



TECHNOLOGY AND LITERATURE: A STUDY OF IMPACT OF TECHNOLOGY ON LITERARY OUTPUT

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Abstract

Technology is all around us. It has penetrated into various spheres of our lives, including our education, lifestyle and cultural production. Our day-to-day life is influenced and driven by technology. In the Digital Age, it is highly impossible to imagine any work reaching its desired recipients without being processed or affected by technology or tools at any stage during its production lifecycle.

This paper explores the use of technology in producing literature right from printing innovation, and its impact on writer as well as literary work.

Keywords: *Technology, Literary work, Digital Age, Cultural Production*

1. Introduction

Human beings have an innate inclination to use tools and technology. Man has been discovering and inventing tools and technologies to make life easier. From using stones for producing fire to making a computer to write, edit and print, the journey of innovation for convenience seems longer than life. The technology not only compensates and complements human deficiencies, but also enhances our productivity. MacKenzie and Wajcman observed that it is a vital aspect of the human condition. The technology has become central to our lives, and has the potential to make or break us. Humans and technology are very much related, and influence each other.

1.1 Printing Technology

Writing has existed even thousands of years ago. From writing on stones, barks of tree and paper to printing, many innovations have shaped and enhanced the art of writing. The modern printing began five centuries ago when a printing press was established in Mainz, Germany in late 1440s. As a result of printing, prices of books fell and access to literature became affordable. Dittmar noted that it also transformed how ideas were shaped and disseminated. Therefore historians regarded printing a significant revolutionary invention in the history of mankind.

1.2 Information Technology (IT)

After the dramatic push that literature and literary works received with printing, a major boost to reading and writing came with the coming of Information Technology and Internet. In early 1970s, personal computers began entering academic spaces and offices gradually replacing paperwork and improving productivity. It entered into all sectors and industries at its own pace, and influenced our ways of working. Tech corporations like International Business Machines (IBM), Microsoft and Apple have come up with a variety of productivity software which eases reading, writing and publishing.

1.3 Desktop Publishing



Personal computers offer a variety of ways and options to express creativity through variety of design and creative software. As personal computers had been gaining ground, a new concept of desktop publishing came up. According to Tucker (1988), it is an electronic equivalent of the printing press. It changed the way how written materials were created and distributed. It also made publishing convenient and affordable for masses. With a meager investment, people having personal computer were able to produce their own book, magazine or other written work. Tucker goes on to note that desktop publishing “enhance[s] more creative projects”, including poetry and books for children with an addition of illustrations. Sullivan (1988) thinks that all phases of the document publication work could be managed from a computer, thus eliminating conventional labor involved in the process. In addition, desktop publishing became “locus of social activity” and helps in writing and gives “valuable experience for writing majors”.

1.4 Word Processing

Word processor is a widely used program in academic, business and personal settings. A word processor, according Webster's New World College Dictionary, performs tasks such as “generate, edit, store, transmit, or duplicate documents”. First typographer came up during 19th Century when American inventor William Austin Burt patented the device. Today, a word processor is more than just a device. It is a computer program that performs word processing. It allows modifications on the written text without the need to rewrite completely. A known example of word processing software is Microsoft Word. The word processing software is powered by latest technologies such as Artificial Intelligence (AI) and Natural Language Processing (NLP). In a research on students, researchers (Owston, Murphy & Wideman, 1992) found out that they were able to make changes to their work and “continuously revised [work] at all stages of their writing.” It also studied that using a word processor improves quality of the work being produced. In another study on students' writing tasks, it was observed that they made less spelling and structural errors when provided with a computerized word processor in comparison to similar tasks without a word processor. In his book “Track Changes: A Literary History of Word Processing,” Matthew G. Kirschenbaum discusses how authorship has changed due to word processors, and how technology affected the relationship between writers and their work. He also writes that word processing “shapes and informs literary subjects”.

2. Technology and Literary Output

Technology breaks down boundaries as literature does. It has proved itself efficient in many human tasks—from calculating to organizing, curating and even generating information. The relationship between literature and technology is that of ‘symbiotic partners’, wherein both partners have enriched and fed each other. It has the potential to influence production of literary work. In order to understand impact of technology on literary work and its producer, it is vital to know what goes into production of a literary work. The process of production of a literary work involves inspiration for an idea, weaving of relevant ideas and thoughts into a narrative, and editing the work before sending it for publishing.

