

# Interactive digital environment: A symbiosis of hypertext fiction and reader

Ladan Modir<sup>1</sup>, Leila Modir<sup>2</sup>, Sohaimi Bin Abdul Aziz<sup>1</sup>, Mohammad Saghafi<sup>3</sup>

<sup>1</sup> School of Humanities, University of Science Malaysia, Penang, Malaysia; <sup>2</sup> Poona College, University of Pune, Pune, India; <sup>3</sup> Department of Management, Firozkooh Branch, Islamic Azad University, Firozkooh, Iran

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## Abstract

In 1965, when Theodore Nelson and Douglas Engelbart developed Vannevar Bush's idea of an efficient information retrieval device called Memex and coined the term "hypertext," least did they realize that the revolutionary system would result in radical changes to human thoughts from the production of texts and its form to the reading experience of these electronic texts in the digital platform. The purpose of this paper is to account for multiplicity of readings in interactive narrative structure of hypertext fiction and its comparison to that of linear printed text. Additionally, this study involves changing role of a reader which is reinforced in an interactive environment while navigating narrative structures of hypertext fictions.

**Keywords:** Hypertext, digital space, interactivity, reader.

## Introduction

Reading electronic written works is not just about entering or accepting contents and yet concerning transforming and performing them. Nelson's notion of hypertext is understood by "non-sequential writing – text that branches and allows choices to the reader, best read at an interactive screen ... this is a series of text chunks connected by links, which offer a reader different pathways" (Landow, 2006, pp. 2-3). The term is defined in many ways since by other media theorists.

A hypertext is like a printed book that the author has attacked with a pair of scissors and cut into convenient verbal sizes. The difference is that the electronic hypertext does not simply dissolve into a disordered heap, because the author also defines a scheme of electronic connections to indicate relationships among the slips (Bolter, 1991, p.35).

Hypertext is non-sequential; there is no single order that determines the sequence in which the text is to be read. [It] presents several different options to the readers, and the individual reader determines which of them to follow at the time of reading the text. This means that the author of the text has set up a number of alternatives for readers to explore rather than a single stream of information (Neilsen, 1995, pp.1-2).

Therefore, hypertext novelists aspire to a kind of visual and verbal literary work. They view hypertext as a means to liberate readers from the constraints of printed text boundaries, freeing them to wander through an array of interconnected texts, graphics, and sounds, exploring and creating their own stories. If printed novels become routinely transformed into hypertext, readers may be able to move instantly from the conventional structures to computerized ones. Indeed, readers depend on such patterns to identify a text's genre, anticipate its development, and integrate its parts. On the other hand, conventional authors opine that text as an orderly succession of ideas is strongly reinforced by the constraints of the printed medium. However, from the perspec-

**Corresponding author:** Ladan Modir, School of Humanities, University of Science Malaysia, Penang, Malaysia.  
E-mail: ladanmodir65@yahoo.com.

tive of hypertext writers and readers, this conception of structure is being lifted today in digital environment with the hopes of influencing on readers' interactivity.

### The impact of hypertext on the process of reading

Hypertext has the potential to update basically how we compose, how we peruse, and even how we think about content itself. Hypertext promises to facilitate the writing process in several ways (Pea, & Kurland, 1987). Manipulation and organization of narrative structures through writer's creation courses of action may endow opportunities to readers to interact freely with the hypertext and make novel cooperation. However, rather than leaving the choices to the users themselves, hypertexts may be designed to guide readers on defined "paths" through the network at the appropriate level for their purpose or level of expertise (Zellweger, 1989). The objective of making ways for different readers assumes that hypertext authors can foresee readers' needs well enough to create the desirable set of paths and direct each reader onto the appropriate one.

The precise idea that hypertext writers can make compelling meaningful and suitable narrative structures in the first place depends on an entire extend of suppositions about how to divide up and relate parts of texts, incorporating what sections of content constitute relevant nodes, what types of links are meaningful and significant, and what orders of texts can or should be read non-linearly. Indeed, in a hypertext, linking is writing. George Landow asserts "hypertext is defined by link" (Landow, 2006, p.152). In fact, within digital environment, narrative structure is realized as a structural/functional criterion. On the other hand, it ought to be recognized that providing access to the story of the hypertext fiction is acknowledged by reader's moves. Ladan Modir suggests "there is no clear distinction between text production and text reception in hypertext fiction, and the readers can decide where to begin their reading and where to end it. They choose their own path and thereby create their own narratives in the hypertext system" (Modir *et al.*, 2012, p.5944). Therefore there is a deep association between reader and structure of a hypertext novel in digital environment. For instance, if we consider hypertext fiction like 10:01 by Olsen, which has a strong realistic appeal and the nodes in that are organized in close

proximity and express related ideas, which facilitate the efficient creation and dissemination of complex structures and sets of events of all kinds, therefore, the ultimate goal of designing such a virtual environment is to create the novel so tailored to reader preferences and task situations that every reader feels as though entering into a new story. Thus, reading hypertext fiction will be easier when it contains discourse signs that signal the relationship between narrative structures.

