

The Ebook as a Continuation of Print: Teaching The Waste Land

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Abstract

This paper will address how eBooks provide a logical “next step” in the evolution of books, through examining a particular text: T.S. Eliot’s The Waste Land. Electronic books are a continuation of print technology. With the creation of the internet and the ability of electronic sharing of information, it was inevitable that eBooks would move the traditional print media into the electronic age. Not since the invention of the codex, has society seen such a leap in how print is shared. This paper will address the history, advantages and disadvantages of eBooks and discuss the accessibility and sustainability of the format.

The Ebook as a Continuation of Print: Teaching The Waste Land Several centuries have passed since Johannes Gutenberg invented the moveable type printing press. Society has now arrived at the electronic age, and electronic books are a continuation of print technology. Their arrival on the scene has altered “print culture,” (a phrase coined by E. L. Eisenstein,) and the way everyone thinks about books (qtd. in Johns 269). eBooks are a somewhat evolved version of print books because they contain everything that print books contain except for the paper and ink. This paper will address how eBooks like *The Waste Land* provide a logical “next step” in the evolution of books. With the creation of the internet and the ability of electronic sharing of information, it was inevitable that eBooks would move

traditional print media into the electronic age. “[*The Waste Land*] anticipates the ...[Internet], with its vast range of fragmentary images, so it is especially suited to publication as an eBook in the electronic age” (Sax). Not since the invention of the codex has society seen such a leap in how print is shared. Nevertheless, it appears that the eBook may not immediately overtake print production. Studies and sales of eBooks and print books show that people are still heavily invested in the print medium (“Paper Books vs eBooks”). This is a time that follows the natural evolution of book culture with a nuanced experience with print (Striphas 541).

This research paper is a case study of the pedagogical implications of teaching a particular text, specifically T.S. Eliot’s *The Waste Land*, in eBook format while looking to answer some of the following questions: What is the history behind the eBook? To what extent are eBooks a continuation of print? Has there been reason to believe that people prefer print books to eBooks? What are the benefits of eBooks? What are the benefits of print books? Are there any setbacks involved in the use of electronic books? Are eBooks more sustainable than print books? Why should a teacher consider insisting on the eBook for students when teaching T.S. Eliot’s *The Waste Land*? Through answering these questions and analyzing the eBooks available for *The Waste Land*, eBooks will be shown to be efficient, social, accessible, portable, adaptable, and sustainable.

It is T.S. Eliot’s remarkable masterpiece, *The Waste Land*, that inspired me into thinking about the way the experience with books is now evolving with the advent of the eBook and how teaching the text can be affected depending on the medium being used to read the text. I ventured to read T.S. Eliot’s *The Waste Land* in both eBook and print interchangeably. *The Waste Land* was written in the aftermath of WWI, and it depicted the sentiment, disenchantment, desolation, and despair of the time (Moore 1). It is a modernist poem that is

one of the most influential poems of the 20th century. The poem is a meditation of many different voices reflecting and refracting each other (“Nick Mount” 8:51-8:56;). It incorporates a conglomerate of works from both Eastern and Western cultures. *The Waste Land* is an epic 434-line poem, containing five stanzas, namely “The Burial of the Dead,” “A Game of Chess,” “The Fire Sermon,” “Death by Water,” and “What the Thunder Said.” Written in England and Switzerland in 1921, *The Waste Land* was first published by a literary magazine that Eliot founded and edited in London called *The Criterion* in October 1922 (Kenner 150). It was then published in *The Dial* in New York in November 1922 (Kenner 150). Both of these editions were presented without notes (“Nick Mount” 0:11-0:22). After this, it was published in December 1922, in book format, with the notes by an American publisher named Boni and Liveright (Eliot and Rainey).

I chose to explore reading eBook and print book versions simultaneously on account of noticing the several benefits of eBooks. Ebooks can be said to be the natural and logical evolution of the print book (Striphas 541). I wondered whether when teaching *The Waste Land* one should incorporate a certain version and type of the text for maximum benefit to students. I hoped that by the end of my research I could find a suitable answer.

One of the several benefits of eBooks is their accessibility. As Caleb Mason discussed in “Why eBooks Will Eventually Replace Print,” print may require one to drive to a store and search for a book, perhaps having to go from one store to another after having not found the book at the first location. Meanwhile, the eBook is readily available right at the click of a button. Click I did, at the prospect of choosing not to be a Luddite and having the opportunity to read T.S. Eliot’s *The Waste Land* on screen.

