental impacts of modernity. The environmentalist movement that emerged in the 1960s and 1970s envisioned history as a process in which the human senses had become ever more estranged from the natural world, whilst industrial production, processed food, and pollution progressively produced an ‘assault on the senses’.⁶³ The environmentalist movement also gave birth to one of sensory history’s formative concepts: the soundscape. This was a term developed by Raymond Murray Schafer to describe the sounds specific to a particular place and time. It was developed not as a historical tool but as a tool of heritage. Schafer believed that the world’s sounds were under threat from the modern assault on the senses and the idea of the soundscape – made up of keynote, signal, soundmark, and archetypal sounds – was a tool in his project of preserving the planet’s acoustic ecology.⁶⁴ The concept has subsequently been adapted by historians to refer to both past acoustic environments and the acts of listening that made sense of them.⁶⁵ It has also been joined by smellscapes (to refer the smells that make up particular spaces and times) and tastescapes (to indicate the taste vocabularies, concepts, and preferences in a given historical culture).⁶⁶ Whilst ‘touchscapes’ have not taken off as a concept, historians have been attentive to the relationship touch, proxemics, and spatiality: for example Simeon Koole’s fascinating interrogation of how twentieth-century Londoners came to ‘mind the gap’ whilst riding the underground, Anna Maerker’s analysis of touch in eighteenth and nineteenth-century anatomical museums, or Santanu Das’ multi-sensory exploration of the ‘slimescapes’ of the First World War trench.⁶⁷

The soundscape is at the heart of Corbin’s other major work of sensory history, *Village Bells*. This book was more in tune with this desire to zero in on particular sensory phenomena, in this case the sound of bells. In this work Corbin tracked the shifting meaning of bells in the French countryside from the late eighteenth to the early twentieth century and emphasised their role in constructing community at the local, regional, and national level. Within these communities, Corbin demonstrated that the sounds of bells carried messages about religion, politics, and social relationships that were central to daily life. A rich scholarship has explored similar themes in relation to the sounds of bells, ranging from Renaissance Florence to the Habsburg Empire at the end of the First World War.⁶⁸ This scholarship has furthered an interest in sound as a tool of power and persuasion. Studies have connected sound technology and the history of emotions to reveal the role of radio in managing the fears of early twentieth-century Americans and developed new concepts such as ‘affirmative resonance’ to explore the role of collective listening in Nazi-party

⁶³ Max Nicholson, *The New Environmental Age* (Cambridge, 1987), p. 83; John Barr, *The Assault on Our Senses* (London, 1970).

⁶⁴ R. Murray Schafer, *The Soundscape: Our Sonic Environment and the Tuning of the World* (Rochester, 1994).

⁶⁵ For a survey of how ‘soundscape’ has been deployed see Ari Y. Kelman, ‘Rethinking the Soundscape A Critical Genealogy of a Key Term in Sound Studies’, *The Senses and Society*, 5:2 (2010), 212-234.

⁶⁶ J. Douglas Porteus, ‘Smellscape’, *Progress in Physical Geography: Earth and Environment*, 9:3 (1985), 356-378; for a practical example of smellscapes in historical study see Kathleen Kole de Peralta, ‘Mal Olor and Colonial Latin American History: Smellscapes in Lima, Peru, 1535–1614’, *Hispanic American Historical Review*, 99:1 (2019), 1-30; Priscilla Parkhurst Ferguson, ‘The Senses of Taste’, *American Historical Review*, 116:2 (2011), 371-384; Pasi Falk, ‘Homo culinarius: towards an historical anthropology of taste’, *Social Science Information*, 30:4 (1991), 757-790.

⁶⁷ Simeon Koole, ‘How We Came to Mind the Gap: Time, Tactility, and the Tube’, *Twentieth Century British History*, 27:4 (2016), 524-554; Anna Maerker, ‘Towards a Comparative History of Touch and Spaces of Display: The Body as Epistemic Object’, *Historical Social Research*, 40:1 (2015), 284-300; Santanu Das, *Touch and Intimacy in First World War Literature* (Cambridge, 2005).

⁶⁸ For the two examples mentioned (out of a wide range of scholarship) see Niall Atkinson, *The Noisy Renaissance: Sound, Architecture, and Florentine Urban Life* (University Park, 2016); Claire Morelon, ‘Sounds of Loss: Church Bells, Place, and Time in the Habsburg Empire During the First World War’, *Past & Present*, 244:1, (2019), 195-234.

politics.⁶⁹ In doing so historians have become more aware of the ways in which historical listeners were not just passive recipients of acoustic propaganda but were often able and willing to listen differently or de-colonially to sounds as a form of emotional composure, resistance, or critique.⁷⁰

