Scale

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> Her function was . . . to dole out stamps and postal-orders, weigh letters, answer stupid questions, give difficult change and, more than anything else, count words as numberless as the sands of the sea . . .
>
> —Henry James, *In the Cage*[1]

HENRY James begins his 1898 novella *In the Cage* with an anonymous young woman who works in a London post office as a telegrapher. Victorianists have been drawn to the story for its fascinating lessons about telegraphic knowledge, gendered labor, surveillance, and the media ecology of the fin de siècle. Yet the story also offers a prescient glimpse of contemporary problems in humanities research: how to manage, read, and interpret texts at scale. The telegrapher's actual postal scale is just part of her quantitative labor: she deals in the quanta and counting of stamps, change, questions, and words. She also experiences texts in excess of measure: words "numberless as the sands of the sea." *In the Cage* not only thematizes the vast scale of textual proliferation which characterized the nineteenth century, it dramatizes the telegrapher's search for meaning in the masses of words beyond counting. *In the Cage* is an early story of "distant reading," a reckoning with how scale might require an unfamiliar form of hermeneutics. For Victorian studies, the problems of innumerable things and how to interpret them manifest doubly as a historical phenomenon and a contemporary methodological challenge.

Victorian commentators perceived such a shift in the extraordinary expansion of printed materials which attended industrial printing processes, demographic changes in readership, efficient distribution networks, and increasing literacy, among other factors. Perhaps every historical period claims to be overwhelmed with its own information, but in the nineteenth century, as Elizabeth Miller argues, the "nearly incalculable volume of new print material made for a qualitative, not just quantitative, shift in the identity of print as a medium."[2] Victorian commentators newly characterized the printed landscape as a *mass* phenomenon, amounting to what Linda K. Hughes calls "the first mass-media era."[3] Proliferation and politics mingle in these notions of the masses and how and whether they could be counted, or at what scales perceived. Benjamin Morgan suggests that scale structures perception

and clears conceptual space for other cultural projects.[4] With respect to print, Miller argues that the efforts to convert "a massive, sublimely ungraspable print culture into something more human-scaled" produce other forms of knowledge work, including new genres of literary writing and criticism.[5]

Scale challenged not simply the mechanics but the interpretive coherence of reading, the sense of how a textual medium even worked. Miller points to the Victorian book review as a signature response. In considering global and planetary scales, Morgan argues that decadent writers undertook "acts of imagination that situate the totality of human life in relation to the totality of natural systems," all "in order to contemplate their shared fate" and thus theorize about the anthropocene.[6] Anna Henchman identifies the novel as among several "large-scale systems" which variously tried to measure sprawling complexity.[7] Victorian astronomy, Henchman argues, provided novelists a model for managing perspectives at various scales. To these arguments, I would add the nascent interest in literary stylistics as something to count, measure, and interpret—perhaps first articulated in an 1887 article in *Science* magazine which charts comparative word lengths in Charles Dickens's *Oliver Twist*, William Makepeace Thackeray's *Vanity Fair*, and John Stuart Mill's essays on political economy.[8]

"Distant reading" is not solely the purview of computers, but of counting. Ted Underwood traces its genealogy to mid-twentieth century experiments in quantitative methods, but Victorian examples suggest an earlier engagement with its methods and the interpretive problematics at its core.[9] In their pamphlet *A Quantitative Literary History of 2,958 Nineteenth-Century British Novels* written for the Stanford Literary Lab, Ryan Heuser and Le-Khac Long put it this way: "The general methodological problem of the digital humanities can be bluntly stated: How do we get from numbers to meaning?"[10] This question has roots in the questions many Victorian writers were asking about how to swim in oceans of textual information in multiply mediated forms.[11] In his subsequent preface to *In the Cage*, James describes his own interest in the telegraph office for its cacophony, having "so much of London to give out, so much of its huge perpetual story to tell." As James explains, "So had grown up, for speculation . . . the question of what it might 'mean.'"[12] *In the Cage* is among several Victorian examples which explore "the question of what it might 'mean'" in terms of counting words, quantitative inference, and literary criticism.[13]

The digital has reinvigorated our engagement with Victorian scale. Natalie Houston describes the "large-scale digitization of nineteenth-century books and periodicals" as producing "evidence at new scale," including

historical texts as well as their computational features.[14] Importantly, Houston stresses that scale happens at various sizes, challenging the fallacy of "big data" with an emphasis on carefully curated data sets and interpretive dexterity. Digital methods must be scalable, too. For instance, Ryan Cordell coins the term "'zoomable reading, in which one moves between levels of perspective."[15] Michael Witmore goes even further, arguing that approaching texts at variable scales has *always* been an interpretive possibility: the seeming novelty of large-scale digitized materials just reminds us of the "massive addresseability" of text.[16] As the Victorians apprehended an enormous increase in printed materials, they too struggled with the problems of scale, the question of what it might mean, and the critical opportunities of trying to find out in new ways.

