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Electronic Literature as a New Trend in the Evolution of Modern Literature

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Abstract. The paper explores how literature has evolved in response to the development of digital technologies, which found its manifestation in Electronic literature, a new and significant trend in the evolution of modern literary forms. The paper aims at tracing evolution of Electronic Literature from the first works of narrative hypertext fiction created in imitation of paper-based works, to recent syncretic, hybrid forms that tend to split into works continuing tradition of printed literature and new forms of computer-generated art. Essential features, distinguishing electronic literature from codex literary texts are highlighted. Traits, sustaining the continuity of literary tradition in works created on a new medium are traced.

Keywords: Chtonotope; Code; Feedback loop; Hypertext; Non-linear time; Synesthesia.

Introduction

The emergence of electronic literature, or computer-mediated writing, represents one of the most remarkable transformations in the history of literature. Just as the invention of the printing press reshaped writing, reading, and dissemination for over five centuries, the rise of computers and the Internet has altered how texts are created, distributed, and interpreted. This shift from paper-based to digital formats has introduced new compositional and rhetorical principles, producing what is called born-digital works.

The evolution of electronic literature runs parallel to that of digital technology itself. Modern databases and systems of information storage have changed the relationship between a text and its medium. Unlike traditional printed texts, where the written surface and the stored information coincide, computer-mediated texts consist of two distinct levels: the interface and the storage medium. This separation has influenced how both writers and readers engage with a text, creating

new forms of interaction and interpretation. However, even though the field is young, electronic literature has already become a legitimate subject of literary criticism.

Generations of Electronic Literature

The first experiments with electronic writing appeared in the 1950s in the form of generative literary works—texts created by computer programs. In the 1960s, text-based computer games began to explore the possibilities of the digital medium, paving the way for what was called the first, or classic generation of electronic literature. These were pre-web, text-heavy, link-driven works that still preserved many conventions of print culture, and mainly transferred a text from a page to a screen.

The 1980s saw the development of hypertext fiction, where readers could navigate stories through links and non-linear paths. As a net structure of computer-mediated texts allowed every point of a text to be connected with any other point, it changed the role of the reader from interpretation to intervention with the aim to gain control of a narrative. This innovation turned readers from passive observers into active participants—or even to so-called co-creators—of the text. Espen Aarseth (1997) described this kind of work as ergodic literature, meaning that it requires non-trivial effort from the reader to traverse the text.

The second generation of electronic literature, from the mid-1990s onward, emerged with the rise of the Internet. Web-based works incorporated multimedia, animation, and interactivity, expanding the expressive possibilities of literature. By the early 2000s, digital poetry became a vibrant form that combined text with sound, image, and animation. Around 2005, a third generation appeared, using familiar platforms such as social media, mobile apps, and web APIs (Application

Programming Interface services). As Leonardo Flores (2019) observes, this generation coexists with earlier ones and reflects a culture in which digital media have become naturalized. In recent years, electronic literature has also begun to use social media as a platform for collective authorship, a form of pop-culture, turning readers into contributors.

Main Part

Structure and Principles of Hypertext Fiction

My research was focused on analyzing the principles of structure and composition that define hypertext narrative fiction. The term “hypertext,” coined by Theodor Nelson (1992), literally means “beyond text” and refers to the surpassing of linear narrative constraints. Our analysis was based on works from the four volumes of Electronic Literature Collection, composed at Washington State University.

Three essential features: code, a linked structure, and feedback loops represent the main properties of hypertexts, besides non-linear approach to time, that became a structural element for creating works of hypertext fiction. The notion of non-linear time, which is connected with the theory of parallel times that exist simultaneously, lies symbolically at the background of the narration in Jorge Luis Borges’s short story “The Garden of Forking Paths” (1941), which is considered to be an inspiration for the concept of hypertext. Hypertext exploits the idea of non-uniform time and provides a single user- interface to a variety of thematically connected episodes.

A linked structure of hypertexts is directly related to the function changing chronotopes acquire in the composition of a story. Chronotope (Bakhtin: 1981), that marks intersection of spatial and time coordinates in the fictional text, is distinct for each node of a hyper-

text and indicates a separate lexia. A linked structure of hypertext and its interconnection with changing chronotopes shows the different principles of composition of paper-based and computer-mediated texts of fiction. Though the plot line – the logical causal and temporal sequence of a chain of events is identical for both works of hypertext fiction and codex literature, the innovative ways of composing a story -- the way the plot unfolds, distinguish electronic literature from paper-based texts.