2.1 Idea

The key to an idea is observation. John Keats observed a nightingale in the garden and composed his famous poem ‘Ode to a Nightingale’, Mahesh Duttani wrote his play ‘Tara’ after reading a research journal about Siamese twins, and Manjula Padmanabhan penned down ‘Lights Out’ after reading about a startling rape case in a Mumbai newspaper. A whole new e-book entitled ‘Caste is Not a Rumour: The Online Diary of Rohith Vemula’ has come up simply with Facebook posts of the



research scholar who committed suicide. There are many such examples of ideas for fiction coming up from nature and newspaper to internet and social media. The literary work begins with an idea, which needs a paper and pen or a device to be composed and preserved. Therefore the next logical step is writing it down.

2.2 Write

An idea is like a smoke, and it disappears quickly into a void of our own mind if not captured and preserved on a piece of paper or a device. Any writer usually writes down his/her idea as soon as it comes. In order to write, humans have used technology—from leaves to paper, chalk to ink and printer. Humans had used stone to write in earliest known period. As time advanced, technology also changed and they invented a paper, pencil, pen, typewriter, printer and computer to make writing a convenient task. With the coming personal computers, writers got much needed help in composing, editing, storing and printing the literary work. It improved their productivity. Typically word processors improve overall writing quality by prompting text quality feedback and revising among others. At the same time, it came to be known that the writers using word processing to write their work gave lesser significance to overall planning of the work before they begin to write. The planning was better when they used paper and pen. Web technologies, especially social media, make writing fiction easier and enjoyable. Though writers know that internet applications may distract, they still use technological devices and software for producing literary works. Social media also makes discussing literature possible.

2.3 Edit

A written work drafted with pen and paper or on a typewriter or computer always need editing and review. Writers have used editing tools and technology to polish their work. In our times, a package of word processing software with editing capabilities makes the job of a writer relatively easier. The software takes care of spelling and syntax mistakes, and enables semantic inferences as numerous research studies have shown. Microsoft Word is among many word processing software which contains aforementioned capabilities. These features complement human deficiencies and cut down on errors writers are likely to make. In addition, internet-enabled technology allows for multi-user editing of the same document from different locations. Software like Google Docs allows collaboration of writers and researchers in writing and editing the work, while addressing the challenges of time and geographical location of users. Once the final draft of the literary work is ready, it goes for printing.

2.4 Publish

A ready-to-print draft of any literary work needs designing as well. Here comes the role of desktop publishing and creative suits such as Photoshop, CorelDraw, InDesign, QuarkXPress, iWork etc. A picture is worth thousand words. Therefore writers and publishers aspire for attractive and meaningful title page, layout, color and font for their literary works. They involve in designing of a literary work with technical help, and use technology that supplement and enhance overall beauty of the ready-to-print work. A better design catches human attention. In fact, a literary work and its design are inseparable entities. After everything is ready, a simple print command to offset printer or a normal one generates as much copies needed.

2.5 Future



Twenty First Century is driven by internet and internet-powered technologies. And Artificial Intelligence (AI) has opened up infinite possibilities of automation of human activities, including creative works. Creative tasks such as composing poetry and music, drawing a painting and writing a fiction are being performed using modern technologies, algorithms, AI, and virtual reality (VR). Czech philosopher Vilem Fussler thinks that with automation human beings would become superfluous to writing, while others believe that no computer can genuinely understand language like a human being does.

3. Conclusion

Technology comes handy for those who intend to write a piece of fiction. Right from conceiving an idea to drafting, reviewing, publishing and receiving feedback—technology comes to the rescue of a writer to cut off a chunk of labour work and refine the output. It altered the way writers conceive their work, research and write.

Writers have always relied on technology whether it was bygone typographer and typewriter to modern computer-powered publishing programs and word processors. These technologies are loaded with a host of writer-friendly features such as spell checker, autocorrect, syntax highlighter, semantic suggester, graphic designer, and layouts. Web technologies help writers interact directly with people interesting in their ideas and works, generating new ideas and receive feedback on published works.

With Artificial Intelligence (AI) and Natural Language Processing (NLP) technologies, literature like other areas of human activity faces a serious challenge. Algorithms succeeded in writing a novel and imitating human languages. They will also be able to gain 'common sense' too, sooner than later. In these circumstances, an important question that requires attention of researchers and opens possibility of further study is: whether writing as a human activity will become redundant?

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