



Reading Paradigms of Digital Narratives: Reception of Hypertext Fictions and Its Implications

Ramya Rajakannan

Vellore Institute of Technology
ramyarajakannan7@gmail.com

Rukmini S

Vellore Institute of Technology
rukminikrishna123@gmail.com

APA Citation:

Rajakannan, R. & Rukmini S. (2021). Reading paradigms of digital narratives: Reception of hypertext fictions and its implications. *Journal of Narrative and Language Studies*, 9(18), 357-380.

Abstract

The digital media probed the transition from page-turners to navigators of web pages through endlessly connected hypertexts, as reading has moved from papyrus to print to digital devices. Hypertext fictions are *sui generis*, revolutionizing aspects of authorship and readership in the literary arena. Reading hypertext fiction requires subjective responses to the medium's semiotics and interpretation. This new form of narrative fiction renders less scholarly attention. This paper presents the dynamics of the shift in readership from print to digital media using hypertext fiction. This paper methodically emphasizes neglected issues and merits of this new genre of literature, determining the readers' response to two digital hypertext fictions: Michael Joyce's *Twelve Blue* by and Deena Larsen's *Disappearing Rain*. The study was assessed through classroom discussions and questionnaires with 61 students to determine whether the hypertext fictions elevate the passivity of the reading process, the impact of its features on the readers, and whether the medium can establish its implication as a new reading paradigm. This paper implies the significance of exploring hypertext fiction as a detrimental genre in literature.

Keywords: Reader-response; hypertext fiction; digital literature; hypertextual reading.

1. Introduction

Today's world is in a state of digital *metaxy* of '0' and '1' in the hope of traversing polarities of binary opposition. From the 1970s onwards internet advanced the age of information by catering to free and rapid knowledge. The 'digital wave' hit us like a tsunami transforming all social, economic, and political communication mediums with digital updates. Computer, a virtual

technology with the possibility of being an autotelic machine, forced digitization and engulfed all humanity with its mighty waves. Language and literature are no exceptions. Perhaps, we are about to witness the death of print and, from its ashes, the rise of digital literature.

DH (Digital Humanities) is shifting literature with its increased use of hypertextuality. Our mind rewires to adapt to reading in different mediums; however, reading in digital medium has more implications than print. Patterson (2000, p.74) quotes theorists like George Landow and Richard Lanham to elicit the very existence of a cursor on a screen transform the hypertextual reading experience by placing the reader into the text. The onset of the hypertextual paradigm—use of computation to engage with literacy and construction of digital platforms to record and store literary matters instead of books—has called our attention to ‘the crisis in reading and textuality. The new digital medium illustrates how reading connects with both body and mind – a fact carrying important implications for even such an intellectual activity as reading. Creative representations of fiction in a text-based hyper-textual medium are yet underappreciated. Authors such as Michael Joyce, Shelly Jackson, Yellowless Douglas, Mark Bernstein, and others have welcomed readers to share the responsibility of authorship with their hypertextual works. The virtual medium transcends the printed words to evolve to their fullest potential. All electronic mediums strive to give the readers the rightful place in the literary regime. A hypertext propagates ordered chaos which bears control in the reader’s ‘touch’ and invokes a multisensory experience of the text. The primary objective of hypertext is this flux and inexhaustibility; the infinite possibilities and chimeral morphing innate in it make it impossible for the readers to arrive at an end. The text does not stand for any cultural identity, for one cannot possibly read all spaces and sequences to determine the cultural orientation of the text, which is proximally epochal; in the case of hypertextual literature, a single subjective range is absent for each click that designates an entirely different path.

The changing nature of texts requires newer reading strategies; we are yet to figure out how the digital represents itself in our minds or interfaces and revamps literature. This paper focuses on the crisis in the reception of hypertextual form. It tries to bring out the nuances in authorship and readership in the new media, taking into account the case of hypertext fictions, a new form of literature in the digital platform to understand the natural response of novice readers to this form:

1. *Twelve Blue* by Micheal Joyce
2. *Disappearing Rain* by Deena Larsen

This study attempts to capture technology students’ first impressions of digital hypertext fictions to test their advanced comprehension skills. It examines how technology students perceive this new form of literature and engage in the hermeneutics of hypertexts; this study affirms the need for developing contemporary discourses and critical approaches of hypertextual compositions. Further questions whether reading—once considered a passive skill—has lost its passivity and attempts to answer it. The following sections will illustrate the reader’s identified features of hypertext fiction and how they perceive the text and grapple with it.

2. Digital Literacy and Mediums

The American Library Association (ALA) defines *digital literacy* as “the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills” (Loewus, 2016). Digital literacy requires computational tools, hyperlinks, hypermedia, and text on the screen. The definition by the ALA does not include reading and writing of digital text on digital medium. To understand digital literacy, one must look at texts in terms of digital mediums, which include: software, digital images, digital video, video games, webpages and websites, social media, digital data and databases, digital audio such as MP3, and electronic books. Digital media has led to the onset of Electronic/digital literature. Hayles (2005), in her essay “Electronic Literature: What is it?”, introduces us to the beginning of the 21st-century literary nuances and its composition with electronic mediums such as hypertext fiction, network fiction, interactive fiction, ‘codework’ generative art and the Flash poem. Electronic mediums have the power of transforming the almost 500 years of print heritage altogether. Electronic literature tests the boundaries of the literary and challenges us to re-think our assumptions of what literature can do and be. ‘Medium is the message,’ said Marshall McLuhan, but in the digital context, ‘the message is for the medium’ i.e., digitization entails making computers understand the medium’s purpose to accommodate the goals and meaning behind the creation of the medium to cater the humanity for its various needs. In the 21st century, texts onscreen have impacted all of us. We read everything on screen but is reading online reading at all? Are we just readers of digitized texts or active contributors to digital textuality? Digital literacy must include digital reading and writing skills and what it means to be digitally literate? Unlike the passive linear printed texts, digital mediums allow readers to contribute and engage actively with the content. The 21st reader has evolved from passive to an active *wreader* (reader + writer); hypertext fiction converts passive readers into wreaders. This paper tries to enlist novel features of hypertext fiction that enable the wreadership.

3. Hypertextual Crisis

Reading online is an *onscreen* process; it relies on virtual electronic mediums to exist. In recent years we have unconsciously internalized reading online without making any conscious effort to understand the challenges posed by the new digital medium. The digital mediums, unlike print, are not static; they interface with the written and the digital function on the computer codes to interpret the human-made text and produce outcomes for our comprehension. The machine-readable texts enable random networked linking technology, namely *hypertexts*—the future of textuality; it uses hyperlinks to create the most challenging logical connections. The term ‘Hypertext’ was appropriated by Ted Nelson ‘hypertext’ “to mean a body of written or pictorial material interconnected in such a complex way that it could not conveniently be presented or represented on paper” (Wardrip-Fruin, 2004, p.127).

The electronic mediums use hypertexts to connect disparate mediums, texts, and disciplines into a hypermedial virtual diorama. Thus, making a nonlinear mesh of rhizomatic networks that links different interfaces gives pluralities. When these complex linking interfaces are combined, they form an infinite loop with multiple entrances and exit points. Jorge Luis Borges’ “The Garden of Forking Path” is an aspirational hypertext in print and Vannevar Bush’s futuristic hypertext device called Memex to supplement our memory is another example. However, this hypothetical device never manifested in reality in Bush’s time. This aspiration was carried forward by various other pioneers in this field, which today is a reality in the *World Wide Web*, which has transformed our means of storage, composition, and comprehension of text, now available to us in the form of

hypertexts. Hypertexts are flourishing well in digital journalism, business, blogging, platforms like Quora, Reddit, and Medium help the mass populace share personal and generic facts worldwide.

