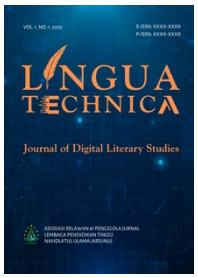
Lingua Technica, 1(2), 2025, 73-82

List of contents available at Lingua Technica

Lingua Technica:
Journal of Digital Literary Studies

homepage: https://journal.arjunu.org/index.php/lingtech



Understanding reader navigation patterns in multi-path hypertext fiction: A case study approach to *Patchwork Girl*

Nurul Hijja Mazlan [1*], Candra Rahma Wijaya Putra [2], Hary Sulistyo [3]

[1] Universiti Teknologi MARA, Malaysia
[2] Universitas Muhammadiyah Malang, Indonesia
[3] Universitas Gadjah Mada, Indonesia
** Corresponding author. Email: nurulhijja@uitm.edu.my*

Article history:
Received May 13, 2025
Revised May 26, 2025
Accepted Jun 25, 2025
Published Jun 30, 2025

Keywords:
comprehension;
engagement;
hypertext fiction;
navigation patterns;
reader motivation

A B S T R A C T

Background: The rise of hypertext fiction has transformed narrative structures, challenging traditional reading behaviors and comprehension strategies. **Objective:** This study aims to investigate how readers navigate and engage with *Patchwork Girl*, a seminal work in hypertext fiction, focusing on navigation patterns, motivations, and their impact on comprehension and engagement. **Method:** Employing a qualitative case study approach, the research involved 110 undergraduate English majors, using observations, interviews, and thematic analysis to uncover patterns and insights. **Results:** Findings revealed three dominant navigation strategies—linear, exploratory, and random—each influenced by motivations such as curiosity, thematic alignment, and a desire for agency. **Implication:** Linear navigation resulted in higher comprehension, while exploratory navigation fostered moderate engagement, and random navigation led to cognitive overload and fragmented understanding. **Novelty:** These findings underscore the importance of balancing narrative complexity with user guidance in hypertext design, offering valuable implications for digital storytelling and educational applications.

DOI: https://doi.org/10.1016/j.lingua.2024.101865

*) Copyright © 2025 Nurul Hijja Mazlan, Candra Rahma Wijaya Putra, Hary Sulistyo
This work is licensed under Creative Commons Attribution-ShareAlike 4.0 International License which permits use, distribution, reproduction, and adaptation in any medium, provided that the original work is properly cited and any adapted material is distributed under the same license.

INTRODUCTION

The advent of digital literature has revolutionized storytelling, introducing multi-path hypertext fiction where readers actively shape their narrative journey. Unlike traditional linear texts, hypertext fiction offers multiple pathways, allowing for a personalized and interactive reading experience. This shift is crucial to study as it reflects broader changes in how people consume and interact with literature in the digital age. Understanding how readers navigate these complex structures has implications for authors, educators, and digital content creators, offering insights into how interactivity influences comprehension, engagement, and satisfaction. Despite its growing popularity, hypertext fiction poses unique challenges, such as decision fatigue and potential fragmentation of the narrative experience. A detailed examination of navigation patterns can provide critical guidance on designing effective and engaging hypertext systems, making this research timely and necessary.

Previous studies have explored various aspects of hypertext fiction. They commonly examined the theoretical foundations of hypertextuality (Fitzgibbons, 2008; Modir et al., 2014), while other studies analyzed its implications for narrative form (Ciccoricco, 2007; Rettberg, 2015). They have also investigated user interaction (DeStefano & LeFevre, 2007; Zheng et al., 2015; Zumbach & Mohraz, 2008) and narrative coherence in digital literature (Calvi, 2004; Campion, 2006; Jordan, 2014). However, most of this work remains theoretical or focuses on system design rather than reader behavior. Recent studies also highlighted the cognitive load associated with navigating non-linear texts (Akbulut, 2008; Antonenko & Niederhauser, 2010; Xu, 2009), but there is limited empirical research on how readers choose specific paths, their motivations, and the resulting narrative experiences. This gap is further emphasized by other researchers, who called for more case studies exploring real-world reader interactions with hypertext fiction (Bell & Ensslin, 2024; Herrada-Valverde & Herrada-Valverde, 2017; Roth & Koenitz, 2017). By addressing these unexplored areas, this study contributes to filling a crucial gap in hypertext literature.