Today eBooks are portable, and the typography of eBooks can be altered as well. I have taken advantage of this feature as I have accessed several eBook editions of *The Waste Land*. I alternated between the eBook and the print version to notice that the typeface of the text titled *The Waste Land: Prufrock and Other Poems* must be 10 or 11-point font in my Dover Thrift Edition of the print text. This is a relatively small font to read. People who are visually impaired may have an issue with small-print typeface. Ebooks are particularly useful for people with poor eyesight considering the fact that it is at times possible to modify the text size and contrast. This is an evolution of print, a medium that has often forced those who were visually impaired in one way or another to strain their eyes to read the usually smaller typeface. Only if one is lucky enough to find books with large print typeface does one avoid such a hindrance. Additionally, not all books have large-print editions. With the eBook, accommodations such as the ability to change font size and brightness are made possible through e-readers. Such accommodations are also available through the many applications available through phones, tablets or computers. These devices also now offer the feature to have the device read text aloud to the reader, or in this case, the listener.

It can be instructive to learn about the development of the eBook. The electronic book is a modern, efficient manner of retrieving “text-based” literature (Wilber). The electronic book, also known as an e-book, eBook or digital book, is an electronic format of a book publication file that stores information such as images and text, that are retrievable through a computer, e-reader, tablet or cellphone (“e-Book”). The electronic book contains all essential information contained in a book. Some books only come in electronic format, and some books are not yet in electronic format (“e-Book”). Although the electronic book appears to be a fairly recent invention, it has a long history that began in the 1930s (Wilber). The idea

of electronic books emerged roughly around the same moment that paperback books materialized on shelves (Wilber; Bartram).

Even almost one hundred years ago, the idea of the eBook was presented as practical since it was dreamt of as portable and adaptable. The idea of the electronic book was invented along with the idea of an e-reader (Wilber). In the 1930s, a writer and impresario named Bob Brown came up with the idea of an eBook reader after watching a “talkie,” a movie with sound (Bartram). He wrote an entire book about his idea which he called “The Readies,” a name inspired by the word “talkie” (Bartram). In his book-length manifesto, Bob Brown plays with words while he envisions a future with a device that would make it possible to read text on a screen. Brown predicted that reading books might one day “go out of style” (Brown 40). He imagined a reading device that would save ink and avoid paper cuts (Schuessler). Brown envisioned a portable device that would allow people to read novels in thirty minutes (Brown 30). He also imagined that one would be able to change the size of the typeface (Schuessler). His device was to be read with a magnifying glass through a medium like a clip, smaller than a typewriter’s tape (Brown 13, 28). Brown’s prediction that we would read novels in thirty minutes never came to pass. However, today some inventors like Craig Saper at readies.org have taken it upon themselves to invent reading machines modeled after the readies.

Ebook capabilities have come a long way since Bob Brown’s manifesto. There were other prototypes that influenced the eBook of today. Among the prototypes that emerged after Bob Brown’s manifesto for an eBook reader was the *Enciclopedia Mecánica* in 1949. Angela Ruiz Robles, a Spanish teacher, introduced the *Enciclopedia Mecánica*, when she became concerned about her students having to lug heavy textbooks around (Wilber).

Angela Ruiz Robles invented a device using spools of printed matter. The device was described by Robles “as “a mechanical, electrical, and air pressure procedure for reading books” (“Biography of Angela Ruiz”). The device operated by using compressed air. The first prototype was not electronic, though it was the first ever known example of such an automated device. While there were several designs, the final design contained audio recordings, a magnifying glass, a calculator, and an electric reading light. The National Museum of Science and Technology in La Coruna, Spain still holds her prototype though the device never went into mass production (Wilber). There was also one other device that emerged on the scene before the first eBook was published.

After Robles' invention came the *Index Thomisticus* which was created between 1949 and 1970 by Roberto Busa and is considered by some people to be one of the world's first eBooks (Wilber). It contained an electronic index of annotated works of Thomas Aquinas, and it was stored on an electronic computer (Wilber). This eBook was released in CD-ROM format in 1989 (Wilber). Yet some historians are hesitant to consider this the first official eBook since it was a compilation not a “stand alone published edition” but was used for studying existing texts that were already written (Wilber). Additionally, there have been other inventions that have directly influenced the modern-day eBook, and hence the production of *The Waste Land*, such as hypertext.