Academia is delving slowly into the discourse of the hypertextual paradigm. Electronic literature such as hypertext fiction designed using software programs such as *Storyspace* is gaining popularity in the west. Different kinds of electronic and hypertextual literature are available on various online platforms such as Eastgate. The Electronic Literature Organisation was founded in 1999- “to facilitate and promote the writing, publishing, and reading of literature in electronic media” (Electronic Literature Organisation, n.d.). Since this is a recent phenomenon, theorizing the digital literature components and the *crisis* that arises due to the onset of the hypertext paradigm, especially in literature—the crises of reading and interpreting hypertexts and the shift from textuality to ‘hypertextuality’—needs more scholarly attention.

Hypertext fiction elevates a text’s intertextual experience, gives us the wholesome experience of nonlinearity, and allows its readers to participate in the plot construction. Mixing multiple genres to form a pastiche can now have hypermedia links. The random story threads and hypertext links transformed the process of passive reading. The reader not only reads but s/he navigates actively to various nonsequential spaces to make sense of the hypertext narrative. Mangen & van der Weel (2017, p.2.) claim that “hypertext challenges us to reconsider fundamental assumptions about the social space of writing and may ‘open the way to a new textual order with a new politics of knowledge and expression.’” Despite all the creative freedom hypertext fiction offers, it has not reached the people or the academicians. Many hypertext fictions are now available for readers, yet it is not widely appreciated. Johnson (2013) wrote about the advent of reader-centric models, which might take over traditional narratives, but also underscores “that future never happened” in his article “Why No One Clicked the Great Hypertext Story?”

This study tries to understand the dimensions of hypertext fiction and how novice readers receive it and lists the merits and problems in the reading experience of hypertext fiction within the frame of the conducted experiment. It captures the response of novice readers to the textual upgrades in hypertext fictions; enumerates the responses of the readers to these new affordances and extended scope of hypertext fictions which facilitates English literary compositions and trace the reading experience of the students and their perspectives on hypertextual reading and further identifies the scope of this new medium reframing the design of narrative fiction. This study highlights its implications through the reader’s reception.

4. Reception of Hypertext Fictions

Literature has been in crisis ever since the advent of literary theories. When theories failed, the post-theorists turned to the objectivity of science, underscored the dynamic nature of knowledge, and made medium the focal point of creating new literature paradigms. “A ‘paradigm’ according to Kuhn is “as an intellectual framework that makes research possible,” and a paradigm is followed by—a *crisis*” (Romero Lopez, 2012, p.4). Even with its objective certainties, any paradigm depends on the observer’s frame of reference; hence, any accurate understanding is constructed through mediated inferences. The essay by Roland Barthes 1967, “the Death of the Author,” metaphorically signifies the reader’s birth. Barthes suggests that reading to interpret the author’s intent will propagate criticism. He underscores the multi-layered feature of writing, “text is the fabric of quotations from thousands of cultural sources and author uses language to put it in

infinite meanings” (Willette, 2013, para. 5). As a result, the readers are the producers of infinite meanings. So, according to Barthes, every text is the “repetition of repetition” rather than from one individual experience.

The Reader-Response criticism marks the departure from the formalist autonomy of the text. It considers reading as a subjective rather than transactional-continuum towards new interpretations. The reader-response criticism reversed Jakobson’s communication model because it is the readers who actualize the meaning in the message by interacting with the code. (Rosenblatt, 2014) the pioneer theorist of Transactional Reader-Response criticism considers reading as a constructive activity that varies with contexts and time, “the relation between reader and signs on the page proceeds in a to-and-fro spiral, in which each is continually being affected by what the other has contributed” (p.16). In today’s digital scenario, the materiality involved in the reading matters. The reading process manifests itself as being extensively multisensory – both in more straightforward and more complex ways than it ever has been, and in that sense, the readers have extended responsibility of engaging with medial linkages of hypertextual paradigms.

Douglas (2001), in his book *The End of Books--or Books Without End?* he explores the scope of hypertext fiction as the future of literature. He propounds an introductory account on the novelties of digital hypertext fiction instead of print. For this study, we presented students with two hypertexts and documented the features highlighted by the students during class discussions. The following are recurring key traits identified by the students:

1. Nonlinearity
2. Interactivity
3. Reader Centricity
4. Digital Medium
5. Open Structured
6. Un-bounded
7. Hybridity



FIGURE 1. Word Cloud Representation of Recurring Features Identified by the Readers



FIGURE 2. The Features of Hypertext Fictions (as identified by the students)

Although the medium's novelty is not restricted to the elements mentioned above and relies only on student interactions in class, the features above profoundly affect the students' reading experience of hypertext fiction. The study attempts to elicit students' reactions to these novel enhancements provided by hypertext fictions through classroom discussion and questionnaires. The questionnaire was created keeping in mind each of these features and how the students interpret them. The research addresses several critical and hitherto overlooked concerns affecting digital reading, focusing on hypertext fiction's reading experience. The boundaries between author and reader are blurred in hypertextual narratives. It takes the poststructural imagination of the 'open text.'

5. Methodology

The study was conducted as part of the 'Advanced Comprehension Component assessment,' which uses a reader-response approach. The reason for prescribing engineering students was twofold: first, to objectively understand technical students' perspectives on hypertext fictions because they have a technological foundation, and second, hypertext fictions are created as postmodern actualizations of unprivileged diverse reading. Engaging engineering students in comprehending the novelty of this new medium was to obtain their beginner insights in understanding hypertext fiction. The following are the texts prescribed:

Twelve Blue by Michael Joyce

Twelve Blue is a unique work written in eight bars published by Eastgate Systems. Inc. the story is has a complex narrative:

"A drowning, a murder, a friendship, three or four love affairs, a boy and a girl, two girls and their mothers, two mothers and their lovers, a daughter and her father, a father and his lover, seven women, three men, twelve months, twelve threads, eight hours, eight waves, one river, a quilt, a song, twelve interwoven stories, a thousand memories, Twelve Blue

explore the way our lives — like the web itself or a year, a day, a memory, or a river — form patterns of interlocking, multiple, and recurrent surfaces.” (Joyce, 1996)

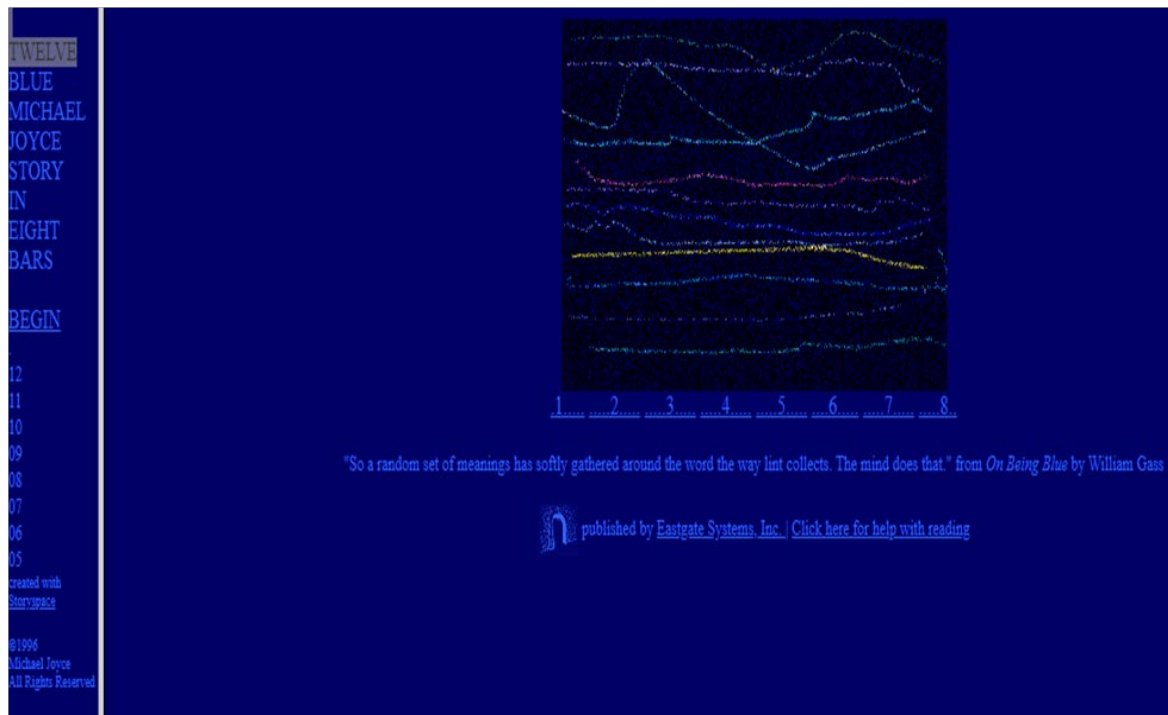


FIGURE 3. “Screenshot of the Opening Screen.” *Twelve Blue*: Michael Joyce, Eastgate Systems Inc., 1996, https://collection.eliterature.org/1/works/joyce_twelve_blue/Twelve_Blue.html