This research aims to investigate how readers navigate multi-path hypertext fiction and the factors influencing their choices. The primary questions include: What patterns emerge in reader navigation through multi-path hypertext fiction? What motivates readers to select specific paths? How do these navigation patterns affect their overall comprehension and engagement with the story? This case study approach will analyze real reader interactions with a selected hypertext fiction to uncover recurring patterns and individual differences in navigation. Additionally, it seeks to explore the implications of these patterns for narrative structure and user design in digital storytelling. By addressing these questions, the research provides a deeper understanding of the interplay between reader agency and narrative construction in digital literature.

Preliminary insights suggest that navigation patterns in hypertext fiction are influenced by a combination of narrative curiosity, perceived difficulty, and thematic resonance with the reader. Readers are likely to follow paths that align with their preferences or curiosity, leading to diverse narrative experiences even within the same hypertext fiction. This research hypothesizes that effective hypertext design requires balancing complexity with clarity, providing users with sufficient agency while ensuring coherence and engagement. If the findings support this hypothesis, it could inform the development of digital storytelling tools and strategies that cater to varied reader preferences. Furthermore, the study's implications extend to education, where hypertext fiction could be used to enhance interactive learning and critical thinking. By understanding how readers navigate multi-path stories, authors and designers can create richer, more inclusive digital literary experiences that cater to diverse audiences.

METHOD

This study examines reader navigation patterns in the hypertext fiction *Patchwork Girl* as its unit of analysis. The material object, *Patchwork Girl*, is an iconic example of multi-path hypertext fiction, offering readers numerous narrative pathways that challenge linear storytelling conventions (as seen in Figure 1). This research employs a qualitative case study design to investigate how readers interact with and interpret the text's non-linear structure (Chowdhury et al., 2020; Gaikwad, 2017). The respondents include 110 undergraduate English majors from two universities, selected to represent a diverse range of reading experiences and digital literacy skills. By focusing on this specific demographic, this study seeks to uncover nuanced insights into how educational background and familiarity with literary analysis influence navigation

behaviors in hypertext fiction. The case study approach provides the depth and contextual focus necessary to explore these behaviors comprehensively (de Vries, 2020; Khan, 2022).

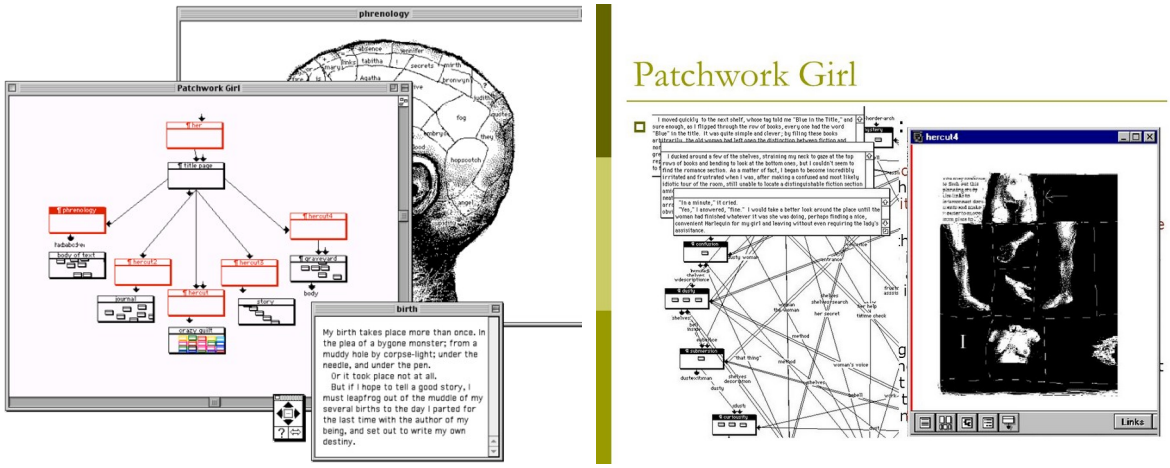


Figure 1. Displays of *Patchwork Girl* hypertext fiction
(Source: A video of Shelley Jackson reading *Patchwork Girl* CD-ROM)

The primary sources of information are the 110 respondents, whose interactions with *Patchwork Girl* are analyzed through multiple data collection methods. Data is gathered using in-depth interviews to explore readers' thought processes and motivations (Al Hadhrami et al., 2022; Ko & Wang, 2013; Talafhah & AL-Jarrah, 2019), structured observations to document real-time navigation behaviors (Mulatu & Regassa, 2022; Talafhah & AL-Jarrah, 2019), and documentation of navigation logs to capture objective interaction data (de Vries, 2020; Yu et al., 2014). The data analysis follows three stages: data reduction, where raw data is filtered and categorized; data display, which organizes findings into thematic patterns; and data verification to ensure the validity and reliability of interpretations (Bygstad & Munkvold, 2016; Kohlbacher, 2006). The analysis employs a meta-analytical approach, synthesizing data from multiple sources to identify overarching trends and unique variations in navigation patterns. This robust methodology provides a holistic understanding of how readers engage with and make meaning from the complex narrative pathways offered by *Patchwork Girl*.