Several projects of the 1960s, such as hypertext, are considered by historians to have inspired the modern-day eBook (Wilber). Of the projects that were predecessors to the eBook, the most notable were the oN-Line System (NLS) project at Stanford Research Institute (SRI) developed by Doug Engelbart and published in 1968, and the Hypertext Editing System (HES) and File Retrieval and Editing System (FRESS) projects at Brown University developed by Andries van Dam in 1967 and 1968, respectively (Wilber). The oN-Line

System was an early multi-user hypertext system which involved the use of a computer mouse (“What Is NLS (ONLine System)?”). The project was funded by the Defense Advanced Research Projects Agency (DARPA) and the U.S. Air Force, which contained “video monitors, information organized by relevance, screen windowing, presentation programs and other modern computing concepts” (DARPA). Andries van Dam, the creator of FRESS, was responsible for coming up with the name “electronic book” (Ardito). His project, the File Retrieval and Editing System, FRESS, evolved from a former hypertext system project which Van Dam had helped develop the year before called Hypertext Editing System (HES). The File Retrieval and Editing System was run though IBM mainframe computers and while containing tables of content and indexes, it was “formatted dynamically for different users, display hardware, window sizes, etc.” (Wilber; “File Retrieval”). The hypertext system functioned much like the World Wide Web does today. It contained tags and jumps. Tags are one-way links that lead to footnotes and references while jumps were two-way links that took users to self-contained pages of related content (“File Retrieval”).

There are some features that are available to more recent eBooks that *The Waste Land* in eBook format needs to have, and hypertext is one of them. Hypertext in computing is “a software system allowing extensive cross-referencing between related sections of text and associated graphic material” (“Hypertext”). In the eBook, hypertext is used to transport from one section of the book to another where relevant information is contained. Hypertext is usually possible as a connection to the footnotes or notes section. Though there is a “Notes” section in *The Waste Land*, for one reason or another, it has not yet been hyperlinked in the eBook texts. Since there is no hypertext, one has to scroll to the end of the text to read the notes each time if need be. This can easily be accomplished using the bookmark feature. When reading a print book, if one wants to reference a footnote, one has to turn the page to

the back where the footnotes are and then return back to the text over and over again. This increases the possibility of distraction. Nonetheless, it may at first be easier to turn to the “Notes” section in the print book than it is to turn to the “Notes” section in the eBook version of *The Waste Land* because you can flip more than one page at a time, helping to navigate to the desired section more quickly.

The eBook format that is used today is commonly credited to Michael S. Hart. He was given unlimited access to a Xerox mainframe computer, an early computer, that had access to ARPAnet, an early version of the internet (Wilber). Someone had given Hart the Declaration of Independence on July 4th at a grocery store, and he was feeling inspired, so he used the computer to type up the Declaration of Independence and put it up for download on ARPAnet (Wilber). Six people downloaded the document (Wilber). Hence, the Declaration of Independence was the first official eBook. Hart made available several other texts, including The Bill of Rights, the American Constitution, and the Holy Bible. He created Project Gutenberg, a website where public domain texts have been made free, downloadable and readable on any device. The website is still available to visit today and contains sixty-thousand free volumes of text that are out of copyright or donated by editors (Project Gutenberg). The early audience for eBooks was relatively small and consisted of scientists and academics (Galbraith). Early internet transfer speeds were slow, so it was not easy to transfer information when Hart made his first eBook (Galbraith). There were additional implements that contributed to the eBook of today, including glare reduction technology, Wifi, and scanners.

WiFi which is the short form of Wireless Fidelity was originally invented in September 1997 as a “wireless network protocols” family, most often used for devices through local area networking, which allows internet access of nearby digital devices through radio waves

(Bradley; Chwala). It was given the abbreviated name WiFi in August 1999 (Wireless Excellence Ltd.). Since the time of invention, it has become the most popularly used computer wireless network in the home and small office to connect through a wireless router through various devices including but not limited to computers, laptops, cellphones, eBook readers, smart TVs, printers, tablets etc. (Brian and Homer). Today many eBook readers and eBook reading apps use WiFi technology. These apps and ebook readers use WiFi to download books, to sync to the last page read, and to save notes and bookmarks. Although WiFi may be necessary to download an eBook, WiFi is not essential when reading eBooks with eBook readers or eBook apps, especially if one uses the same device and does not want to switch between devices while reading. Among other developments in technology that influenced the eBook is the invention of the scanners.