Twelve Blue is a story in eight bars”. The opening page has several nodes (lexias) in the form of twelve intertwined threads depicted in the image; numbered links below the image and on the right-hand side of the screen; and another that says “BEGIN,” which supposedly takes the reader to the first webpage, but not necessarily, because the reader has the freedom to click any of the lexias s/he chooses. As a result, the tale has no clear beginning; readers may be sent to any webpage corresponding to the link clicked. As there are 269 connections distributed across 90 spaces, the reader/user might end up with multiple endings depending on the series of choices s/he makes.

Disappearing Rain by Deena Larsen



FIGURE 4. “Screenshot of the Opening Screen.” *Disappearing Rain* by Deena Larsen, 2000.
<http://www.deenalarsen.net/rain/>

Disappearing Rain is a web-based hypertext detective fiction that tells the story of Anna’s disappearance and follows the pursuit of her family and the police with the minimal clues left by Anna:

The only trace left of Anna, a freshman at the University of Berkeley California, is an open internet connection in her neatly furnished dorm room. Join the four generations of a Japanese-American family as they search for Anna and discover credit card conspiracies, ancient family truths, waterfalls that pour out of televisions, and the terrifying power of the internet. (Larsen, 2000)

This work has 144 pages and several links. The narrative is divided into two parts: I. “Water Leavings,” and ii) “River Journeys.” These portions are further divided into various sections based on the haiku on every page. Besides serving as navigation markers, hyperlinks direct users to web pages outside the confines of the hypertext, which results in a 404 error (object not found) as the readers navigate through the links, the prospects of finding Anna become increasingly remote. The disjointed links cause the characters and readers to vertigo, not knowing whether they are closer to Anna or disoriented from the actuality of what has happened to her.

6. Findings and Interpretation of the Study

As the students struggled through the prescribed texts, they shared their perspectives on the plot and story. They suggested new prospective enhancements to the medium and the development of hypertext fiction. The overall response to the notable characteristics of the reader-centric approach was favorable. We collected 61 responses with informed consent. Since this is students’ first foray into the hypertext fiction genre, the questionnaire was designed as per the seven identified features. The questionnaire primarily consists of close-ended questions to assess the reader’s response to hypertext fiction. Table.1 shows the questions asked and the response of students:

Table 1. The Readers’ Response Assessed through the questionnaire is listed below.

Characteristic features of Hypertext Fictions	Criteria	Questions and Results
1. Nonlinearity	Choice of links	<i>Mention the first link you clicked in “Disappearing Rain” and “Twelve Blue.”</i> This question was intended to understand the general proclivity of the students to understand their choice of links. Around 90% of the student tried to access the text linearly. In <i>Twelve Blue</i>, students clicked the <u>BEGIN</u> option available, which led to the page’s interface titled “How she knew.” Students accessed <i>Disappearing Rain</i> either with the link that says “Come on in” went directly into “Part 1: Water Leavings”.
	Impact of nonlinearity	<i>Did the hypertext fiction’s randomness and nonlinearity positively impact you as a reader?</i> Yes - 59% No - 41%
2. Interactivity	Participatory nature	<i>Are hypertext fictions participatory/interactive?</i> Yes -82% No-18%
3. Reader Centricity	Assertion of Positions	<i>The significance of whose positions (the author’s or the readers’) is asserted in hypertext fiction?</i> The Reader’s Position- 73.8% The Author’s Position- 26.2%
	Readability	<i>Is it possible to read hypertext fiction for pleasure or require critical reading?</i> Reading for pleasure- 37.7% Critical reading- 62.3%

4. Digital Medium	Impact Medium	<i>Will digital media lead to the end of books?</i> Yes-72.1% No-27.9%
	Scope of the Medium	<i>Can hypertext fiction be regarded as a new reading paradigm?</i> Yes -80.3% No- 19.7%
5. Open Structured	Response to Interpretation	<i>Hypertext fictions are open structured with no beginning, middle or end; do you think it is an innovative narrative technique or a hindrance to the interpretation of the text?</i> Innovative Narrative Technique-72.1% Hindrance to the Interpretation-27.9%
	Attaining Closure	<i>Is it ever possible to complete reading hypertext fiction?</i> Yes- 55.7% No-44.3%
6. Unbounded	Formal Aspects	<i>What were your concerns while reading hypertext fiction?</i> Content-26.2% Form-6.6% Structure-57.4% Mediality-9.8%
	Difficulty Level	<i>Were the texts prescribed difficult to read?</i> Yes -63.9% No-36.1%
7. Hybridity	Response to Plurality	<i>Is hypertext fiction intended to distract the reader or to force the reader to concentrate more?.</i> Yes – 80.3% No – 19.7%

The study's implications are to comprehend technology students' advanced comprehension abilities and critical thinking capacity and their response to digital hypertext fictions. They demonstrated a better sense of ease, involvement with particular text segments, and struggle with others. The advantages and drawbacks of hypertext fiction are determined by the medium's action

possibilities and the reader's perception of it. Hypertext fiction has an abundance of possibilities. The following are students' observations and reflections on hypertext fictions based on their reading experience with the prescribed texts.

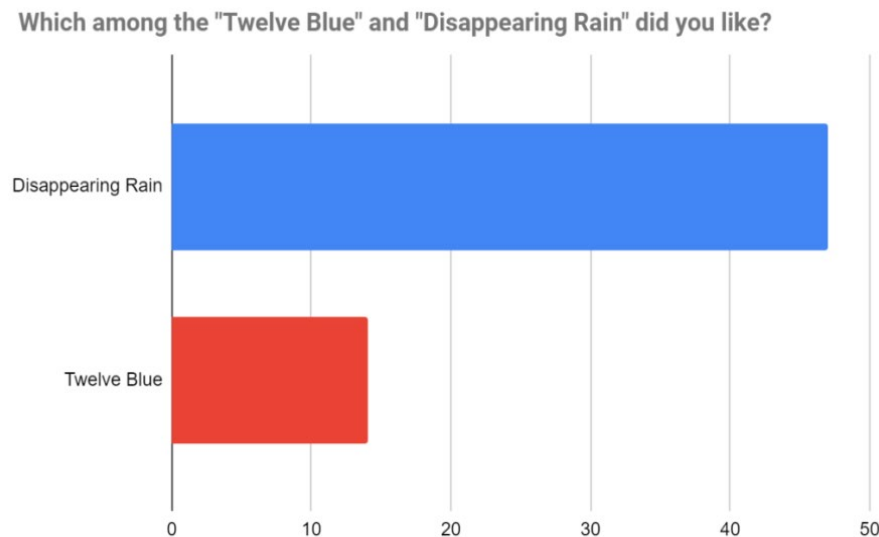


FIGURE 5. Graphical Representation of the Most Preferred Texts Out of the Recommendations

Disappearing Rain was favored by 77 percent of students over *Twelve Blue*, which was preferred by 23 percent. They validated their choice by citing the materiality of the text's interface, which includes colors and hues, images, external links, and navigability. They, interestingly, sought a compelling plot, understandable language, clarity of the narrative, themes, and characters.