The regulation of, or ascription of desire or disgust to, sense-scapes has been and continues to be a tool of power that produces and justifies forms of inequality. The overall impression of the growing body of work on smell and sound is that the world has become neither more nor less but rather *differently* odorous and noisy. By this I mean that sensory environments are different from the past but also that they have changed in different ways for different people. Work on the history of domestic architecture, air-conditioning, and soundproofing has illustrated how the regulation of sensory environments has often involved the movement of noise and stench into or onto other spaces and lives rather than their complete eradication.⁷¹ Historically this has often been accompanied by attempts to regulate the ‘distribution of the sensible’, the ways of sensing that are possible or acknowledged in a given time and place.⁷² The history of touch, which has perhaps seen the closest engagement with questions about gender out of all the senses, provides some good examples of the relationship between power and sensory proscription. Past societies have often sought to regulate who can be touched by who and in what context touching can occur.⁷³ For example, Laura Gowing’s study of childbirth and Jonah Miller’s work on early modern powers of ‘stop and search’ both reveal the extent to which touch was at the heart of the early modern patriarchal state, in which men and women asserted their power over women’s bodies through their hands.⁷⁴

Ideas about power and inequality will remain central to the future of sensory history. Recent work has connected forms of sensory inequity and environmental injustice.⁷⁵ Julia C. Frankenbach has identified one section of a growing body of work that connects class, inequality, and sensory surroundings. Mostly covering the nineteenth century to the present, this work demonstrates how distinctions between sensorially offensive areas of towns and cities and those that benefited from cleaning and regulation were encoded with classist and racist assumptions. Working class and non-white areas were represented as noisy, greasy, stinking, and aesthetically unpleasing, whilst the bodies that inhabited them were described as lacking any sensitivity to, or awareness of, the offensiveness of their surroundings.⁷⁶ These understandings of the senses justified and continue to justify the zoning of industries to areas where poorer, non-white, people dwell with important

⁶⁹ Greg Goodale, *Sonic Persuasion: Reading Sound in the Recorded Age* (Chicago, 2011); Carolyn Birdsall, *Nazi Soundscapes: Sound, Technology and Urban Space in Germany, 1933-1945* (Amsterdam, 2012).

⁷⁰ William Tullett, ‘Political Engines: The Emotional Politics of Bells in Eighteenth-Century England’, *Journal of British Studies*, 59:3 (2020), 555-581; Jennifer Stoeber, “Just Be Quiet Pu-leeze”: The New York Amsterdam News Fights the Postwar “Campaign against Noise”, *Radical History Review*, 121 (2015), 145-168.

⁷¹ On domestic space see Flora Dennis, ‘Sound and Domestic Space in Fifteenth- and Sixteenth-Century Italy’, *Studies in the Decorative Arts*, 16:1 (2008–2009), pp. 7-19; on air-conditioning see Hsuan Hsu, *The Smell of Risk: Environmental Disparities and Olfactory Aesthetics* (Berkeley, 2020); on sound-proofing, see Emily Thompson, *The Soundscape of Modernity: Architectural Acoustics and the Culture of Listening in America, 1900–1933* (Cambridge, 2002); Jonathan V. Picker, *Victorian Soundscapes* (Oxford, 2003).

⁷² For this concept see Jacques Rancière, *The Politics of Aesthetics* (London, 2013).

⁷³ For a general overview see Constance Classen, *The Deepest Sense: A Cultural History of Touch* (Chicago, 2012).

⁷⁴ Laura Gowing, *Common Bodies: Women, Touch, and Power in Seventeenth-Century England* (New Haven, 2003); Jonah Miller, ‘The Touch of the State: Stop and Search in England, c.1660–1750’, *History Workshop Journal*, 87 (2019), 52-71; for further work in this direction see Elizabeth D. Harvey (ed.), *Sensible Flesh: On Touch in Early Modern Culture* (Philadelphia, 2002).

⁷⁵ For the term ‘sensory inequity’, see Kara C. Hoover, Kara C. Hoover, ‘Sensory Disruption in Modern Living and the Emergence of Sensory Inequities’, *Yale Journal of Biology and Medicine*, 91 (2018), pp. 53-62.

⁷⁶ Julia C. Frankenbach, ‘Sensing Disorder: Sensory History and Future Directions for Working-Class and Urban Environmental Scholarship’, *Labour/Le Travail*, 78 (2016), pp.281-300.

ramifications for quality of life and opportunity. This is an important and growing area, in which scholars are mapping out the longer historical roots of ‘slow violence’, the iniquitous forms of pollution that creep up upon populations who have been taught to ignore the evidence of their senses.⁷⁷ To paraphrase the conclusion of Melanie Kiechle’s study of the nineteenth-century urban environment, sensory history teaches us that if we sense something, we should say something.⁷⁸ This suggests that in the future sensory history could have a more public, activist, role in helping to understand and frame critiques of – and campaigns against – both the sensory causes and tangible results of sensory inequality.