RESULTS

Patterns of readers' navigation to hypertext fiction

The hypertext fiction *Patchwork Girl* by Shelley Jackson offers a rich platform for observing reader navigation behaviors in non-linear storytelling. Unlike conventional narratives, *Patchwork Girl* enables readers to create individualized paths through its complex structure. This study investigates observed navigation behaviors among 110 undergraduate English majors from two universities. Through direct observation, patterns of interaction with the hypertext fiction were categorized into three main styles: linear, exploratory, and random (Ciccoricco, 2007; Modir et al., 2012; Rettberg, 2015). These observations aim to shed light on how readers interact with multi-path hypertexts, providing insights into their decision-making processes and engagement levels. Understanding these patterns has broader implications for digital storytelling and educational applications. Observational data revealed three predominant navigation behaviors, as summarized in Table 1.

Table 1 indicates that 50% of readers engaged in exploratory navigation, characterized by deliberate exploration of multiple pathways. The 30% percent exhibited linear navigation, adhering to a single narrative thread without deviation, while 20% navigated randomly, jumping unpredictably between sections. These behaviors reflect distinct approaches to interacting with the hypertext structure.

Table 1. Patterns of readers' naviation to hypertext fiction

Patterns of Navigation	Respondents (%)	Description
Linear Navigation	30	Readers follow a single path consistently without backtracking.
Exploratory Navigation	50	Readers explore multiple paths with occasional revisits to previous sections.
Random Navigation	20	Readers navigate unpredictably, jumping between paths without a clear strategy.

This finding illustrates diverse engagement styles. Exploratory navigation dominated, with readers frequently revisiting sections and choosing alternative paths to gain broader narrative perspectives. Linear navigation was less common but showcased a consistent and focused approach, resembling traditional reading behaviors. Random navigation, while the least frequent, was marked by spontaneous and seemingly unstructured movement through the text. These observations highlight the flexibility of *Patchwork Girl*, allowing readers to adapt their strategies based on personal preferences and familiarity with hypertextual interfaces.

The predominance of exploratory navigation suggests that the text's design encourages curiosity and active engagement, inviting readers to uncover its layered narratives. Linear navigation appears to cater to those seeking clarity and structure, possibly due to their comfort with conventional storytelling. Random navigation, often characterized by abrupt and fragmented movement, may indicate either a playful experimentation with the medium or a lack of familiarity with hypertext navigation. These findings underline the necessity for hypertext fiction to balance user agency and narrative coherence, ensuring that diverse navigation behaviors are supported while maintaining the reader's engagement and comprehension.

Readers' motivation in selecting paths in hypertext fiction

The hypertext fiction *Patchwork Girl* presents readers with a multitude of narrative pathways, allowing them to actively shape their reading experience. This interactive structure prompts the question: what motivates readers to select specific paths? Understanding these motivations is crucial for designing engaging hypertext fiction and enhancing digital storytelling experiences (Bell & Ensslin, 2024; Jordan, 2014; Mitchell, 2016; Rajakannan & Rukmini, 2021). Observing and interviewing 110 undergraduate English majors from two universities provided insights into the factors driving their choices. The findings reveal a range of motivations, from curiosity about alternative storylines to the desire for thematic exploration, control, and aesthetic appeal. These motivations not only influence navigation patterns but also shape readers' overall engagement and satisfaction with the text. Interviews with participants identified four primary motivational categories, summarized in the Table 2.

Table 2 indicates that 40% of respondents were driven by curiosity to explore alternative narratives, making it the most common motivation. Thirty percent selected paths based on thematic interests, while 20% prioritized their sense of control or agency in shaping the story. Finally, 10% were influenced by the aesthetic or visual appeal of certain paths. These diverse motivations highlight the multifaceted nature of reader engagement with hypertext fiction.

The data visualizes distinct patterns in reader motivations. Curiosity emerged as the leading factor, with readers expressing a strong desire to uncover how different choices influenced the story's outcome. Thematic exploration was the second most common motivation, as participants often selected paths that resonated with their interests or personal experiences. The sense of control appealed to those who valued the autonomy to shape their narrative journey. A smaller group of respondents highlighted the role of aesthetics, emphasizing the impact of visually striking or creatively designed sections in guiding their choices. Together, these motivations reflect the dynamic interplay between narrative design and reader agency.