Twelve Blue confused them with a lack of characterizations and a strong story. The interface was entirely blue, with light blue font, making it less aesthetically appealing to read; they claim "it looks and sounds blue." In comparison to *Twelve Blue*, *Disappearing Rain* featured a more intriguing plot and interface that was easier to navigate and aesthetically appealing. We will solicit students' responses to the characteristics in the parts that follow. Following are the conclusion of the discussions; we asked the students to rate their reading experience on a scale of 1-5 based on the identified elements of hypertext fiction; the table below displays the results of their ratings.

Table 2. The Table Represents the Rating of the Feature by the Students

Features of Hypertext Fictions	Scale for Assessing the Features and the Percentage of Students				
	5:Exciting /Unique	4:Interestin g	3:Indifferent	2: Confusing	1:Frustration
Nonlinearity	19.7%	21.3%	11.5%	36.1%	11.5%

Interactivity	19.7%	42.6%	26.2%	9.8%	1.6%
Reader Centricity	27.9%	32.8%	18.0%	14.8%	6.6%
The Digital Medium	29.5%	41.0%	18.0%	1.6%	9.8%
Open Structured	26.2%	29.5%	21.3%	14.8%	8.2%
Unbounded	19.7%	21.3%	27.9%	23.0%	8.2%
Hybridity	16.4%	32.8%	26.2%	16.4%	8.2%

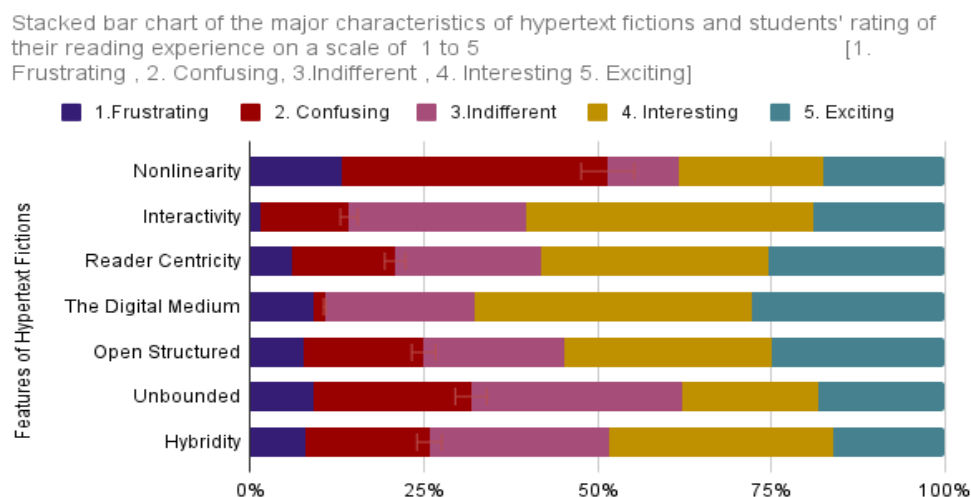


FIGURE 6. Stacked Bar Chart of The Values Mentioned in Table.2

Nonlinearity

Time in narration is subjected to chronological scrambling as a simultaneous narration of all time in an instance is impossible. Narrative fiction has always experimented with its form, topic, composition, and new media as a means of replenishing the “used up” status of literary traditions. Nonlinearity is a consequence of “Derrida’s concept of a ‘decentered’ text, Barthes’s concept of a ‘writerly’ text, and Guattari’s vision of a ‘rhizome’ text represent the nucleus of the hypertext with its nonlinearity and focus on the active roles of the reader” (Kouta, 2021, p.2). In print, nonlinearity is linear due to the medium’s limited affordances; however, hypertexts can connect with a single *lexia* with multiple other *lexia* to produce a networked nonlinearity and inexhaustible stories. The invariable connections with hyperlinks amount to innumerable versions of the text that are distinct to each reader based on their choices; hypertexts deconstruct the autonomy of order in conventional texts and break the Aristotelian tradition of beginning, middle, and end. As a result, hypertextuality generates dissociation in both writing and interpretation.

The students struggled with the nonlinearity the most (as shown in Table.2 and the stacked graph) and strived to find at least one unifying principle for ease of perception. Their proclivity for linearity is evident from their choice of links; even when the text offered multiple nodes to start it, the students chose linearity. As the pages diverged into incomprehensible disjointed fragments, they found it challenging to comprehend. However, the difficulty level was determined not by the networked structure but by the intricacy of the story. The students thought *Disappearing Rain* was

considerably easier to navigate than *Twelve Blue*. Despite how confusing and disorganized the hypertexts are, the students were enthralled, and 59 percent recognized nonlinearity as an intriguing approach to narrative.

Interactivity

Any literary narrative consists of *fabula* (story) and *syuzhet* (plot). The story is the chronological order in which events occur, and the plot is the order in which the story is narrated. The interactivity in the hypertexts emerges from links that impart plot construction capability on its readers. The act of clicking compels readers to interact with the text bestows the power over how the event unfolds through their choice of links. The use of second-person narrative is another factor that contributes to interactivity. As Bell & Ensslin (2011) point out, “the textual “you” in interactive fictions “create the illusion of being present in a story world that is constructed by the reader in creative collaboration with the programmed text”(p.312). The interactivity is not specific to the reader and text but also the medium’s affordances. According to (Trimarco 2017), the second-person narration in hypertext fiction guides the reader with the navigational choices by addressing the readers in the plot making. Hypertexts aim to produce an immersive interactive narrative world by individualizing the reader experience with the help of networked links.

Over 62 percent of readers deemed interactivity the most exciting and interesting feature of hypertext fiction. Both prescribed texts are interactive in their intermedial nonlinearity, allowing more room for interactivity than print, although they are from the first wave and lack multimodality. About 82 percent of the readers approved the texts’ participatory aspect and acknowledged the potential interactive novels. Their nonlinear reader centrism challenges the author dictating linearity in print.

Read Centricity

Hypertexts are ‘writerly’ texts (Barthes, 1977) considered ‘writerly’ texts as of higher values “because the goal of literary work [of literature as work] is to make the reader no longer a consumer, but a producer of the text” (p.4). We recognize reading as a passive, receptive skill; the print medium propagated ‘silent reading’ to better comprehend the text. However, the actual value of the text emerges from its criticism as the enigma of the text is that its ‘codes’ are constantly recomposed with ‘proairetic,’ ‘semantic,’ ‘symbolic ‘cultural’ ‘ACTS’ of reading. The readers concretize the narrative possibilities with their critical engagement with the text. We know that the hypertext’s nonlinearity enables interactivity and changes the reader’s role into a ‘wreader.’ Hypertext theorist George .P. Landow coined the term wreader for readers of hypertext fiction; they are not just mere consumers but also producers of the text. The ‘w’ in ‘wreader’ stands for the privilege of composition ascribed to the readers. In Jennings’ (1992) opinion, the changing role of “reader-being-writer” is more associated with the deconstruction of linear tradition, and medium enables “transfer of power” from the author to the reader; sequences of paragraphs or chapters no longer bind the wreader.