Electronic books would not have advanced at as rapid a pace without the influence of scanners. When the scanner was invented in 1957, it was rare and so was optical character recognition (Galbraith). Intelligent Machines Research introduced optical character recognition, which is “software that works with your scanner to convert printed characters into digital text (“OCR”). This system was later used by eBook creators to help them shift from being typists to proofreaders (Galbraith).

By the late 1990s, a series of eBook readers were developed that could hold a number of books. The First eBook readers were the Rocket eBook and SoftBook Reader both launched in 1998 in Silicon Valley (Lebert). Both of these eBook readers were approximately the size of a large book and could hold up to ten eBooks at a time (Lebert). Since the time that eBook readers were invented, many companies have created eBook applications with which a user can choose a typeface, adjust typeface size, and make modifications to the screen color, along with other such functionalities. One of these applications has been created by Amazon, and

it is called the Amazon Kindle App (Wilber). The Amazon Kindle App makes it possible for any compatible device to access sometimes free, searchable books and connect to the Amazon's Kindle store where users can access over six million different eBooks (Wilber; Haines). Similarly, Apple makes accessible Apple Books via iPhones, iPads and Mac computers application (which started in 2010 as iBooks), containing a store where users can purchase a plethora of eBooks or download free books in 33 languages made available through the application (Apple; Galbraith).

Of the many applications available for reading eBooks online, the following have versions of *The Waste Land* available: Kindle, Overdrive, Internet Archive, and VitalSource. OverDrive is associated with many libraries around the world and makes eBook borrowing available to any user who has a library card from a participating library. The Internet Archive is a not-for-profit library that offers “permanent access for researchers, historians, scholars, people with disabilities, and the general public to [millions of] historical collections that exist in digital format” (qtd. in Galbraith). The Internet Archive includes 32 million eBooks, 9.1 million videos, 13 million audio files, 3.9 million pictures and other similar materials (“Internet Archive”). VitalSource Bookstore contains one million titles and was founded in 1994 to house the texts of interest to dental students (VitalSource). On its “About Us” page, VitalSource lists itself as the “leading education technology solutions provider committed to helping partners create, deliver, and distribute affordable, accessible, and impactful learning experiences worldwide” (“About Us.”). It credits itself with creating “cutting-edge technologies” that are “designed to optimize teaching and learning for the 21st century” (“About Us.”).

There are many additional benefits of eBooks. The eBook allows a bibliomaniac to safely tuck away their hoardings. When reading with eBooks, it is easy to hyperread, (a concept

coined by James Sosnoski,) for example, looking up information in the dictionary (qtd. in Hayles 496). When reading in print, the act of looking at the dictionary averts one's eyes away from the main text. Then one has to retrace where one was in the main text before looking away to take time to rummage through the dictionary in search of a word. Imagine never losing one's place while reading. The eBook grants that possibility. Ebooks, unlike print books, are accessible almost everywhere to almost everyone, especially including individuals who have spinal injuries or muscular spasms who may have difficulty holding a book as well as the visually impaired, due to the ability to alter the typography, the contrast of the text, and the ability to use text-to-speech capabilities (McNaught 36). Many of these features are available through OverDrive, Internet Archive, Kindle and VitalSource.

There are also many reasons why one may resort to reading print text instead. Reading physical books may cause less distraction. Though there is the possibility of text-to-speech capabilities with eBooks, the visually impaired may want to read braille. Reading braille cannot be accomplished by digital text. Some argue that the physical act of turning the pages of books may aid memory and may also be pleasurable as opposed to scrolling. Some studies, in fact, suggest that the physicality of the book improves comprehension (Delgado et. al). It has also been said that reading eBook texts at night time alters circadian rhythms (Chang 1232-1237). Nonetheless, as writer and impresario Bob Brown predicted, print books may one day go out of style in what James LaRue, former director of the Douglas County Library in Colorado, has called the eBook revolution.