Table 2. Readers' motivation in selecting path in hypertext fiction

Motivation Category	Respondents (%)	Description
Curiosity about Alternative Narratives	40	Readers were motivated to explore different storylines to see how choices impact the narrative.
Interest in Thematic Exploration	30	Readers focused on paths that aligned with their thematic interests or personal connections.
Desire for Control/Agency	20	Readers wanted to actively shape their journey, feeling empowered by their decisions.
Aesthetic/Visual Appeal of Paths	10	Readers were drawn to paths that offered visually appealing or uniquely designed sections.

The dominance of curiosity suggests that *Patchwork Girl* successfully engages readers by offering an open-ended narrative structure that fosters exploration. This aligns with the appeal of hypertext fiction as an interactive medium, where readers actively participate in constructing meaning. Thematic exploration indicates that personal relevance and emotional resonance significantly influence navigation choices, underscoring the importance of relatable and diverse content in hypertext design. The desire for control highlights readers' appreciation for agency in their storytelling experience, reflecting broader trends in interactive media. Lastly, the role of aesthetics points to the need for visual design to complement and enhance narrative engagement. These findings suggest that effective hypertext fiction must balance narrative complexity, thematic depth, user agency, and aesthetic appeal to cater to a wide range of reader motivations.

Impact of navigation patterns on students' comprehension and engagement

Hypertext fiction like *Patchwork Girl* introduces unique challenges and opportunities for reader comprehension and engagement due to its non-linear narrative structure. The patterns readers adopt—linear, exploratory, or random navigation—play a significant role in shaping their understanding and involvement with the story (Ho & Yao, 2018; Mitchell, 2016; Zumbach & Mohraz, 2008). This study analyzes how these patterns influence comprehension and engagement levels among 110 undergraduate English majors. Observational and evaluative data from their interactions with *Patchwork Girl* were used to assess their comprehension scores and engagement levels. Understanding these impacts provides valuable insights for educators, authors, and designers of interactive narratives to optimize user experiences. Student comprehension and engagement outcomes are summarized in Table 3.

Table 3. Impact of navigation patterns on comprehension and engagement

Navigation Pattern	Average Comprehension Score (out of 100)	Engagement Level (High/Medium/Low)
Linear Navigation	85	High
Exploratory Navigation	78	Medium
Random Navigation	65	Low

Table 3 reveals that students following a linear navigation pattern achieved the highest average comprehension score (85 out of 100) and demonstrated a high level of engagement. Those adopting an exploratory navigation style scored slightly lower, with an average comprehension score of 78 and a medium

engagement level. Random navigation produced the lowest comprehension scores (65) and was associated with low engagement levels.

The data shows a clear relationship between navigation patterns and comprehension and engagement levels. Linear navigation, characterized by consistent focus on a single narrative thread, enabled students to achieve the highest comprehension and engagement scores. Exploratory navigation allowed for broader story exploration but resulted in slightly fragmented understanding, leading to medium comprehension and engagement levels. Random navigation, marked by spontaneous and unstructured movement through the text, produced the lowest outcomes in both comprehension and engagement. These results highlight how structured versus unstructured navigation affects the ability to process and retain information in hypertext fiction.

The high comprehension and engagement levels among linear navigators suggest that a focused approach aligns closely with traditional cognitive processing methods, making it easier to follow and synthesize the narrative. Exploratory navigation, while promoting curiosity and broader story exposure, may introduce cognitive load due to the non-linear structure, slightly reducing comprehension. Random navigation likely overwhelms readers with a lack of coherence, leading to lower comprehension and disengagement. These patterns suggest that while hypertext fiction supports diverse reading strategies, providing guidance or scaffolding may enhance comprehension and engagement for less structured navigators, making the medium more accessible to a broader audience.

DICUSSION

The navigation patterns—linear, exploratory, and random—highlight distinct strategies that readers employ when engaging with hypertext fiction. These patterns have broader implications for the design and accessibility of digital narratives. For instance, linear navigation aligns with traditional storytelling, suggesting that readers who favor this pattern may benefit from hypertext designs that balance complexity with coherence (Bezdan et al., 2013; Herrada-Valverde & Herrada-Valverde, 2017; Zumbach & Mohraz, 2008). Exploratory navigation fosters curiosity and active engagement (Burin et al., 2015; Do et al., 2020; Kashihara & Kawai, 2010), indicating the potential for hypertext fiction to enhance critical thinking skills (Fitzgibbons, 2008; Ko & Wang, 2013). However, random navigation, often associated with lower engagement and comprehension, underscores the need for navigational aids to support coherence (Mobrand & Spyridakis, 2007; Torun & Altun, 2014). These findings suggest that tailored hypertext designs can accommodate diverse reading strategies, making the medium more inclusive and effective for educational and recreational purposes.