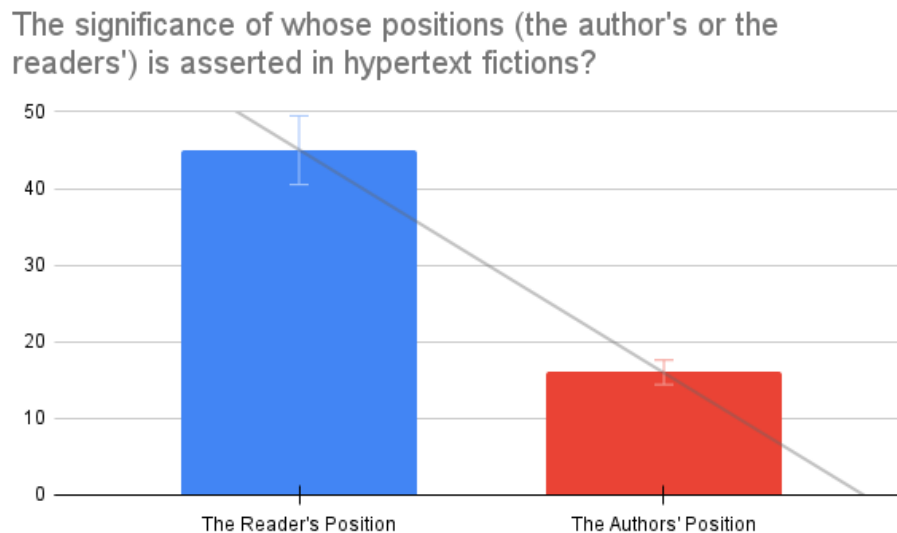


FIGURE 7. Graphical Representation of Significance of Positions

Hypertext fiction may not entirely facilitate readership, for Landow's reader aims for an "active reader [who] necessarily collaborates with the author in producing a text by the choices he or she makes" (Landow, 1991, p.88) however hypertext fiction offers hyperlinks to build the plot based on their choice of nodes. The readers perceived hypertext fiction as a "puzzle" in which each reader obtains a piece fashioned by their narrative experience and must solve it collectively. More than 73 percent of students agreed that the significant aspect of hypertext literature is reader centrism (See figure 7.). Both *Twelve Blue* and *Disappearing Rain* use metafictional self-reflexivity to engage the reader in the text's narrative by morphing themselves with every click.

The Digital Medium

Postmodern experiments achieved nonlinearity and interactivity through intertextuality; hypertext fictions are not medium-specific; digitalism tailors various media together and achieves higher order interactivity. Reading on a digital platform has elicited multiple opinions, most of which have been critical. However, hypertext fiction was examined from two perspectives: the end of books and another as an elevation of print. Landow (1991) says hypertext denotes an information medium that links verbal and nonverbal information. Reading on the digital platform was less demanding than comprehending the structural complexities of hypertext fiction. The purpose of hypertexts is not to be a grand didactic experiment; instead, it is to discover and reinvent narrative fiction. The medium simply enhances dynamic interaction between the reader and the text, blurring the boundaries between words and other mediums.

A. Bell (2010) *The Possible Worlds of Hypertext Fiction* clearly states the hypertextual features are not specific to digital medium alone; these were typical of postmodernist print fiction, however, and "in the case of hypertext, they are deeply embedded in the medium itself" (p.79). The medium has its message to convey in terms of its affordances which will help the readers better understand the text.

Open Structured

Eco (1994) considers an "open text" as a refined form "syntactic-semantic-pragmatic device"(p.16) with generative possibilities of interpretation. Eco alters Jakobson's communication

model by recasting authorship as a textual technique for activating the model reader. Every text is ‘open’ as it can be an indefinite number of ways by the reader. Literary texts are dynamic, psychologically engaged fields and are not limited to unilateral meanings. An open text must be inexhaustible and self-reflexive about its complexity and requires multiple readings. Eco’s open text manifests as hypertext fiction, which employs structural metaphor to improve narrative fiction. Hypertext fiction’s non-sequentiality allows for multiple narrative paths, as the text re-morphs its meaning in different schematic order with the various nodes. Due to the apparent structural openness, there are no Aristotelian unities of time, place, and action or a single unifying beginning, middle, and end. Despite the lack of closure, 72 percent of students viewed the open structure as an innovative narrative technique rather than a hindrance to interpretation. Though students were puzzled by the absence of closure, which simulated an endless narrative abyss, they noted in their critical reflections that the structure of hypertext fictions resembles life itself. A hypertext narrative can have multiple closure points, and the reader can choose one or none. According to them, *Disappearing Rain* drew their attention since it had a central theme about locating Anna, whereas *Twelve Blue* was more scattered and did not culminate in a cohesive story. The readers still felt the need for closure and tried to identify some unifying principles to locate a closure point.

Unbounded

The formation of codices needed an organizing principle. Any binding imposes order and linearity to a text. bookbinding ascribed a format of the ordered stack, but the formal shape is not an absolute necessity. “Unlike texts in manuscript or print, those in hypertext apparently can continue indefinitely, so one wonders if they can provide satisfying closure” (Landow 2006, p. 228). Reading hypertext fiction is analogous to reading shuffled sheets of an unbound book. The unbound principle applies to the pages and the form and media used within the text, with the help of the medium’s nodal capabilities. “It may be novel in its formal innovation, but it’s not a novel in the way that we think of a novel nowadays because novels are pretty much bound by the print-publishing paradigm that all books have been bound by” (Mirapaul, 1997, para.3). The unbound principle is what frees the text from linearity.

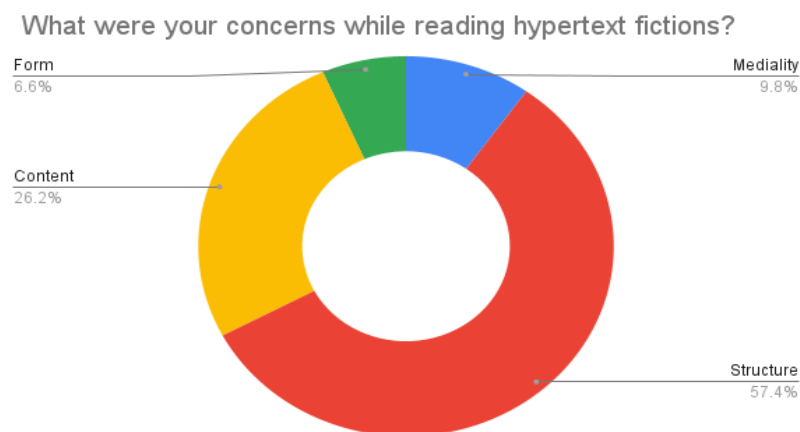


FIGURE 8. The chart represents the student orientation toward: form, mediality, content and structure

The first wave hypertext fictions are largely print-based, with fewer affordances in electronic and digital formats; the second wave hypertext fictions include audio-visual aspects and a greater variety of ergodic principles. The recommended readings come from the end of the first

wave of hypertext fiction. The structure of the texts piqued the interest of more than 57 percent of the pupils, whereas 31 percent voiced confusion and frustration. Over 64 percent of students agreed that formlessness promotes nonlinearity and challenging textual comprehension.

Hybridity

Since the dawn of writing, hybrid forms have been a part of literary heritage. Literature has the authority to break any language's rules. The set rules forms are no exceptions; crossing genres, forms, and style produce hybrid forms; hypertext fictions are one such hybrid form. (Zenner, 2005, p.204) Aside from constituting new literature, it is a "hybrid genre" because of its rich intertextuality. Hypertext fictions on digital media are developed and performed in a programmatic network; it is influenced by the internet's contemporary cultural hybridity, which provides a wide range of entertainment goodies—games, films, animations, digital arts, graphic design, and electronic visual cultures. Hayles (2005), in her seminal essay "Electronic Literature: What is it?" describes hybrid by nature as a "trading zone" where varied "vocabularies, expertise, and expectations" engage together to determine the result of their interaction, the hypertext fictions are constantly evolving with human-computer interactions. Hayles (2001) *Lexia* remediates "beginnings and boundaries to tell new stories," forming metaphoric networks with reader text interactions.