The future of sensory history will also undoubtedly benefit from greater interdisciplinarity. There are plenty of possibilities here. For example, consumption and production have been useful tracks for sensitive historians to follow. An older narrative that traced the increasing importance of vision in modern advertising and shopping, has been supplemented by work which emphasises the continued importance of all the senses to consumer experience.⁷⁹ Historical retail spaces have been analysed as centres where producers, salespeople, and shoppers could learn, perform, or witness skills of sensory discernment.⁸⁰ Historians have been attentive to the impact of packaging on altering the relative importance of each sense in the consumer assessment of products; they have examined the way in which sensory – especially tactile – knowledge of products could be developed in one space (e.g the home) before being used in another (e.g the department store); and they have described attempts by authorities from the Middle Ages onwards to stamp out the forms of sensory obfuscation used by retailers in order to more easily sell their wares.⁸¹

The relationship between the design and reception of both goods and retail environments has been a recurrent theme in this scholarship. For examples we can turn to Adam Mack’s work on the sensory design of Whole Foods stores in the early 2000s or Kate Smith’s exploration of how eighteenth-century consumers perceived quality, design, and workmanship.⁸² Here there may be, as of yet largely unrealised, opportunities for historically minded researchers to collaborate with the wide-ranging scholarship in cross-modal psychology on shopping, marketing, and consumption.⁸³ As Alex Rhys-Taylor’s evocative ethnography of East London’s multicultural meals also demonstrates, historical approaches can help us understand the heritage embedded in contemporary consumer choices. The best way to understand the popularity of a stall selling curiously-hybrid halal chicken katsu wraps in London’s ‘Square Mile’ is to historicise tastes that have evolved through cross-cultural translation and transfer from the sixteenth century to the present.⁸⁴ In each appreciative bite it is possible to locate a series of sensory preferences built up over centuries. Here the body itself might justly be described as a historical archive. Sensory history

⁷⁷ On slow violence see Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge, 2011).

⁷⁸ Melanie Kiechle, *Smell Detectives: An Olfactory History of Nineteenth-Century Urban America* (Washington, 2017), pp. 259-65.

⁷⁹ For a volume that brings together fresh reassessments the reader should keep their senses alert for Serena Dyer (eds.), *Shopping and the Senses: A Sensory History of Retail, 1800-1975* (Basingstoke, forthcoming 2022).

⁸⁰ Serena Dyer, ‘Shopping and the Senses: Retail, Browsing and Consumption in 18th-Century England’, *History Compass*, 12:9 (2014), 694-703.

⁸¹ Erica M. Storm, ‘Gilding the Pill: the sensuous consumption of patent medicines, 1815-1841’, *Social History of Medicine*, 31:1 (2018), 41-60; Angela Loxham, ‘Women, tactility and consumption: middle-class female sensory participation in Victorian shopping environments’, PhD thesis, Lancaster University, 2016; Richard Newhauser, ‘Retailing ruses: sensory obfuscation, the marketplace, and the state’, *The Senses and Society*, 15:3 (2020), 359-365.

⁸² Adam Mack, ‘The Politics of Good Taste: Whole Foods Markets and Sensory Design’, *The Senses and Society*, 7:1 (2012), 87-94; Kate Smith, ‘Sensing Design and Workmanship: The Haptic Skills of Shoppers in Eighteenth-Century London’, *Journal of Design History*, 25:1 (2012), 1-10.

⁸³ For an accessible summary of some of this work, see Charles Spence, *Sensebacking* (London, 2020).

⁸⁴ Alex Rhys-Taylor, *Food and Multiculture: A Sensory Ethnography of East London* (London, 2017), pp. 41-56.

is a particularly useful tool for thinking about phenomena that hover at the disciplinary boundaries of history and heritage. A collaboration between these two disciplines will be essential to future research on the sensory past.

Art history, which has witnessed a turn towards more multi-sensory modes of analysing images and objects, provides one useful avenue of engagement for historians.⁸⁵ One relevant art-historical concept is Michael Baxandall's notion of the 'period eye', in which the researcher excavates the various forms of education, knowledge, and habits that would have informed ways of perceiving among a particular group.⁸⁶ The adjacent fields of museum studies and heritage also provide essential readings for sensory historians who are interested in thinking through the relationship between sensory pasts and presents. Museums and galleries have also experimented with 'exhibitions within exhibitions' such as the Courtauld's 2001 'Art on the Line'. This recreated the densely packed wall-to-ceiling hang of early-nineteenth-century exhibitions staged by London's Royal Academy in the rooms that originally hosted them. Exhibitions such as these have encouraged visitors to consider the historically specific ways of feeling that would have determined the reception of artworks in their original context. In doing so, audiences better understand the similarities and differences between contemporary and historical ways of sensing.⁸⁷