The navigation patterns are rooted in the cognitive and structural demands of hypertext fiction. Linear navigation reflects a reader's preference for predictability and structured storytelling, which aligns with schema theory, suggesting that familiar structures facilitate comprehension (An, 2013; Che, 2014; Iran-Nejad, 2013). Exploratory navigation leverages the open-ended design of hypertext, enabling readers to construct personalized narratives. This aligns with constructivist learning theories, where active exploration enhances engagement (Eidloth et al., 2022; Ho & Yao, 2018; Kashihara & Kawai, 2010). Conversely, random navigation often stems from cognitive overload due to the absence of clear pathways, as described by cognitive load theory (Cheng et al., 2023; Howard et al., 2020; Sweller, 2010). These structural underpinnings demonstrate how hypertext fiction challenges traditional narrative processing, emphasizing the importance of adaptive design features that guide and support diverse reader strategies.

The findings of this research also reveal that readers' motivations—curiosity, thematic interest, control, and aesthetic appeal—play a pivotal role in shaping their navigation patterns. These motivations suggest that hypertext fiction not only serves as a narrative medium but also acts as a tool for fostering self-directed engagement (Modir et al., 2014; Rajakannan & Rukmini, 2021). For example, readers motivated by curiosity are likely to explore alternative narratives, which can enhance critical thinking and creativity. Thematic interests point to the importance of personalized content in sustaining engagement (Mitchell, 2016; Rajakannan & Rukmini, 2021). Meanwhile, the desire for control aligns with trends in interactive media, where agency is key to user satisfaction (Pope, 2006; Shuaib Mohamed Haneef, 2010). The aesthetic appeal highlights the

significance of design elements in enhancing the reading experience. These findings underscore the need for hypertext fiction to offer diverse entry points that cater to varying reader motivations.

The analysis of comprehension and engagement outcomes reveals that navigation patterns significantly impact readers' ability to process and retain information. Linear navigation, associated with higher comprehension and engagement, suggests that structured pathways facilitate cognitive processing and narrative synthesis (Burin et al., 2015; Tabullo et al., 2024). Exploratory navigation, while fostering engagement, introduces a moderate cognitive load that can challenge comprehension (Bezdan et al., 2013; Mobrand & Spyridakis, 2007). Random navigation, linked to the lowest outcomes, highlights the risks of narrative fragmentation and cognitive overload (Burin et al., 2015; Do et al., 2020; Parsons et al., 2023). These findings emphasize the need for hypertext designs that balance reader agency with narrative coherence. For educators, these insights suggest that hypertext fiction can be a powerful tool for developing critical thinking and comprehension skills, provided the text includes scaffolding to guide readers effectively.

The differing impacts of navigation patterns on comprehension and engagement can be attributed to underlying cognitive and structural factors. Linear navigation supports schema theory, as it aligns with readers' expectations of a structured narrative, reducing cognitive load and enhancing comprehension (An, 2013; John Paul & Christopher, 2017; Kalyuga & Singh, 2016). Exploratory navigation reflects the constructivist approach, where active engagement fosters deeper learning but may challenge memory retention due to the dispersed nature of the narrative (De Haan et al., 2018; Tabullo et al., 2024; Torun & Altun, 2014). Random navigation disrupts narrative coherence, leading to fragmented understanding and lower engagement, as explained by cognitive load theory (de Jong, 2010; Kalyuga, 2011; Kalyuga & Singh, 2016). These structural explanations highlight the need for adaptive hypertext designs that provide clear navigation cues while maintaining opportunities for exploration and reader agency. Such designs could optimize the balance between engagement and comprehension, ensuring hypertext fiction is both enriching and accessible.

CONCLUSION

The study on reader navigation patterns in hypertext fiction, focusing on *Patchwork Girl*, offers significant insights into how non-linear narratives influence comprehension and engagement. One of the most important lessons learned is the role of tailored navigation design in enhancing user experience. The research highlights that readers employ distinct strategies—linear, exploratory, and random—and these patterns are shaped by motivations such as curiosity, thematic interest, and a desire for agency. A key strength of the study lies in its integration of qualitative methods, including observation and interviews, to uncover nuanced reader behaviors. By combining these methods with cognitive theories, the study contributes to the academic field by updating perspectives on digital narrative engagement and introducing variables like reader motivation and comprehension into the analysis of hypertext fiction. This multi-dimensional approach broadens the understanding of how digital storytelling can be optimized for diverse audiences.

