Digital/Electronic Literature from the USA: Theories, Forms and Practices

An Introduction

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Keywords

Digital Humanities

Electronic literature

AI-generated texts

Hypertexts

Digital Literature

Abstract

Introduction to the Special Section of the *Iperstoria* issue "Digital/Electronic Literature from the USA: Theories, Forms and Practices."

> *When my electrons and neutrons war, that is my thinking.*
> *Nevertheless these images and reflections are understood by you,*
> *persons, men and women. You have electrons and neutrons like me.*
>
> (RACTER, *The Policeman's Beard is Half Constructed*)

Under the umbrella term of *Digital Humanities* the last thirty years have witnessed an unprecedented production of studies devoted to the interactions and connections between increasingly advanced technologies, on the one hand, and artistic forms and theoretical perspectives in the humanities, on the other. As far as the field of literary studies is concerned, the interaction with digital technologies thanks to AI systems is now at the center of various research endeavors. This interaction highlights the potentialities of intensive technological application and implementation, leading to a fundamental rethinking of the discipline. Experiments with AI-generated literature, such as Ross Goodwin's 2018 project *1 the Road*, as well as AI-driven analyses of literary texts, are becoming more and more common, contributing to increasingly complex integrations of digital technologies into literary works, both essayistic and fictional. Within the critical domain, moreover, digital technologies have enabled interpretive and analytical models such as those based on *textual analysis* or *distant reading*

(Moretti 2013), alongside discussions of their potential risks of fatally altering or compromising more canonical approaches to the discipline (Underwood 2019). At the same time, other interpretive methods based on the idea of *network* (Jagoda 2016) or of *code* (Geoghegan 2023) emerged, as well as critical approaches based on *intermedia* or *transmedia* research perspectives (Jenkins 2014).

On a creative level, works incorporating cybernetic structures, such as the works by Oulipian authors, or instances where electronic technologies facilitated the process of selection and creation, such as the mesostics and "writing-through" poems by John Cage and Jackson Mac Low, have gradually evolved into experiments involving texts generated entirely by computational programs. These include, among other early examples, the case of RACTER, which 'authored' the book *The Policeman's Beard is Half Constructed* in 1984, or software like Storyspace – especially with reference to "hypertext narratives." More recently, such developments have led to the emergence of increasingly complex works going under the label of digital literature (Hayles 2008) or electronic literature (Rettberg 2018), precisely because they are generated, consumed, and published in a digital context. As Scott Rettberg, who co-founded the Electronic Literature Organization (ELO) in 1999, defines it, electronic literature – or e-lit – comprises "works with important literary aspects that take advantage of the capabilities and contexts provided by the standalone or networked computer" (2018, 4).

In a similar framework, as critics such as Katherine Hayles (2008) have pointed out, works of electronic literature are sometimes considered borderline cases from the perspective of more conventional literature, and include, for example, experiments with social media and other networks not immediately associated with the literary context, yet still plunged into what has been defined as "digital plenitude" (Bolter 2019). In this light, the current thematic section of *Iperstoria* aims to analyze examples of digital/electronic literature, concentrating on works that have been either directly created or re-elaborated using contemporary digital technologies. These works are therefore inherently connected to certain technological specificities that are also able to define aesthetic parameters.

While many of the examples discussed are not explicitly "born digital" (Hayles 2008), the featured contributions understand the digital as a technology that reshapes perceptual and creative paradigms, rather than simply as an instrument that implements, facilitates, expands, or accelerates established practices. In this sense, the digital is considered in its tight relation with technological aspects and *as* a technology in itself, namely an aesthetic condition capable of defining a new theoretical framework for literary products. In the wake of the recent debate on the topic (see in particular Hayles 2021; 2008; Rettberg 2018; Tabbi 2018), the digital is thus framed here not simply as a new tool to replicate older forms of media or interaction (such as print literature), but as a force capable of reshaping fundamental aspects of culture and

communication, following again Friedrich Kittler's Nietzsche-inspired claim that "our machines are also shaping our thoughts" (1999, 249).

To consider the digital as a technology – or, more precisely, a 'transformative technology' – means to think about its relationship with literature not in terms of the application of instrumental models or tools, but as a possible reconceptualization of the aesthetic interactions with the text, textualities and literary objects. To this end, as the title of our special section explains, in the investigations here presented theories, forms and practices of digital/electronic literature are conceived of as discussing a possible aesthetic re-envisioning of the interactions/integrations between literature and the digital, particularly in the direction of a careful analysis of the more material – and materialistic (Crawford 2021) – implications of the problem. The works discussed are thus read through a triple perspective of inquiry. First, the exploration of potential theoretical approaches to the connection between digital/electronic technologies and literature, in order to overcome purely applicative paradigms that risk underestimating the aesthetic consequences of the ever-evolving mediascape; second, an analysis of digital literary works that problematize and thematize the very connection with technologies; and third, a special attention to contemporary practices in which digital technologies integrated into the creative process are understood not so much as tools that enables certain results, but as part of a poetic experience and expression.

With a particular focus on the North American context, the contributions gathered here, while primarily addressing literary concerns, also reflect more broadly on key issues concerning the current configuration of the relationship between digital technologies and the humanities. Aspects such as the structure of paratexts, hypotexts, hypertexts, as well as the challenges of encoding models and the translation from text to voice, are increasingly challenged in digital/electronic literary products. This contributes to a radical reevaluation of the fundamental components of literary works – moving beyond plot, themes, and styles to question the technological frameworks that underpin them. At the same time, these dynamics are currently situated within a larger, ongoing transformation in the systems of communication and publication, where digital technologies are conceived of as active agents in redefining how literature is produced, distributed and consumed.