Notes

1. Henry James, *In the Cage*, in *Tales of Henry James*, ed. Christof Wegelin and Henry B. Wonham, 2nd ed. (New York: W. W. Norton & Company, 2002).
2. Elizabeth Carolyn Miller, "Reading in Review: The Victorian Book Review in the New Media Moment," *Victorian Periodicals Review* 49, no. 4 (2016): 626–42, 626.
3. Linda K. Hughes, "SIDEWAYS!: Navigating the Material(ity) of Print Culture," *Victorian Periodicals Review* 47, no. 1 (2014): 1–30, 1.
4. Benjamin Morgan, "Fin Du Globe: On Decadent Planets," *Victorian Studies* 58, no. 4 (2016): 609–35, 613.
5. Miller, "Reading in Review," 628.
6. Morgan, "Fin Du Globe," 612.
7. Anna Henchman, *The Starry Sky Within: Astronomy and the Reach of the Mind in Victorian Literature* (Oxford: Oxford University Press, 2014), 2.
8. T. C. Mendenhall, "The Characteristic Curves of Composition," *Science* 9, no. 214 (1887): 237–49.
9. Ted Underwood, "A Genealogy of Distant Reading," *Digital Humanities Quarterly* 11, no. 2 (2017): n. p.
10. Ryan Heuser and Le-Khac Long, *Quantitative Literary History of 2,958 Nineteenth-Century British Novels: The Semantic Cohort Method*, Pamphlets of the Stanford Literary Lab (Palo Alto: Stanford Literary Lab, May 2012), 46.
11. For a brilliant reading of the rhetoric of information "floods," see Nathan K. Hensley, "Database and the Future Anterior: Reading *The Mill on the Floss* Backwards," *Genre* 50, no. 1 (2017): 117–37.

12. Henry James, Preface to *The Novels and Tales of Henry James: New York Edition*, Vol. 11 (New York: Charles Scribner's Sons, 1908), xviii, xix.
13. For other examples, see Morgan, "Critical Empathy: Vernon Lee's Aesthetics and the Origins of Close Reading," *Victorian Studies* 55, no. 1 (2012): 31–56. See also Natalia Cecire, "Ways of Not Reading Gertrude Stein." *ELH* 82, no. 1 (2015): 281–315.
14. Natalie M. Houston, "Toward a Computational Analysis of Victorian Poetics," *Victorian Studies* 56, no. 3 (2014): 498–510, 498.
15. Ryan Cordell, "Taken Possession Of: The Reprinting and Reauthorship of Hawthorne's 'Celestial Railroad' in the Antebellum Religious Press," *Digital Humanities Quarterly* 7, no. 1 (2013).
16. Michael Witmore, "Text: A Massively Addressable Object," *Wine Dark Sea* (blog), December 31, 2010.

Science

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THE most interesting of recent developments in Victorian literary scholarship has been our obsession not with the Victorians but with ourselves. We have become fascinated by invoking the Victorians in order to consider our contemporary conditions. This self-interrogation has been both welcomed and contested. For literature and science scholars it has been puzzling, for Victorian literature and science has a long tradition of scholarly critique that takes account of both past and present. It has also been satisfying, since the turn towards our own historical moment has seen the study of literature and science take up a place at the very heart of Victorian literature and culture. This interest in our present moment and its attachments to Victorian cultures is important because it is making us think creatively about the future praxis of Victorian scholarship. It is enabling us to consider new ways of conceiving of the temporal gap between the Victorians and ourselves and what knowledge crossing that gap might generate.

This temporal turn is clear in the significant proportion of recent Victorian research that has focussed, for example, on ecological crises: from environmental violence and studies of the anthropocene