In *The Possible Worlds of Hypertext Fiction*, Alice Bell develops a systematic approach to understanding the ontology of hypertext fiction using Possible World Theory, where she discusses rubrics multimodality enabled by digital affordances that contributes to the hybrid form of hypertext fictions:

For those unfamiliar with hypertext fiction, it is a form of computer-based multimedia literature characterized by the use of hyperlinks, sound files, images and animations. It is through the use of hyperlinks that emphasis is placed on the reader to follow their own nonlinear journey through a story, thus giving hypertext fiction its unique experiential power. (Emmanuel, 2012, p.406)

Hypertext fiction is a genre of literature that employs hyperlinks to connect various areas of communication. In contrast to black and white print pages, readers must comprehend diverse new media aspects, words, literary forms, and visuals in their reading experience. There is no agreement on how to read hypertext fiction; according to Beatty (2010) in her literature review summary, reading fiction in print is very different from engaging with hypertext fiction. It requires the formation of a new "hybrid reading process." *Twelve Blue* is a highly dissociative piece written in modernist poetic prose. Each section is an instance, and each micro plot has extensive allusions to other works, locations, items, or events. *Twelve Blue*'s language is clear and concise. The blue backdrop is a metaphor for the currents of events that engulf the readers in a sea of circumstances. Unlike *Disappearing Rain*, it has few grainy images or other media components.

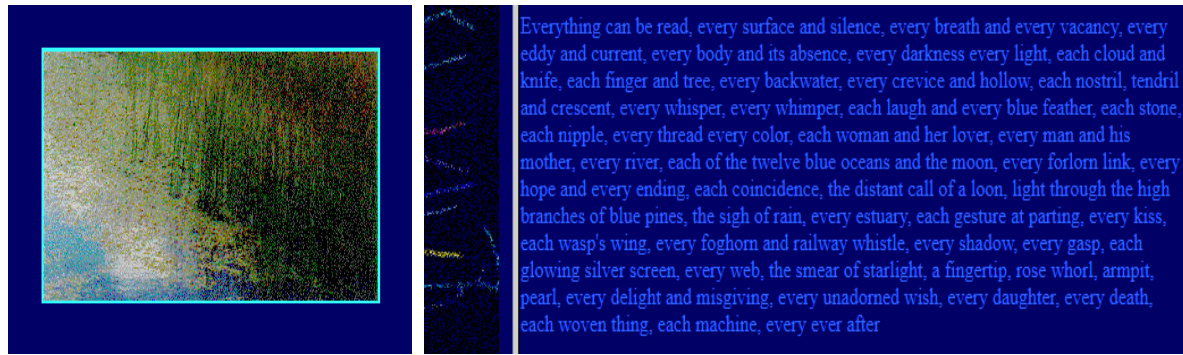


FIGURE 9. Examples of media elements in *Twelve Blue*: the image on the left is the grainy image of a marsh; on the right is the image of twelve intertwined strings and the example of the writing style of the text.

Disappearing Rain goes outside its interface with integrated external linkages and visual images. Larsen uses Kanji characters in every interface and embeds haiku poems for mapping. These images add another diegetic layer in unveiling the mystery in the plot. Each section's title is written in kanji-ku brushstrokes. As a result, poetry acts as a road map for navigating a narrative. The sequence of poems and the narrative gain new levels of meaning and resonance due to these haikus; the author also uses different fonts and typesets for metafictional and metaleptic demonstrations.

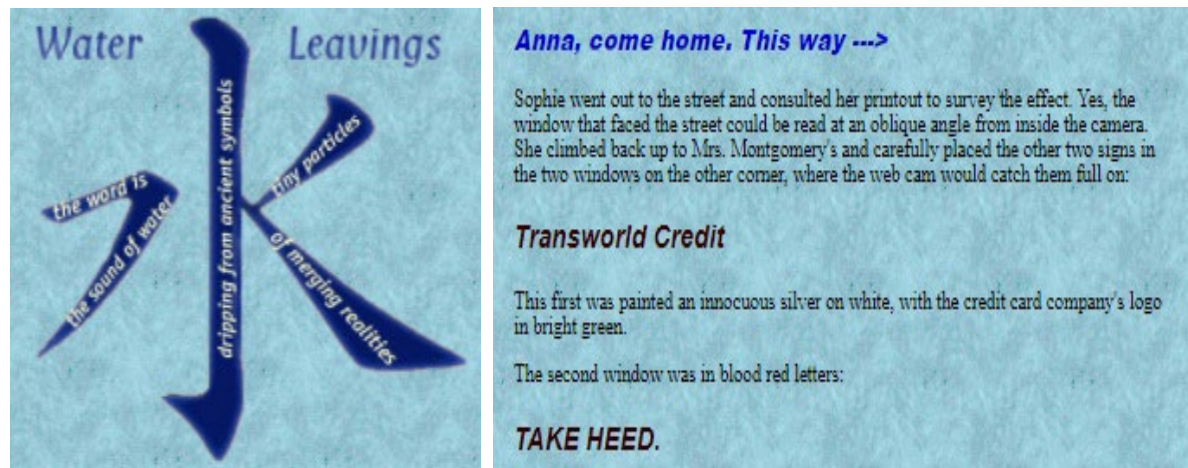


FIGURE 10. Examples of media elements in *Disappearing Rain*: image on the left is Kanji-ku brush strokes embedded with Haiku poetry; the image on the right shows typesets in the text.

The structureless structure, mediality, and unusual elements such as the Kanji strokes, interweaving threads, and whole interface as a message to be decoded piqued the pupils' interest. They saw this formlessness as yet another confusing feature, as it made the works appear abrupt and incoherent. As a result, hypertext fictions are hybrid in form, structure, and literary content, needing complex human interactions with electronic devices and hybrid reading approaches. The hybridity of this kind of writing disorients the readers, causing them to pay more attention to their reading act. About 80.3 percent of pupils agreed about the same, making their reading more active than a book.

The primary response to the novel features of the reader response remained positive. The readers affirm the scope of hypertext fiction as a new form of the novel. They agreed that hypertext fiction set a new paradigm for narrative fiction, but the medium's scope and its prospective improvisation are often undermined. Though the reading experience was strenuous, the readers engaged with the prescribed text with enthusiasm, their responses showed mixed dispositions, which will be discussed in detail in the next section.

7. Discussions and Conclusion

Reading online has become an instinctive process, yet literary reading compositions have hit a downturn. At the onset of this experiment, the general tendency of students towards reading was reluctance for the following reasons: (1) Reading is time-consuming. (2) They preferred movie adaptations since they provided an abridged version of any book. (3) The multimodal affordances of digital media, such as audio-books and videos, are better knowledge providers than print. Reading for enjoyment is a natural byproduct of writing, especially print medium. Traditional narratives are often chronological in character and focus on an individual's activities and objectives. In contrast, contemporary digital narratives strive to engage all five senses with nonlinguistic components such as audiovisuals, graphics, music, and a range of other visual aesthetics. The hypertext narratives provide non-hierarchical designs, with no one feature gaining precedence over another, and they evoke a multimodal simulation.

It is worth noting that while hypertext fictions experiment with the medialities of print and digital, their primary mode of communication is text-based, i.e., it is intended for reading. For the same reason, this study employed reader-response critique to ascertain firsthand exposure of (technology) students to digital literature such as hypertext fiction. As shown by the data in the previous section, the seven unique characteristics identified by students both excited and challenged them in their reading experience. The following table shows the observations and recommendations of the readers.