Despite its contributions, the study has certain limitations that warrant further research. One limitation is its focus on a specific demographic—English majors—which may not fully capture the diversity of readers' interactions with hypertext fiction. Additionally, the research concentrated on a single hypertext fiction, limiting the generalizability of its findings to other narratives or platforms. Future studies should expand on this work by incorporating diverse reader profiles, including different age groups, cultural backgrounds, and levels of digital literacy. Moreover, exploring multiple hypertext works and integrating quantitative metrics like eye-tracking or navigation analytics could provide deeper insights into the cognitive and emotional dimensions of reader interaction. Addressing these limitations will enrich the understanding of hypertext fiction and further refine its potential as a medium for learning and storytelling.

ACKNOWLEDGMENTS

The authors thank the reviewers and editorial team for their constructive feedback on this manuscript.

FUNDING INFORMATION

Authors state no funding involved.

AUTHOR CONTRIBUTIONS STATEMENT

Nurul Hijja Mazlan: conceptualization, methodology, formal analysis, writing – original draft (lead). **Candra Rahma Wijaya Putra**; writing – review and editing**,** data curation, formal analysis (supporting). **Hary Sulistyo**: writing – original draft, writing – review and editing (supporting).

CONFLICT OF INTEREST STATEMENT

Authors state no conflict of interest.

AI USE DECLARATION

The authors used artificial intelligence tools to assist with the formatting and layout of this manuscript. AI was not used to generate the substantive content, conceptualization, data, analysis, or conclusions of the research, all of which remain the sole responsibility of the authors.

INFORMED CONSENT

Not applicable – this study did not involve direct human participants. Data consisted solely of publicly accessible documents, platform policies, and governance materials.

ETHICAL APPROVAL

This research did not involve human or animal subjects; it analyzed publicly available documentary records concerning machine co-authorship, and therefore no institutional review board approval was required. Where research does involve human subjects, the authors affirm that such research would be conducted in full compliance with all relevant national regulations and institutional policies, in accordance with the tenets of the Declaration of Helsinki, and would be approved by the authors' institutional review board or equivalent committee.

DATA AVAILABILITY

The corpus/data analyzed in this study are available from the corresponding author upon reasonable request.

REFERENCES

Akbulut, Y. (2008). Predictors of foreign language reading comprehension in a hypermedia reading environment. Journal of Educational Computing Research, 39(1), 37–50. https://doi.org/10.2190/EC.39.1.c

Al Hadhrami, A. S., Raja Al-Amrat, M. G., Khasawneh, M. A. S., & Darawsheh, S. R. (2022). Approach to improve reading skill of students with dyslexia. Information Sciences Letters, 11(6), 2333–2338. https://doi.org/10.18576/isl/110639

An, S. (2013). Schema theory in reading. Theory and Practice in Language Studies, 3(1), 130–134. https://doi.org/10.4304/tpls.3.1.130-134

Antonenko, P. D., & Niederhauser, D. S. (2010). The influence of leads on cognitive load and learning in a hypertext environment. Computers in Human Behavior, 26(2), 140–150. https://doi.org/10.1016/j.chb.2009.10.014

Bell, A., & Ensslin, A. (2024). Reading digital fiction: narrative, cognition, mediality (p. 207). https://doi.org/10.4324/9781003110194

Bezdan, E., Kester, L., & Kirschner, P. A. (2013). The influence of node sequence and extraneous load induced by graphical overviews on hypertext learning. Computers in Human Behavior, 29(3), 870–880. https://doi.org/10.1016/j.chb.2012.12.016

Burin, D. I., Barreyro, J. P., Saux, G., & Irrazábal, N. C. (2015). Navigation and comprehension of digital expository texts: Hypertext structure, previous domain knowledge, and working memory capacity. Electronic Journal of Research in Educational Psychology, 13(3), 529–550. https://doi.org/10.14204/ejrep.37.14136

Bygstad, B., & Munkvold, B. E. (2016). Exploring the role of informants in interpretive case study research in IS. In Enacting Research Methods in Information Systems: Volume 2 (pp. 84–115). https://doi.org/10.1007/978-3-319-29269-4_4

Calvi, L. (2004). Adaptivity in hyperfiction. 163–170. https://doi.org/10.1145/1012807.1012854

Campion, B. (2006). Theoretical framework for construction of representation through interactive narrative. 3942 LNCS, 380–388. https://doi.org/10.1007/11736639_49

Che, Y. (2014). A study on the application of schema theory to English newspaper reading. Theory and Practice in Language Studies, 4(2), 441–445. https://doi.org/10.4304/tpls.4.2.441-445