The eBook revolution has inspired various versions of eBook formats, which include "printable PDFs, enhanced PDFs with hyperlinks and embedded files, or 'true eBook' formats: EPUB (electronic publication) or MOBI files (Mobipocket eBook format)" (Bartram). PDF stands for Portable Document Format, and it is a kind of computer file

developed by Adobe in 1993 that makes it possible to showcase text and images with fixed formatting (“What is PDF?”). EPUB and MOBI make it possible to resize and reflow text, adjust screen sizes, and read with either portrait or landscape orientation (Bartram). The most commonly used format within “government agencies, commercial publishers, and libraries,” is EPUB, and Amazon Kindle uses “MOBI or AZW” (Bartram). Ebooks are also sometimes available as TXT files, which are computer text files that can be read by almost any computer word processor program.

Of the editions of *The Waste Land* I perused, there are several versions in eBook of which I shall distinguish by the publishers that are involved. There is an edition of *The Waste Land* on Archive.org that lists the phrase “Forth Printing” instead of a publisher. It has been uploaded by a user named “Jakej” in the “Open Source Textbook” collection of Archive.org. The eBook is a scanned copy that can be read with a makeshift eBook reader created for Archive.org by volunteers (*The Waste Land*: T.S. Eliot; Galbraith). Though one can perform a search of the entire text, one cannot change the typography for the version of the text that is showcased in Archive.org’s eBook reader. The page automatically returns to the same page one had been reading the previous time if one is logged in. One can zoom in, zoom out, bookmark, adjust brightness and contrast, invert colors, and choose grayscale on Archive.org’s e-reader. The file can also be downloaded in various formats, including EPUB, Kindle (presumably .MOBI and .AZW formats), PDF, and TXT.

There is also an edition of *The Waste Land* available through Queens Library published by Project Gutenberg. This document is in the public domain. This particular text is in EPUB format. Since it is only available through Overdrive, it cannot be searched, and notes cannot be taken on the document, but the typeface and contrast can be altered. One can also

bookmark this text to mark important locations or mark where one read last. The text automatically syncs to the place one read last after a previous visit.

Additionally, there are two editions of *The Waste Land* available through Overdrive and Kindle from the Brooklyn Public Library, which are published by Open Road Media and Mariner Books. The texts both have a built-in dictionary from Overdrive and Kindle. For these two texts, one can change the typography, the size of the text and the orientation: portrait or landscape. One can also hyperread, which means to search for information one needs to find through Google from the text on both Kindle and Overdrive (qtd. in Hayles 496). On both Kindle and Overdrive, both texts can be bookmarked, and the page automatically returns to where one read last if one were on the same device. On another device, one would have to be connected to the internet on the first device to return to the page last read. One cannot search through the entire text from Overdrive, but one can conduct a search of the entire text from Kindle. On Kindle, one can see other users' highlights and how many times a particular phrase has been highlighted.

Unfortunately, the Open Road Media text is inferior to all the other texts. It does not have the opening quotation from *The Satyricon* by Petronius, nor does it have the "Notes" section. The quotation from *The Satyricon* by Petronius is important because it helps the reader understand the poem and evokes the themes in *The Waste Land*. The epigraph from *The Satyricon* is about a prophet called Sibyl of Cumis, who "is the gatekeeper to the gates of hell" ("Nick Mount" 17:02-17:14). As is further explained, "The Sibyl of Cumis asked for immortality but she forgot to ask for eternal youth. And so as she aged through the centuries, she got smaller, as old people do and now she is so small she fits into a jar" ("The Works of T.S. Eliot 11" 2:38-3:08; Moore 6). For the Sibyl of Cumis, mortality is something to be desired ("The Works of T.S. Eliot 11" 3:35-3:49; Moore 6). The phrase "How to cope with

mortality without rebirth” evokes the main themes in any religion: metaphysics and ethics, which are themes in *The Waste Land* (“The Works of T.S. Eliot 11” 4:30-4:40; Moore 6). This phrase serves as an overture and is arguably one of the most important parts of the poem because it suggests what the poem will be about.

The exclusion of the “Notes” section is unacceptable, though the “Notes” section did not appear in the first two editions of the poem that were published in *The Criterion* and *The Dial*. Some argue that although the “Notes” section was not included in the first two editions of *The Waste Land*, it is essential to reading the poem. I would argue that the “Notes” are essential for reading the text, as it introduces themes and explains allusions present within the poem. Students tasked with reading and studying Eliot’s work should be able to have the latest and best version of the text containing all the relevant sections that have emerged over time. This could simply mean choosing the particular text for the students and providing them with a link or the International Standard Book Number (ISBN) for easy retrieval, which is a unique identifying number for each edition.