On the contrary, when hypertext is set incoherent expectations or cannot affirm readers' expectations, they create problems for readers, especially those to whom the issue is unfamiliar. Conventional readers rely on the writer to select topics, determine their sequence, and signal relationships among them by employing traditional discourse signs. But hypertext violates standard assumptions of what printed texts are like and raises potential situations for readers by endowing them an authority to select topics, figure out their arrangement, and make connections around them by enjoying interactive environment. In this regard, Mayer believes that allowing readers to choose their own reading order "may result in deeper, more active encoding, which allowed subjects to struggle harder to relate the text to their own experience rather than memorize the information as presented" (Mayer, 1976, p.149). In fact, the net impact of hypertext frameworks is to give readers much more amazing control over the narrative they peruse and the sequence in which they read it. However, sometimes readers become overwhelmed by the choices among links and by the difficulties of maneuvering through the networked text structure (Conklin, 1987). As a result, readers may disorient and lose where they are in the novel. Birkets argued that a fragmented text can only result in a fragmented understanding and a generally impoverished reading experience (Birkets, 1994). On the contrary, some hypertext proponents (e.g., Beeman *et al.*) claim that allowing readers to explore freely in a hypertext may foster insights and critical thinking through the creative juxtaposition of ideas from multiple perspectives. However, hypertext narratives encourage readers to shape the outcomes of the stories they read by the decisions they make in the reading process. Interactive narratives have no single, physical ending in the way that printed narratives do.

As Bolter has argued, each reading generates or determines the story as it proceeds:

There is no story at all; there are only readings. ...the story is the sum of all its readings... Each reading is a different turning within a universe of paths set up by the author (Bolter, 1991, pp. 124-5).

Therefore, the centrality of the reader in constructing meaning, together with the relatively self-contained property of the individual node, leads to the conception of interactivity in hypertext novels.

### Multiplicity of readings

Louise Rosenblatt proposes, "Literature equals book plus reader" (Rosenblatt, 1960, p. 304). This phrase stresses that literature should not be appreciated from a point of view of a text which is the production of the author's mind solely, but the reader should interpret it liberally. He adds that the reader and the text are more analogous to a pianist and a musical score. But the instrument that the reader plays upon is he himself. His keyboard is the range of his own past experiences with life and literature, his own present concerns, anxieties, and aspirations. Under the stimulus and guidance of the text, the reader seeks to strike the appropriate key, to bring the relevant responses into consciousness. Out of the particular sensations, images, feelings, and ideas which have become linked for him with the verbal symbols, he creates a new organization. This is for him the story (*ibid.*). Therefore, readers are seen as breathing life into the texts they read in a creative effort nearly comparable with its author. When hypertext structure is used in storytelling, the narrative is not always fixed to one linear order like the print; instead, there are numerous orders or narrative possibilities in approaching the story. Paul Delany claims that writing does not rely on the subsequent use of paragraphs but rather on blocks of text or what Roland Barthes terms as 'lexia'. Each lexia, according to him, "takes on a life of their own as they become more self-contained, because they become less dependent on what comes before or after in a linear succession" (Delany *et al.*, 1991, p. 10). Since the dependency is loosened in hypertext, lexias can become discrete reading units, which can be easily and openly joined together with other lexias. Such condition challenges the hallmark of a print novel in terms of the way a story is normally structured and read. Indeed, associative and expandable nature of hypertext transforms the idea that a print narrative is univocal. Since there is only one possible reading path in print, readers understand only one meaning or interpretation, which will eventu-

ally lead to only one conclusion. On the other hand, Bolter asserts "hypertext has no univocal sense because every path may define an equally convincing and appropriate reading..." (Bolter, 1991, p. 35). In fact, in hyperfiction, multilinearity clearly exemplifies the sort of freedom exercised by the reader in deciding what to read next and it heightens a sense of discovery and mystery that print fiction has always been trying to achieve.

### Text versus interactive hypertext fiction

Interactivity tends to evoke mostly images of the digital media. In literature, digital interactivity is commonly associated with hypertext. Bolter proposes "The qualities that distinguish electronic writing from print, flexibility and interactivity, become the bases of the enthusiastic claim that computer can improve on the printed book" (Bolter *et al.*, 2001, p.26). Therefore, hypertext novels can be described as books whose technical structure is to some extent different from the majority of printed ones. They position the reader in a way to interact with the story by choosing from some present paths. In fact, the notion of literature that it is dynamic can be exemplified by hyperfiction. Therefore, reading this genre of novel with its world of sound and sight creates enjoying and perceptive experience for the reader who interacts with the novel.

Hypertext fiction challenges all ideas regarding a work is strictly the sole property of the author, mainly because of the freedom of reading selection and direction. Consequently, as Birkets stated that the authorial distribution between the author, and the reader becomes more equal (Birkets, 1994). In other words, the choices and control that grant readers make them as much part of the author himself as readers are able to determine for themselves what to read. On the other hand, there is only one possible starting point directed by the first words and completed by the last works of the narratives in print. To put it simply, reading is usually satisfied at the end point. However, hypertextual reading does not necessarily begin and end in such a way because the author sometimes designs a story without an entry point but with multiple beginnings and endings instead. The entry points may well guide the readers before going deeper into the system of links. The endings, however, do not necessarily show that the story has reached a conclusion because the exit point will sometimes open up several other reading possibilities. Therefore, digital reader concret-

izes and reifies the story in a different manner from traditional reader with the opportunity to enjoy his/her output.

## Conclusions

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Although, it is not a simple errand to make a mental representation of an incoherent or disarranged text in digital environment, but it crucially depends on the order in which readers encounter the development of important concepts in successive interactive hypertext. In fact, it is a writer's task to place the burden of selecting and arranging information, and providing signals to the arrangement. They strive to make their texts more comprehensible to readers. On the other hand, it should be remembered that hypertext writers, by proliferating the readers' choices about what portions of a text to read and in what order, allocate a large portion of this task to the reader. Consequently, interactive electronic space can be regarded as an indispensable situation for readers' interactivity and their interaction to digital genre like hypertext fiction.

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