Table 3. The Table Showing Observations and Recommendations of the Readers

Features Identified	Observations	Recommendations
Nonlinearity	The hypertext fiction's nonlinearity disoriented the readers and compelled them to know and remember the customized links that designated the storyline. The readers are forced to engage in active reading to devise a path through the infinite pathways. However, they agreed that the recommended texts are	The readers suggested that "hypertext fictions are like puzzles, and each reader gets a piece of it." They recommended collaborative reading as the solution to cope with the problems posed by nonlinearity in the hermeneutics of the texts. Another solution the readers offered is multiple readings.

	inexhaustible but not an unreadable sense.	
Interactivity	The interactivity in novels offered in plot-making had a positive response from the readers. Traversing a novel with hypertext links was new and exciting to the readers.	The interactivity is limiting as it occurs only in the choice of links. The readers rightly identified the instructive function of links (e.g., “Follow me before the <u>choices disappear</u> ”); however, the links’ randomness leads to confusion. The readers felt the need for more definitive paths, in essence, a comprehensible storyline that was absent.
Reader Centricity	The readers naturally looked for the author-directed storyline. However, its absence made the readers actively engage with the texts. The readers narrated their path of navigation in the classroom discussion. There is no singular storyline, just episodes of events from the characters’ lives in the text.	The readers appreciated the reader centricity of the text prescribed. Hypertext fictions in the digital medium are more flexible than print. Since hypertext fictions lack a central plot line or characterization, the readers can add story segments with hyperlinks, making hypertext fiction thoroughly reader-centric.
Digital Medium	Reading fiction composed digitally excited the readers, and they tried to interpret the new medial elements in the text and their contribution to the storyline. They struggled with the excessive intertextuality in the text and the form of digital audio-visual components.	The digital affordances of the medium are not used to their fullest potential. Hypertext fiction can integrate more audio-visual elements, adding more interactivity to the text. They felt decoding the extra medial features can better understand the texts, for hypertext fiction gives more importance to the medium than the content or the form.
Open Structured	The lack of closure puts the readers in anxiety. But they understood that the open-ended structure necessitates the organization and composition of complex narratives such as hypertext fiction. They noted the texts’ “open-ended-ness is life-like.”	More than the lack of closure, a lack of storyline bothered the readers. Each segment is a mere description. The readers felt they did not have a literary background to study them.
Unbounded	The unbound nature of digital hypertext fiction facilitates nonlinearity, producing infinite paths and combinations.	The readers’ response to the unbound free-flowing web pages was reluctance, yet it did not stop them from accessing the text. Its randomness of composition hinders the interpretation than its unbounded nonlinearity of it.

Hybridity	The digital medium allows to tailor multiple visual and aural elements together, and form demands plurality for it to be nonlinear, hence making it a pastiche of hypermedially interconnected inter and hyper textualities, medialities and characterizations.	The diversity of hypertext fiction makes it genuinely secular and accommodates a variety of itineraries, unlike the print. The hybridity makes it an ideal form for collaborative compositions.
------------------	---	---

The *nonlinearity* of hypertext has to impose active role and participation of readers, but the readers still assume a passivity of their functional role. For (Amaral n.d.), a hypertext delivers information; it allows the readers to forge their route, build their order, and derive meaning from the text. The fundamental difficulty that readers have encountered with this novel type of text within the text (hypertext) is its sequential interpretation. Readers expressed frustration at the lack of a beginning and a finish; “there is no place for a bookmark,” they exclaimed. While readers highlighted nonlinearity as a fascinating aspect, their overarching reaction was one of confusion.

However, as classroom discussions progressed, readers’ critical engagement with the text grew exponentially. They also determined the medial significance of the text’s nonverbal and verbal aspects. In their narration of the story referred to section titles by default. Since their access to the plot starts anew every time, the readers looked for some way of linear access, but with the discussions, they collectively piece-together the plot segments they read. They recommended different ways to navigate the nonlinearity in a linear fashion, which redirected their focus from the story to form and medium for understanding the texts prescribed. Though *interactivity* occurs with the choice of links, the readers felt the lack of a unifying plot makes it improbable to form and commit to a generic plot, story, or characterization, but it is not an indication of a lack in the same. Interactivity, through the multitude of hypertextual connections, has decentralizing implications. Despite the medium’s complexity, even novice readers identified themes, characters, and fragmented stories, and in their critique, they referred to the non-hierarchical form of digital hypertext fictions that may be extended via links. While interactivity solely through lexias is a prototype, it is unquestionably an improvement than in a print book; it still requires a more solid articulation of its meaning. The readers enjoyed the divergent narratives but felt there was potential for development because the interactivity was limited to links.

The readers’ choice shares the narrative construction with randomizing machine, but it cannot be viewed as complete liberation of author dictates considering hypertext fiction is still the author’s intellectual labor. The *reader centrality* emerges from the meaning-making process, which is a collaborative outcome of the readers (choice of links), the computer (determining the interface), and the author (the creation of text). The reader experiences hypertextual vertigo as onscreen displays of text fragments and reappearances of webpages in other link chains vary. If only the link choices resulted in clear interfaces, such as an interactive movie, the text would be easier to comprehend. The interfaces were too disjointed to provide a holistic understanding. On the other hand, this new digital genre is committed to a more rigorous examination of the reading process and reception.

A hypertextual work is not ‘medium specific’; it is a multimodal pastiche of moving pictures, videos, audio. Hypertext fictions are available in print, electronic and digital mediums. This study focuses only the digital hypertext fiction and how it makes the narrative imagination virtually exciting and allows us to incorporate other mediums into seeming function to communicate what was thought by the composer. The affordances of the *digital medium* are not utilized fully; the readers felt the need for including more audio-visual elements, and in doing so, the visual aesthetics will increase manifold. If interactivity and hypertext are the future of literary and non-literary compositions, we have to learn to incorporate them as part of our literacy and find means to cultivate the creative minds of the readers. With its novel feature of nonlinearity, interactivity, and digitality, hypertext attains inexhaustibility by producing infinite paths, making it *open-structured*. Specific web pages repeat in the endless selection of links, and the core theme plot, action, and storyline never solidified with the repetitions in different sequences. The readers are somewhat apprehensive about the open structure and tire of the reading experience. However, they agreed that the totality of the text is implausible to attain, which ascertained the inexhaustibility of hypertext fiction. The digital medium allows the composers to add new contexts and make the hermeneutics of hypertext fiction a continuous open-ended process.

The writing technology concretized linearity with the establishment of the print empire. The linearity ascribed to printed novels, which is carried over even in e-books, is imposed by the bound print books, so the postmodern experiments with the narrative structure are not unique to the digital medium. Print novels such as *Hopscotch* by Julio Cortázar can be read in two distinct iterations; *the Unfortunates* by B.S. Johnson is a book in a box and has rearrangeable chapters; similarly, Marc Saporta’s *Composition No. 1* is a shuffle novel with loose-leaves where the pages can be read in any order. The affordances of the digital medium truly liberate the narrative from the linearity of print. Hypertext rewrites and transcends print-bound hegemonies of literature with its *unbounded* open structure. The hypertexts are polyvocal with garrulous voices of named or nameless characters. It’s rich in intertextuality and draws from varied events and cultures. The allusions are challenging to make sense as the readers must know the intertextual and hypertextual references; hence, they felt they could better interpret the chosen texts with a literary background. The fluidity of the medium contributes to the *hybridity* that hypertexts offer.

To summarise, this study used reader-response to understand the honest response of students toward hypertext fictions. The readers affirm the scope of hypertext fiction as a new form of the novel with continuous digital upgrades. The listed features result from the reading experiment conducted to assess students’ advanced reading skills.

Can hypertext fiction be regarded as a new reading paradigm?