This leads us to a final important point: in the future sensory historians should engage with work from other disciplines that have felt out ways of engaging the senses as part of the process and outcomes of their research. The possibility of such an approach has been criticised recently by Mark Smith and Rob Boddice and the majority of sensory historians still engage in the same processes of looking, reading, and writing that make up traditional historical methods.⁸⁸

However, if we are to truly realise the radical implications of sensory history for wider historical method, it might be time to put the senses back into sensory history.⁸⁹ There is a particular urgency to this project in our current intellectual context. Euro-centric histories, as Rosabelle Boswell has noted, have often produced 'desensitized pasts' that ignore the lingering sensorial legacies of colonialism and slavery.⁹⁰ In his book *The End of Cognitive Empire*, Boaventura de Sousa Santos discusses how modern western academic traditions of knowledge production have, since the nineteenth century, 'conceived of the senses as necessary evils, indispensable but treacherous vehicles to be sorted out or unmasked'.⁹¹ The same period that saw the emergence of academic

⁸⁵ For a methodological critique of an exclusively 'visual' approach to visual culture, see W. J. T. Mitchell, 'Showing seeing: a critique of visual culture', *Journal of Visual Culture*, 1:2 (2002), 165-181; for recent multisensory art-historical work see Heather Hunter-Crawley and Erica O'Brien (eds.), *The Multisensory Image from Antiquity to the Renaissance* (London, 2019); Patrizia di Bello and Gabriel Koureas (eds.), *Art, History and the Senses 1830 to the Present* (London, 2017).

⁸⁶ For the period eye see Michael Baxandall, *Painting and Experience in Fifteenth-Century Italy: A Primer in the Social History of Pictorial Style* (Oxford, 1988); for the period nose see James McHugh, *Sandalwood and Carrion: Smell in Indian Religion and Culture* (Oxford, 2012); for the period ear see Jan-Friedrich Missfelder, 'Period Ear: Perspektiven einer Klanggeschichte der Neuzeit', *Geschichte und Gesellschaft*, 38:1 (2012), 21-47.

⁸⁷ Helen Rees Leahy, 'Incorporating the Period Eye', *The Senses and Society*, 9:3 (2014), 284-295.

⁸⁸ For Smith and Boddice's critique see their, *Emotion, Sense, Experience*, pp. 23-5; for some interesting recent exceptions see the articles in the special issue 'Rethinking Performative Methods in the History of Science', *Berichte zur Wissenschafts-Geschichte*, 43:4 (2020), 307-456; there is a much wider literature on historical recreation and re-enactment in the areas of archaeology, material culture, history of science, and digital humanities that Boddice and Smith seem to largely ignore.

⁸⁹ This theme will be taken up in a forthcoming work by the author, *Smell and the Past: Archives, Narratives, and Heritage*.

⁹⁰ Rosabelle Boswell, 'Desensitized pasts and sensational futures in Mauritius and Zanzibar', *Journal of the Indian Ocean Region*, 15:1 (2019), 23-39.

⁹¹ Boaventura de Sousa Santos, *The End of the Cognitive Empire: The Coming of Age of Epistemologies of the South* (Durnham, NC, 2018), p. 166

disciplines in the west, including history, also saw attempts to match hierarchies of the senses to racial and cultural hierarchies. Perhaps the best known – the tip of the iceberg – is Lorenz Oken's mapping of humankind in his 1847 *Elements of Physiophilosophy*. In that work Oken gave the following hierarchy:

1. The Skin-Man – is the Black, Africa.
2. The Tongue – is the Brown, Australian-Malayan.
3. The Nose – is the Red, American.
4. The Ear – is the Yellow, Asiatic-Mongolian.
5. The Eye – is the White, European.⁹²

This dismissal of certain ways of knowing the world – especially those beyond hearing and seeing – has been described by Santos as a form of epistemicide. This devaluation of knowledge was deeply entwined with the workings and justification of European colonial power. In an attempt to confront and undo the long-term consequences of this process – to decolonize the cognitive empire – the practice of research that Santos advocates centres on an openness and engagement with diverse ways of sensing and knowing, rather than forcing their translation into the pre-existing epistemologies of western academic practice. As sensory archaeologists have also shown, this also involves refiguring our notion of the historical archive: to integrate indigenous practices and sensations that are absent from the written or material record, to expand our notion of the Archive beyond fixed repositories, and to allow objects locked away in stores to be sensed and used by the communities that created them.⁹³ If we want to decolonise historical study, taking all of the senses seriously would be a good place for us to start.

⁹² Lorenz Oken, *Elements of Physiophilosophy* (London, 1847), p. 651.

⁹³ For one example here, see Cara Krmpotich, 'The senses in museums', in Robin Skeates and Jo Day (eds.), *The Routledge Handbook of Sensory Archaeology* (London, 2019), pp. 94-106.