

# BOOKS WITHOUT SCENT, SHAPE OR WEIGHT

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*Over the course of several centuries, the printed book has evolved into a medium which can facilitate deep and attentive reading in a highly productive manner. This ability results to a large extent from specific material properties of paper-based books. As few of these properties can be replicated effectively on digital devices, the transition to screen-based texts invariably leads to different forms of reading. While the immateriality of digital books may affect our capacity to concentrate on texts and to remember their contents, the plasticity and the computability of digital words simultaneously engender innovative ways of engaging with books.*

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**T**he concept of the ‘horseless carriage’ has become a widely-used trope to describe the human tendency to view new technologies primarily as continuations of older technologies. For those who witnessed the introduction of engine-powered automobiles in the early nineteenth century, the concept

may have been useful as it enabled them to conceptualise radically new concepts as innovative manifestations of concepts that were familiar already. An evident shortcoming of the trope is that it undervalues the extent of the differences between two distinct types of machinery. When new phenomena are conceived of narrowly as modifications of past inventions,

this can easily result in unwarranted simplifications which can place a shackle on our capacity to recognise new uses and new functionalities. Similar types of misconceptions are often difficult to forego completely, nonetheless, when we analyse the pragmatic and functional differences between paper-based texts on the one hand and texts read from the screen on the other. Over the course of several centuries, the printed book has become a crucial medium for the dissemination of knowledge and information, and this intimate familiarity with the printed book directly informs our efforts to come to grips with the concept of digital text. The continued importance of paper-based media is evident, for instance, in e-reading devices which digitally replicate the physical experience of turning a page. Texts that consist of atoms and texts that consist of bits both have many distinctive characteristics, nonetheless, and the numerous fundamental differences also lead to different forms of reading.

**W**hen written words are communicated via printed books, the material substrate of the medium invariably produces a range of sensations which cannot be replicated through digital devices. The combination of paper and ink may produce distinct olfactory sensations, for instance, and the quality of the paper on which books are printed likewise produces specific tactile experiences. The flimsy paper of a newspaper, for instance, feels differently on our fingertips than the more sturdy paper of hardback novels. Books also have a certain size and a certain weight.

When we read a book, a comparison of the weight in our left hand and the weight in our right hand enables us, consciously or unconsciously, to make an assessment of our reading progress. A crucial characteristic of printed texts, furthermore, is that they have a fixed typography. Units such as paragraphs, titles, block quotes and footnotes have all been given a distinct visual appearance, and such visual distinctions can help readers to identify the genre of the text and to quickly understand its logical structure. Various scholars have emphasised that typography makes a crucial contribution to the overall experience and significance of text. Don McKenzie, for instance, explained that “the material form of books, the non-verbal elements of the typographic notations within them, the very disposition of space itself, have an expressive force in conveying meaning”.<sup>1</sup> Similar to the way in which a conductor of a musical piece can choose to highlight specific aspects of the original work of a composer, typographers can emphasise specific features of a text in order to steer prospective readers in the direction of a particular interpretation.

**T**he properties which have been listed typically originate during processes of “mise en page” and “mise en livre”, and they determine what Shillingsberg refers to as the “bookness” of the printed codex.<sup>2</sup> The process of “mise en object numérique” results, by contrast, in resources which are immaterial. Digital texts essentially consist of arrangements of binary numbers which can be rendered temporarily as words on specific reading devices.

The intangibility and impermanence of digital texts also complicates a systematic analysis of their nature. The types of manipulations that are allowed, for instance, vary strongly along with the format of the file and along with the devices that are used to open and to render these files. 'Digital text' is clearly a very broad phenomenon, which can manifest itself in different ways. Texts can firstly be constructed digitally in the form of eBooks, commonly in the ePub format. E- book devices generally make use either of e-ink technology or of liquid crystal display (LCD). E-books are manipulable, as readers can usually change the font type, the font size and the colours or brightness of the background. Digital Texts can be made available, secondly, in the form of HTML-based web pages. As is the case for ePub, the typographic form of web pages can be modified by zooming in, or by associating different stylesheets. Social media posts such as Twitter feeds or Facebook updates are most commonly consumed via webpages, and they may be argued to fall within this third category as well. Incidentally, any claim that the digital age leads to a decrease in the amount of time spent on reading will have to be revised if it is accepted that the act of reading includes the time spent on text-based social media. The term 'digital text' can thirdly refer to plain text files, which only contain the lexical codes of the text, and which have shed their typography. Examples of this third type may be found on text corpora such as *Project Gutenberg*. Texts can fourthly be embodied digitally as PDF files. Out of the four formats which have been distinguished, the risks and the

limitations alluded to in the trope of the horseless carriage are visible most clearly in this fourth manifestation, as PDF files fix the typographical form of a text, together with its division into pages. Inquiries into the nature of digital text ought to diversify, taking the principled differences between these four formats into account.

An important characteristic of ePub files and web pages is that it has become possible to separate the lexical codes of the text from their typographic form. When texts are available in such rescalable formats, layout artists only have limited possibilities to stabilise their presentation. The ease with which typography can be altered or discarded on the digital medium has led a number of theorists to question the function and the importance of typography. In their article "What is a Text, Really?" DeRose et al. claim that the meaning of a text is produced principally by the words contained in these texts, and that "adjustments of typography" are only "superficial and transient".<sup>3</sup> This somewhat callous stance clearly underestimates the expressive value of the typographic form, and overlooks the fact that the presentation of a written text can have strong implications for the manner in which readers experience this text. The position that typography is transparent and semantically void is challenged strongly, moreover, by literary texts in which authors convey meaning via formal aspects. Examples of such texts can be found in the works of George Herbert, Paul van Ostaijen and Dom Silvester Houedart. If readers would be able to modify the font size of the words in

Herbert's "Easter Wings", for instance, the unity of the form and the contents of the poem would easily get lost. For much the same reasons, the poem can scantily be mediated via the plain text format.