Through the VitalSource Bookshelf, a Dover Publications edition of *The Waste Land* is available as the exact replica of the Dover Publications print text. This text can be viewed through VitalSource’s Bookshelf application that is also available as a web app. This edition includes the opening quotation from *The Satyricon* by Petronius, and the “Notes” section. In addition to the “Notes” section, is also a section that lists details about the author. On VitalSource’s Bookshelf, pages can be bookmarked. The page automatically returns to where the user read last. It is also possible to search the text, as well as change the typeface and the typeface size. One can choose from varying colors for the screen. VitalSource’s Bookshelf also has text-to-speech capabilities.

Because *The Waste Land* includes 60 different allusions made to 40 different writers in half a dozen languages, *The Waste Land* is the kind of poem that could benefit from notetaking and the professor and the students sharing such (“Understanding Poetry” 1:12-1:18; “Nick Mount” 3:58-4:08). Through the eBook available through Kindle and VitalSource, readers can highlight, save and publish relevant sections, and instructors can take notes and share them with students (*Kindle*; Gee 123). In VitalSource, students can also share notes with each other while reading (“Making and Sharing Notes and Highlights”). “The Plymouth eBook Project” states that this sharing of notes while reading is what makes eBooks a sociable exchange (Gee 123).

After reeling through the various eBook formats, I now notice a critical detail that may prevent me from utilizing the full function of *The Waste Land* in eBook format. All the eBooks I perused fail to include the line numbers for the poem. This is an important detail. In order to analyze the notes section, one must depend on these line numbers to reference back and forth each itemized listing in the notes section. This changes a few things when teaching *The Waste Land*. One has a few options. One may wait to find a text that emerges with the lined notes and notes section. One could write to the publishers requesting that they change this detail by adding the line numbers. One may have to require students to acquire both the Dover Publication book and the eBook just to utilize the notes section in the eBook. One could use the notes feature of the eBook to outline the line numbers for students. One could also only teach the print text until a definitive option that includes line numbers and the notes section is available. I have written to the publishers, and if immediately given the opportunity to teach *The Waste Land*, I was going to take the time using the notes section of VitalSource’s Bookshelf to outline the line numbers of the Dover Publications eBook edition of *The Waste Land*. Then one of the publishers, Dover Publications, informed me that they

would publish and outline *The Waste Land* with hyperlinks to the notes and line numbers in a forthcoming February 2022 edition of the text (McDonald). This is good news and extremely fortunate for me. There are still some other drawbacks with the other publishers when it comes to the eBook version of the text.

Among the drawbacks of eBooks is the compromise of user privacy. Deborah Caldwell-Stone laments the many changes that are occurring in public libraries at the expense of user confidentiality and privacy (21-22). She explains how user data becomes exposed through sites and apps like OverDrive, which has partnered with Amazon to make eBooks available to libraries through Kindle in exchange for information they collect for marketing purposes (Caldwell-Stone 21). Caldwell-Stone explains how databases connected to these vendors collect unique identifying information, including highlights and notes as well as search words and books read in a manner that can be compromised (22). The Library Bill of Rights and the American Library Association code of ethics are supposed to protect the privacy of users by keeping their personal information confidential (21-22). They go against their code of ethics in exchange for new technology. With this awareness, when teaching *The Waste Land*, I will avoid recommending that students borrow eBooks from the public library.

Despite the prevalence of new technologies for e-reading, a majority of Americans still enjoy reading print books (Perrin 1; Green). Despite the benefits of eBooks, studies and statistics still show that most people are still invested in print books. According to data provided from the Pew Research Center and the American Association of Publishers, as of 2019, among the people surveyed in the United States, people still prefer print books to eBooks (“Paper Books vs eBooks Statistics”). About 26 billion sales were recorded by the American Association of Publishers in 2019. Of these 26 billion in sales, about seven percent is attributable to eBooks (“Paper Books vs eBooks Statistics”). This data does not include free eBooks that are