Cheng, B., Lin, E., Wunderlich, A., Gramann, K., & Fabrikant, S. I. (2023). Using spontaneous eye blink-related brain activity to investigate cognitive load during mobile map-assisted navigation. Frontiers in Neuroscience, 17. https://doi.org/10.3389/fnins.2023.1024583

Chowdhury, S., Ahmmed, F., & Ismail Hossain, M. (2020). Methodological dilemma in microfinance research: Applicability of a qualitative case study design. Qualitative Report, 25(2), 271–290. https://doi.org/10.46743/2160-3715/2020.3962

Ciccoricco, D. (2007). Reading network fiction (p. 244). The University of Alabama Press. https://muse.jhu.edu/book/2300/

De Haan, J., Richards, D., & Dignum, F. (2018). Aiding learning efficiency in virtual worlds. 2018-January, 1–8. https://doi.org/10.1109/VSMM.2017.8346286

de Jong, T. (2010). Cognitive load theory, educational research, and instructional design: Some food for thought. Instructional Science, 38(2), 105–134. https://doi.org/10.1007/s11251-009-9110-0

de Vries, K. (2020). Case study methodology. In Critical Qualitative Health Research: Exploring Philosophies, Politics and Practices (pp. 41–52). https://doi.org/10.4324/9780429432774-2

DeStefano, D., & LeFevre, J.-A. (2007). Cognitive load in hypertext reading: A review. Computers in Human Behavior, 23(3), 1616–1641. https://doi.org/10.1016/j.chb.2005.08.012

Do, T.-T. N., Singh, A. K., Cortes, C. A. T., & Lin, C.-T. (2020). Estimating the cognitive load in physical spatial navigation. 568–575. https://doi.org/10.1109/SSCI47803.2020.9308389

Eidloth, L., Roßner, D., & Atzenbeck, C. (2022). User study on link-service usage and information processing in the context of the world wide web. Proceedings of the 5th Workshop on Human Factors in Hypertext, HUMAN 2022. https://doi.org/10.1145/3538882.3542802

Fitzgibbons, M. (2008). Implications of hypertext theory for the reading, organization, and retrieval of information. Library Philosophy and Practice, 2008 (MAR.). https://digitalcommons.unl.edu/libphilprac/170/

Gaikwad, P. (2017). Including rigor and artistry in case study as a strategic qualitative methodology. Qualitative Report, 22(13 Special Issue), 3431–3446. https://doi.org/10.46743/2160-3715/2017.3436

Herrada-Valverde, G., & Herrada-Valverde, R. I. (2017). Factors influencing hypertext reading comprehension. OCNOS, 16(2), 7–16. https://doi.org/10.18239/ocnos_2017.16.2.1287

Ho, J. C. F., & Yao, M. Z. (2018). Sequence analysis in distributed interactive learning environments: Visualization and clustering of exploratory behavior. Journal of Educators Online, 15(2). https://doi.org/10.9743/jeo.2018.15.2.10

Howard, Z. L., Evans, N. J., Innes, R. J., Brown, S. D., & Eidels, A. (2020). How is multi-tasking different from increased difficulty? Psychonomic Bulletin and Review, 27(5), 937–951. https://doi.org/10.3758/s13423-020-01741-8

Iran-Nejad, A. (2013). The schema: A long-term memory structure or a transient structural phenomena. In Understanding Readers' Understanding: Theory to Practice (pp. 109–128). https://doi.org/10.4324/9780203056837

John Paul, X., & Christopher, G. (2017). Teaching reading skill using heuristic technique through schema theory. IUP Journal of English Studies, 12(1), 11–15. https://ssrn.com/abstract=3191829

Jordan, S. (2014). An infinitude of possible worlds: Towards a research method for hypertext fiction. New Writing, 11(3), 324–334. https://doi.org/10.1080/14790726.2014.932390

Kalyuga, S. (2011). Cognitive load aspects of text processing. In Cross-Disciplinary Advances in Applied Natural Language Processing: Issues and Approaches (pp. 114–132). https://doi.org/10.4018/978-1-61350-447-5.ch009

Kalyuga, S., & Singh, A.-M. (2016). Rethinking the boundaries of cognitive load theory in complex learning. Educational Psychology Review, 28(4), 831–852. https://doi.org/10.1007/s10648-015-9352-0

Kashihara, A., & Kawai, R. (2010). A self-regulator for navigational learning in hyperspace. 6094 LNCS(PART 1), 389–400. https://doi.org/10.1007/978-3-642-13388-6_43

Khan, N. I. (2022). Case study as a method of qualitative research. In Research Anthology on Innovative Research Methodologies and Utilization Across Multiple Disciplines (pp. 452–472). https://10.4018/978-1-6684-3881-7.ch023