By clicking on links, which indicate to possible connections between different lexias (Barthes: 1977) in a hypertext, the reader makes a leap in time and, consequently, in space, i.e. changes a chronotope. The change of chronotopes permits authors to show various types of cause-effect relations, associations and connections between the events of a fictional world. Chronotopes of lexias show parallel worlds in which characters live and events or situations that bring them together. Links make it possible to show how human lives intersect and integrate into a single picture of our multifaceted life. Through links and changing chronotopes the net also enables authors to integrate life events of an individual character into a unified whole, thus bringing a human life to a common denominator by combining and showing connections between its constituent elements.

Combinations of lexias, that are marked as nodes, into a network by joining them links, at a static level resembles “a mosaic” of chronotopes. However during the process of reading, the combination of chronotopes changes according to the paths taken by the reader, and the previously static picture starts to move, likening reading a hypertext to looking into a kaleidoscope, when at each turn a new picture is created from already available parts. Constantly “changing pictures” account for the absence of a fixed end in most works of hypertext fiction.

In hypertext discourse, two tropes define the reader’s experience: aporia, that indicates to an absent piece of a text, which the reader failed to find, and epiphany, the sudden revelation that resolves the gap. Together, these tropes sustain narrative tension and reader engagement (Aarseth: 1994).

Hybrid and Intermedial Forms

As technology advanced, authors of electronic literature began to merge text with images, sounds, colors, and animations, producing hybrid forms that appeal to multiple senses. These works use various interface metaphors that de-emphasize the traditional notion of the link. Such literature reflects the co-evolution of humans and technology; as Hayles (2007) states, the development of Homo sapiens has always been intertwined with the tools we create.

This fusion of sensory modes produces synesthetic perception, achieved through the integration of linguistic, visual, auditory, gestural, and spatial semiotic systems. With the rise of touchscreen devices and virtual-reality environments, reading has become an embodied experience that engages sight, hearing, and touch. This process bridges what Hayles (2005, 2007) described as the Cartesian divide between mind and body, making interaction with digital texts more natural and immersive. As nowadays people spend more of their time in virtual reality than in the real world, where our perception of reality comes from our senses, inclusion of visual, auditory and sensory aids into electronic media makes interaction with computer more natural and life less estranged from reality by activating the work of both reader’s sensory and cognitive functions while interacting with the Web. Reading, in this context, becomes an act of navigation, interpretation, and decision-making—a feedback loop between user and text.

However, a central question arises: should these multimedia and interactive works still be called literature? Many digital texts blend elements of literature, art, music, cinema, and gaming, creating what scholars describe as intermedial or plurimedial forms. Intermediality—the interaction of several media within a single work—reveals literature’s intrinsic ability to absorb and reinterpret other art forms. In many intermedial works signs of all five semiotic systems – linguistic, audio, visual, gestural and spatial start to play meaning bearing, constitutive role in creation of computer-mediated works of new art. They have acquired content-bearing function, and act as constitutive elements of composition that have an equal role to elements of the linguistic system in transmitting a message. In this way new, hybrid form of computer art is created. Synesthetic perception of such works merges virtual and real worlds, as perception of these works happens through the same senses as it happens in the real world.

Continuity and Return to the Book

However, after numerous experiments with computer-generated hybrid literary forms, that by now have lasted for over four decades, as our research has evidenced, in the Fourth Volume of Electronic Literature Collection (2022), besides further experiments with the net, we again come across works that evoke aesthetic experience mainly through expressive use of language, as it is peculiar to traditional literary works, reflecting a trend “Back to Book.”

The variety of created on computer literary forms of electronic literature require systematization in order to define the main trends of their evolution in spite of the fact that electronic literature is still a new phenomenon which undergoes rapid transformation and constant modification. Accepted properties of works of different

genres should be taken into consideration while attributing a work of electronic literature to a genre of narrative fiction and its participation in continuation of existing up to now literary tradition. The first, and the most essential property, which is characteristic to all literary works, is to evoke aesthetic experience through expressive use of the language of the linguistic semiotic system. The second criterium is based on the fact that though print literature existed as the only form of preserving and transmitting knowledge for five centuries, it had inherited ages long oral and written traditions of composing and telling stories of various genres, that are imprinted in texts and in our memory, and constitute the basis of our understanding of what literature is. That is the reason for which a work may be qualified as a literary narrative text if it satisfies some accepted requirements, such as a title, upper and lower borders, plot, characters, conflict, setting, theme, point of view and style. Both print and electronic narrative texts meet all these requirements, perhaps except the lower border, which is often missing in electronic fiction, though it may exist implicitly. However, this may be the case with many experimental paper-based works as well. Creation of texts is affected by the medium that is used for their creation.