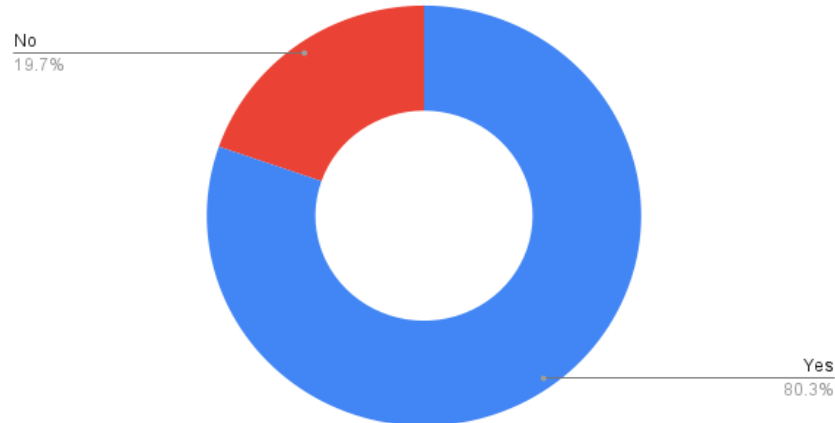


FIGURE 11. Chart showing the Scope of Hypertext Fictions

Writing and reading hypertextually are still not taught widely; our awareness of the medium we use in our everyday lives is nearly absent. Many applications designed for writing have given us platforms to present our ideas multimodally, only to extend the possibilities of writing. Though we have effortlessly embraced the non-literary disciplines' hypertextuality, reading literary fiction hypertextually remains a challenge as the mind has been trained to perceive texts linearly when the mind is naturally wired to associate nonlinear fashion. In the recent 500 years, print successfully deliberated our senses to perceive the symbols as sounds and comprehend abstraction as concepts of reality. Similarly, hypertexts will prevail with the advancement of technology and can conjure a central transcendence in human consciousness to efficiently read the hypertextual information nonlinearly.

Though there are numerous articles on theorizing hypertext fiction, very few illustrate the views and opinions of readers, which is evident in the hypertext fictions' composition. This study utilized the novelty of hypertext fiction to evaluate the advanced comprehension skills, critical reflection, and imagination of readers in a technological institution. The primary limitations are that the texts prescribed belong to the first wave with limited affordances, and the number of participants is less though from varied technological departments; it does not include literary students. As elicited from the findings and results of this study, the readers' active participation and critical engagement affirm the potential of hypertext fiction to set a new paradigm for narrative fiction. However, the medium's scope and its prospective improvisation are often undermined. This paper implies the significance of exploring hypertext fiction as a detrimental genre in promoting active and critical reading practices. However, it does not mean the end of books; rather, it supplements narrative fiction in associations with its hypo-texts. We are just beginning to theorize reading online, much less pedagogic contexts, and academic criticism is focused on the reception of hypertext fictions.

To conclude, hypertext fiction is detrimental in remediating literary compositions as it pushes nonreaders to engage critically. Academic research to help the readers trace electronic literature, incorporate digital writing in the curriculum, and devise methods to read and interpret such complex compositions is essential to understand this new experimental genre in literature.

Moreover, such research will help readers engage with these texts without hypertextual vertigo seamlessly and probe readers to upgrade to a wreader in the approaching times. (Coover, 1992, para.7) rightly denotes that “the difference between reading hyperfiction and reading traditional printed fiction may be the difference between sailing the islands and standing on the dock watching the sea. One is not necessarily better than the other.” This article presents one such instance of a reader-centric approach to hypertext fiction by attempting to record the readers’ engagement with the text rather than focusing merely on the textual structures. Also, further research can be conducted on this front to understand better the implications of this budding 21st-century literary genre.

References

- Amaral, K. (n.d.). Hypertext and writing: An overview of the hypertext medium. Whoi.Edu. Retrieved December 12, 2021, from <https://www.whoiedu.org/science/B/people/kamaral/hypertext.html>
- Barth, J. (1997). *The Friday book: Essays and other nonfiction*. Johns Hopkins University Press.
- Barthes, R. (1977). *S-Z*. Hill & Wang.
- Beatty, M. (2010). *A Step Towards Reader Acceptance of Hypertext Fiction: From Annoying Distraction to Enjoyable Experience*. The Open University.
- Bell, A. (2010). *The possible worlds of hypertext fiction* (2010th ed.). Palgrave Macmillan.
- Bell, Alice, & Ensslin, A. (2011). “I know what it was. You know what it was”: Second-Person Narration in Hypertext Fiction. *Narrative*, 19(3), 311–329.
- Burgess, E. (2015). *Understanding interactive fictions as a continuum: reciprocity in experimental writing, hypertext fiction, and video games*. The University of Manchester.
- Coover, R. (1992, June 21). The end of books. *The New York Times on Web*. <https://archive.nytimes.com/www.nytimes.com/books/98/09/27/specials/coover-end.html>
- Douglas, J. Y. (2001). *The end of books--or books without end?: Reading interactive narratives*. University of Michigan Press.
- Eco, U. (1994). *The role of the reader: Explorations in the semiotics of texts*. Indiana University Press.
- Electronic Literature Organisation. (n.d.). ELO. Retrieved 2021, from <https://eliterature.org/>
- Emmanuel, J. (2012). The possible worlds of hypertext fiction. By Alice bell. *The European Legacy, toward New Paradigms*, 17(3), 406–407.
- Hayles, K. (2005, August 5). *Electronic Literature: What is it?* Eliterature.Org. <https://eliterature.org/pad/elp.html>
- Kouta, A. T. M. (2021). Narrative nonlinearity and the birth of the wreader: A hypertext critical reading of selected digital literary texts. *Critique Studies in Contemporary Fiction*, 62(5), 586–602.

- Johnson, S. (2013, April 16). Why No One Clicked on the Great Hypertext Story? Wired. <https://www.wired.com/2013/04/hypertext/>
- Joyce, M. (1997). Twelve Blue. Electronic Literature Collection. <https://doi.org/10.1353/pmc.1997.0018>
- Jennings, E. M. (1992). The Text is Dead; Long live the Techst. Postmodern culture journal of interdisciplinary thought on contemporary cultures, 2. <http://www.pomoculture.org/2013/09/26/the-text-is-dead-long-live-the-techst/>
- Landow, G. P. (1991). Hypertext: Convergence of contemporary critical theory and technology. Johns Hopkins University Press.
- Landow, G. P. (2006). Hypertext 3.0: Critical theory and new media in an era of globalization (3rd ed.). Johns Hopkins University Press.
- Larsen, D. (2000). Disappearing Rain. Deenalarsen.Net. <http://www.deenalarsen.net/rain/>
- Loewus, L. (2016, November 8). What is digital literacy? Education Week. <https://www.edweek.org/teaching-learning/what-is-digital-literacy/2016/11>
- Mangen, A., & van der Weel, A. (2017). Why don't we read hypertext novels? Convergence The International Journal of Research into New Media Technologies, 23(2), 166-181. <https://doi.org/10.1177/1354856515586042>
- Mirapaul, M. (1997, June 25). Hypertext fiction on the web: Unbound from convention. The New York Times. <https://archive.nytimes.com/www.nytimes.com/library/cyber/mirapaul/062697mirapaul>.
- Patterson, N. G. (2000). Hypertext and the changing roles of readers. English Journal, 90(2), 74. <https://doi.org/10.2307/821221>
- Romero Lopez, D. (2012). Poetics of crisis or crisis of poetics in digital reading/writing?: The case of Spanish digital literature. Literary and Linguistic Computing, 27(3), 305-320. <https://doi.org/10.1093/lc/fqs030>
- Rosenblatt, L. M. (2014). *Literature as Exploration*. Modern Language Association of America.
- Trimarco, P. (2017). Stylistics and hypertext fiction. In M. Burke (Ed.), *The Routledge Handbook of Stylistics* (pp. 500-515). Routledge.
- Wardrip-Fruin, N. (2004). What hypertext is. Proceedings of the Fifteenth ACM Conference on Hypertext & Hypermedia - HYPERTEXT '04.
- Willette, J. (2013, December 13). Roland Barthes: "the death of the author." Arthistoryunstuffed.Com. <https://arthistoryunstuffed.com/roland-barthes-the-death-of-the-author/>
- Zenner, R. (2005). Hypertextual Fiction on the Internet: A Structural and Narratological Analysis [Rhine-Westphalian Technical University of Aachen]. <https://d-nb.info/975467271/>