Ko, M.-Y., & Wang, T.-F. (2013). EFL learners' critical literacy practices: A case study of four college students in Taiwan. Asia-Pacific Education Researcher, 22(3), 221–229. https://doi.org/10.1007/s40299-012-0013-5

Kohlbacher, F. (2006). The use of qualitative content analysis in case study research. Forum Qualitative Sozialforschung, 7(1). https://doi.org/10.17169/fqs-7.1.75

Mitchell, A. (2016). Using theme to author hypertext fiction. 10045 LNCS, 423–427. https://doi.org/10.1007/978-3-319-48279-8_41

Mobrand, K. A., & Spyridakis, J. H. (2007). Explicitness of local navigational links: Comprehension, perceptions of use, and browsing behavior. Journal of Information Science, 33(1), 41–61. https://doi.org/10.1177/0165551506068144

Modir, L., Abdul Aziz, S. B., & Saghafi, M. (2012). Appraisal of reader's role in revolutionary potential of hypertext fiction. Life Science Journal, 9(4), 5244–5246. http://irdoi.ir/605-977-071-426

Modir, L., Guan, L. C., & Aziz, S. B. A. (2014). Text, hypertext, and hyperfiction: A convergence between poststructuralism and narrative theories. SAGE Open, 4(1). https://doi.org/10.1177/2158244014528915

Mulatu, E., & Regassa, T. (2022). Teaching reading skills in EFL classes: Practice and procedures teachers use to help learners with low reading skills. Cogent Education, 9(1). https://doi.org/10.1080/2331186X.2022.2093493

Parsons, T. D., Asbee, J., & Courtney, C. G. (2023). Interaction of cognitive and affective load within a virtual city. IEEE Transactions on Affective Computing, 14(4), 2768–2775. https://doi.org/10.1109/TAFFC.2022.3220953

Pope, J. (2006). A future for hypertext fiction. Convergence, 12(4), 447–465. https://doi.org/10.1177/1354856506068368

Rajakannan, R., & Rukmini, S. (2021). Reading paradigms of digital narratives: reception of hypertext fictions and its implications. NALANS: Journal of Narrative and Language Studies, 9(18), 357–380. https://nalans.com/index.php/nalans/article/view/450

Rettberg, S. (2015). Interactive Digital Narrative: History, Theory and Practice. Routledge. https://doi.org/10.4324/9781315769189

Roth, C., & Koenitz, H. (2017). Towards creating a body of evidence-based interactive digital narrative design knowledge: Approaches and challenges. 19–24. https://doi.org/10.1145/3132361.3133942

Shuaib Mohamed Haneef, M. (2010). Intertextuality and interactivity in hypertext reading of www.timesofindia.com. Journal of Creative Communications, 5(3), 189–205. https://doi.org/10.1177/0973258612471249

Sweller, J. (2010). Cognitive load theory: Recent theoretical advances. In Cognitive Load Theory (Vol. 9780521860239, pp. 29–47). https://doi.org/10.1017/CBO9780511844744.004

Tabullo, Á. J., Saux, G. I., & Pearson, M. R. (2024). The role of executive functions in adolescents' hypertext comprehension. Journal of Research in Reading. https://doi.org/10.1111/1467-9817.12473

Talafhah, R. H., & AL-Jarrah, J. M. (2019). The application of metacognition, cognitivism, and constructivism in teaching writing skills. European Journal of Foreign Language Teaching, 3(4), 199–213. https://doi.org/10.5281/zenodo.2531617

Torun, E. D., & Altun, A. (2014). The effect of levels of processing with navigation design types on recall and retention in e-learning environments. Behaviour and Information Technology, 33(10), 1039–1047. https://doi.org/10.1080/0144929X.2014.945963

Xu, A. (2009). Cognitive overload and its countermeasures from the angle of information processing. 1, 391–394. https://doi.org/10.1109/IITA.2009.278

Yu, H., Abdullah, A., & Saat, R. M. (2014). Overcoming time and ethical constraints in the qualitative data collection process: A case of information literacy research. Journal of Librarianship and Information Science, 46(3), 243–257. https://doi.org/10.1177/0961000614526610

Zheng, X., Cheng, W., Fan, Z., & Chen, G. (2015). The effect of signals in hypertext reading by tablet computers. 118–119. https://doi.org/10.1109/ICALT.2015.80

Zumbach, J., & Mohraz, M. (2008). Cognitive load in hypermedia reading comprehension: Influence of text type and linearity. Computers in Human Behavior, 24(3), 875–887. https://doi.org/10.1016/j.chb.2007.02.015