Another similarity of printed works of narrative fiction and works of narrative hypertext fiction is the structure of plot lines that fall into three basic categories: axial, arborescent, and networked (Ciccoricco, 2007: 5). In multi-plot genres, in terms of formalists, plot lines have a chain, parallel, or circular organization (Mebuke, 2022, 2023: 22).

I have suggested to draw a demarcation line based on the primary and complementary function intermediality has in the composition of literary works. When visual, linguistic, and auditory components carry equal struc-

tural importance, the resulting work can be classified as a hybrid form of computer art. However, when language remains primary and other media serve an expressive or supportive role in the composition of a text by visualizing, or otherwise objectifying content with the help of different forms of synesthesia, expressed through signs of others than linguistic semiotic system, such works continue the literary tradition in electronic form. This distinction allows us to see electronic literature both as a continuation of literary heritage and as a gateway to new aesthetic territories.

Conclusion

To conclude, the development of electronic literature illustrates how storytelling continues to evolve alongside technology while preserving its essential di-

mension. The boundary between literature and digital art depends on the degree to which aesthetic power of linguistic expression remains central. Electronic literature thus represents both innovation and continuity: it merges centuries-old narrative traditions with the creative potential of new media.

As Monteiro and Carvalhais (2023: 21) remind us, storytelling is a fundamental aspect of human existence, continually shaped by the tools we invent. And as Heckman and O’Sullivan (2018: 22) observe, the miracle of electronic literature does not lie in computers themselves, but in the timeless human impulse to imagine, create, and share meaning. Whether printed on paper or generated by code, literature remains one of the most profound expressions of human consciousness.

References

1. Aarseth, E. J. (1994). Nonlinearity and literary text theory. In G. P. Landow (Ed.), *Hyper/text theory* (pp. 51–86). Johns Hopkins University Press.
2. Aarseth, E. J. (1997a). *Cybertext: Perspectives on ergodic literature*. Johns Hopkins University Press.
3. Aarseth, E. J. (1997b). *Ergodic literature*. Johns Hopkins University Press.
4. Bakhtin, M. (1981). Forms of time and of the chronotope in the novel. In *The dialogic imagination* (pp. 84–258). University of Texas Press.
5. Barthes, R. (1977). Introduction to the structural analysis of narratives. In *Image–Music–Text*. Fontana.
6. Borges, J. L. (1999). *Collected fictions* (A. Hurley, Trans.). Penguin Classics.
7. Carvalhais, M., & Monteiro, A. C. (2023). How we construct meaning in interactive digital narratives: A structurally coupled relation. *Journal of Digital Media & Interaction*, 6(14), 21–32. <https://doi.org/10.34624/jdmi.v14.32177>
8. Ciccoricco, D. (2007). *Reading network fiction*. University of Alabama Press.
9. Flores, L. (2019). Third generation electronic literature. <https://doi.org/10.7273/axyj-3574>
10. Hayles, N. K. (2005). *My mother was a computer: Digital subjects and literary texts*. University of Chicago Press.
11. Hayles, N. K. (2007a). *Electronic literature: New horizons for the literary*. University of Notre Dame Press.

12. Hayles, N. K. (2007b). Electronic literature: What is it? Electronic Literature Organization.
13. Heckman, D., & O'Sullivan, J. (2018). Electronic literature: Contexts and poetics.
<https://dlsanthology.mla.hcommons.org>
14. Mebuke, T. (2022). Prospects and confines of electronic literature. In A. Mammadov & B. Lewandowska-Tomaszczyk (Eds.), *Analysing media discourse: Traditional and new* (pp. 62–86). Cambridge Scholars Publishing.
15. Mebuke, T. (2023). Temporal and spatial coordinates in hypertext fiction. *Global Journal of Human Social Sciences: G. Linguistics & Education*, 23(7), 21–24. <https://doi.org/10.17406/GJHSS>
16. Nelson, T. H. (1992). Opening hypertext: A memoir. In M. C. Tuman (Ed.), *Literary online: The promise (and peril) of reading and writing with computers* (pp. 43–57). University of Pittsburgh Press.

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