available and read each year. According to a survey the Pew Research Center conducted of the different groups of Americans who read books last year, the percentage of those who read only eBooks is seven percent while the people who read both eBooks and print books stands at twenty-eight percent (“Paper Books vs eBooks Statistics”). Of the people surveyed, thirty seven percent of the total read print books. Furthermore, according to a survey by the Toronto Star conducted on Canadians, an overwhelming majority of individuals who are college and high school educated read print books as opposed to eBooks in 2020 (“Paper Books vs eBooks Statistics”). Of the college graduates in both Canada in 2020 and the United States in 2019 who read a book, half as many read eBooks as print books. It may not immediately be so that as many people read eBooks as print books. However, there is a trend according to the surveys by the Toronto Star and The Pew Research Center that the more educated the person is, the more likely they are to read eBooks (“Paper Books vs eBooks Statistics”). Nevertheless, electronic books have many advantages, including the ability to carry a great number of books in a small space and the ability to read while in motion (Wilber). As Galbaith noted, “E-books are searchable, interactive, and less expensive (millions are free).” Additionally, Striphas notes that when it comes to publishing, eBooks have enormous potential for re-releasing updated versions due to print errors. Reprinting traditional print books due to errors, however, is not cost effective as the publisher would have to produce additional books made from paper (*The Late Age of Print*).

Among the reasons why eBooks are an evolution of print is sustainability. Sustainability is the ability “to avoid the depletion of natural resources in order to maintain an ecological balance” (“Sustainability”). According to a study done by custommade.com, the production of one ebook reader consumes about 65 pounds of carbon monoxide while producing one book consumes about 7.5 pounds of carbon monoxide (CustomMade). However, there are

other distribution costs entailed in production of a book. Also, one could offset the cost of the ebook reader in one year by reading up to 22 books (CustomMade). Although I have yet to come across a study on the cost of eBooks in comparison to the cost of print books, “626,000 tons of paper are used to produce books every year in the United States” (“Promote Environmental Benefits.”). Therefore it appears that eBooks are more sustainable in the long run because published books require the cutting down of numerous trees. The existence of trees erases carbon emissions, thus preventing global warming (Leahy). Trees are also useful to maintain dynamic equilibrium in our ecosystem because they absorb carbon dioxide through a process known as photosynthesis (Leahy).

In addition to the many reasons why eBooks are more sustainable is the idea that print books require time, effort and resources through the distribution process that eBooks do not require. Print books require shelf space. This shelf space requires the payment of rent or other expenses to maintain. There is also a cost entailed in shipping books. When I purchased *The Waste Land* from Amazon, it was relatively cheap at 1 cent but with a \$3.99 shipping fee and a tax of .35 cents, ultimately costing \$4.35 for the used book. The eBook was free with a library card through OverDrive and Kindle and only cost .99 cents through VitalSource for unlimited access. Through VitalSource, I have the ability to read offline. However, when it comes to note-taking using VitalSource and Kindle, I may be required to log into the internet to save the data. Overdrive has not yet enabled functionality for taking notes or saving notes online.

As wonderful as the many aspects of eBooks are, there is one disappointing characteristic. In a 2012 *American Libraries* article titled “Navigating the eBook Revolution,” James LaRue, interviews someone from each sector of the publishing industry and discusses how similar and different eBooks are in respect to print. The most vivid take away from these

series of interviews is the sad fact that eBooks will not be shareable. For a long time, book gifting has been a part of popular culture, but at this moment, this is not often possible with eBooks which is a major setback (Striphas, *The Late Age of Print* 7). The only contender making it possible to share eBooks has been the Nook App and e-reader by Barnes and Noble.

It is incredibly important for educators to be knowledgeable about the latest developments in technology to best serve students. Ebooks allow educators to quickly and effectively provide enrichment and supplemental materials to help students gain a deeper understanding of the material than was ever possible before the advent of this technology. As an instructor, if I were to require a particular version of the text to study *The Waste Land*, I would recommend the eBook Dover Thrift Edition from VitalSource or the Dover Thrift Edition in print. This particular version has the opening quotation and the “Notes” section. By the time I am teaching, after February 2022, Dover Publications will make hyperlinks and line numbers available. Nonetheless, I would explain to students that if they are not comfortable with the eBook version, they could acquire the print version. I would take advantage of the VitalSource note section for instructors to provide notes. I would also make the notes I provide available through other mediums, like the Goodreads website for Kindle notes for those who do not acquire the eBook in VitalSource.

Works Cited

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