**T**he immateriality of digital texts also engenders different forms of reading. When we read from printed pages, we can readily get immersed in what we read. This aptitude for reading deeply and attentively stems from the fact that we can experience the printed medium as a transparent interface. Tasks such as flipping the pages, or making an assessment of our reading progress, generally become subconscious activities. Reading via screens discordantly involves a number of tasks which undermine our ability to become deeply engaged in a text. As we often read texts on different devices with idiosyncratic interfaces and with singular navigational aids, handling the medium still demand a conscious effort which can interfere with our ability to get immersed into text. The ability to read attentively is challenged further on devices such as tablets or web browsers, as the texts that we want to read need to compete almost continuously with the many other applications on these environments

which jauntily attract our attention.

**I**n many cases, the digital book is also a pageless book. While texts printed on paper typically form fixed bundles of information with a set number of pages, the plasticity of the digital form wreaks havoc with many of our traditional bibliographic units.

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The texts of ebooks is generally reflowable so that they can flexibly be used on multiple devices. On web pages and in plain text files, there is no technical need to divide the text into pages, and words are frequently shown in one long sequence. The lack of a formal stability and the dearth of fixed recognisable chunks are additional factors which can complicate comprehension.

When we read a text, we connect what we learn to the position on which we found the new information. Various studies have shown that readers create cognitive maps of texts, based on visual clues encountered during the reading process.<sup>4</sup> The stable physical structure of printed texts can serve as scaffolding on which readers can buttress their understanding. On the digital medium, the notion of the page becomes increasingly irrelevant, and there are generally very few other permanent explicit landmarks on which readers can base their

orientation. With the exception of PDF files, digital texts are constantly in a state of flux, and this makes it more challenging for readers to organise and to interpret their contents.

**I**t can be observed, in summary, that the various distinctive properties of the digital medium places heavy strains on our capacity to concentrate deeply on a single text for a longer period of time. Sustained attentive reading is only one specific form of reading, nonetheless. Although digital texts may not facilitate deep reading as productively as analogue texts, they may vice versa provide support for other forms of reading which cannot be practiced as well via paper, if at all. Close reading can only occur, obviously, when readers have already selected their texts. Especially since the invention of the printing press, however, there have always been more books than people can read within a lifetime. To combat their sense of information overload, readers have sought to develop techniques that enabled them to learn about the contents of books without fully reading all of these. One such technique is the form of textual engagement which Katherine Hayles refers to as 'hyper reading', which includes "skimming, scanning, fragmenting" and which aims "to conserve attention by quickly identifying information".<sup>5</sup> Library systems have helped us to discover the substance of printed books we have not read by supplying information about contextual aspects, such as their author, their publisher or date of publication. Digital texts, with the possible exception of some PDF files, are usually machine-readable.

The possibility to let computers process the full text of digital books can form the basis for faster and more encompassing forms of hyper-reading. This form of engaging with texts, which can also be referred to as distant reading, can enable us to study patterns and correlations within textual data or to examine large-scale historical developments.

**V**ery similar to the way in which the horseless carriage is currently evolving into the self-driving car, distant reading is essentially a form of reading performed by software, and which delegates parts of the human reading process to computers. This very development, in which texts disseminated digitally are evolving into self-reading books, demonstrates that it is specious to view texts restrictively as printed books behind a screen. Analogue texts and digital texts simply cannot support the exact same functions. The shapelessness and the weightlessness of digital books may affect our ability to read deeply and attentively, but the computability and the plasticity of digital books can, by the same token, allow for innovative ways of engaging with texts. Computational tools may help us to deal with multiple books at the same time, or they may automatically generate abstracts or summaries of texts. Computers may help us to interpret and to understand texts, by highlighting specific significant passages, or by showing us striking similarities between texts from different periods or from different genres. Applications such as these reduce the need for human readers to develop erudition, as

computers can be trained to formulate recommendations for the texts we ought to read, and to cull those books we can ignore. It is clear, in any case,

that when words are transferred to the digital medium, reading does not continue to take place as usual.



<sup>1</sup> D. MacKenzie, *Bibliography and the Sociology of Texts* (Cambridge [etc.]: Cambridge University Press 1999), p. 3.

<sup>2</sup> P. Shillingsburg, *From Gutenberg to Google: Electronic Representations of Literary Texts* (Cambridge: Cambridge University Press 2006), p. 139.

<sup>3</sup> S.J. DeRose et al., 'What Is Text, Really?', *Journal of Computing in Higher Education*, 1:2 (1990), pp. 3-26, there p. 3.

<sup>4</sup> Scientific American, 'The Reading Brain in the Digital Age: The Science of Paper versus Screens - Scientific American', <<https://www.scientificamerican.com/article/reading-paper-screens/>>, (19 June 2018); S.J. Payne & W.R. Reader, 'Constructing Structure Maps of Multiple on-Line Texts', *International Journal of Human-Computer Studies*, 64:5 (2006), pp. 461-474.

<sup>5</sup> K. Hayles, *How We Think: Digital Media and Contemporary Technogenesis* (Chicago: The University of Chicago Press 2012), p. 12.