Within such a varied framework, Grba and Todorović examine generative narrativity as a form of creative expression made possible by generative AI, thus exploring the literary-digital nod from a philosophical and aesthetic perspective. Their research delves into how generative AI technologies influence narrative forms that go beyond traditional human-like storytelling and often engage audiences through novel interactions and interpretive experiences. Such examination of generative AI underscores a specific technological context: the narrative forms it discusses depend on the capabilities, limitations, and cultural implications of generative AI

itself, particularly the trend toward "human-mimetic" language processing. By focusing on the unique "routes for meaningful generative narrativity" that differ from mainstream, human-like AI, the article shows how AI's distinct capabilities shape new and unconventional literary experiences, as well as critical artistic reactions to the prevailing AI trends. Grba and Todorović's analysis is grounded in the exploration of exemplary works that employ generative AI, emphasizing artistic approaches that question and stretch the boundaries of AI-generated narratives. Rather than passively imitating human communication, these works use AI's capabilities to engage audiences in ways that diverge from traditional narratives, making them innovative products of current digital technology. Instead of blindly embracing this new approach, the authors situate generative narrativity within the cultural influence and fallouts of AI, examining both its expressive potential and the critiques it raises about conventional uses of AI in storytelling. From this critical perspective the article provides insight into how generative narrativity not only challenges but also possibly redefines literary norms within the digital age.

Such a start reinforces an understanding in which the digital is not just about delivering or interpreting content; it is about experiencing literature through a different lens, gaining access to notions that shape 'literariness' through the possibilities offered and implemented by technologies. To this extent, Mustazza's article applies digital technology as a way to re-evaluate and understand human literary performances. Mustazza studies AI-generated voices performing poetry, which is an example of literature that relies on recent digital advancements, particularly in generative AI. These AI voices are both products and facilitators of electronic literature, bringing digital specificity into literary analysis and performance. The use of generative AI to create synthetic voices for poetry performances exemplifies literature produced directly within and for the digital environment. Unlike traditional readings, which are performed by human voices, AI performances exist solely because of digital technology, making the medium inseparable from the content. The research investigates the unique features and limitations of AI voices, specifically the 'uncanny valley' phenomenon and prosodic differences, which arise due to the limitations in AI's ability to replicate human vocal nuance. This technological specificity not only shapes the user experience but also introduces new literary interpretations by defamiliarizing familiar performances through AI's imperfections. The study thereby emphasizes how these technologies impact our perception of poetry, aligning our interest in the technological aspects of digital literature.

Carpenter's article, then, approaches the topics of this special issue from a broader historical and conceptual perspective rather than focusing on a specific contemporary digital literary work. The contribution examines "computer-generated texts" and the experimentation involved in creating "writing machines." By exploring the evolution of machine-generated text and

shedding light on contemporary practices in this field, the research contributes to the understanding of how digital literature has developed and why these practices continue to evolve. Indeed, the article discusses generative texts across several 'generations' of technology, rather than focusing solely on present-day digital literature, with an emphasis on the progression of technologies – from mainframes to modern computers – each influencing the capabilities and types of texts that can be generated. This analysis shows how each iteration of technology uniquely shapes literary possibilities, also from a perspective on collaboration between humans engaged in attempting to make writing machines, which enriches our investigation by discussing the human role in digital literary creation, framing generative literature as a collaborative process between people and technology. This conceptual focus can illuminate the motivations and philosophies underpinning contemporary digital literature.

On a different direction, explorations of forms and practices in which digital and electronic technologies are interrogated within the literary field are presented through even more technical approaches. Accordingly, Seguy's research does not examine a work created directly in a digital environment, but it does align with the main focus of this special issue by using a digital encoding format to analyze a "difficult" text, i.e. Pound's *The Cantos*. This approach emphasizes the technological demands of digitizing challenging literary works and exemplifies the role of digital tools in deepening our understanding of canonical literature. Indeed, the paper discusses the *The Cantos'* XML-TEI encoding, which is a digital process applied to an existing literary work. While *The Cantos* themselves are not a product conceived in a digital environment, encoding them in XML-TEI format is a digital transformation that brings a new electronic dimension to its analysis and accessibility, while providing the readers with a novel understanding of ancient as well as modern poetic forms, structures and models as used in the *Cantos*. This process provides a way to digitally engage with Pound's work, exposing it to computational methods of reading and analysis. XML-TEI introduces technological specificity by imposing a structured, markup-based approach to text representation, which brings unique challenges and decisions in representing complex literary features digitally. The paper's attention to the specific obstacles of encoding Pound's intricate text showcases the digital challenges and innovations required to capture and preserve the poem's nuances electronically. This encoding project contributes to digital humanities approaches by transforming how readers, scholars, and technologies interact with the text, and the paper explores how the electronic encoding of a traditionally printed text poses both limitations and opportunities for its analysis.

Finally, the main subject of Delioglanis' article is *Twilight: A Symphony* by Michael Joyce, created specifically for a digital platform (CD-ROM) using the Storyspace hypertext writing program. This work represents one of the early experiments in electronic literature, where the

narrative structure and experience are inherently tied to the digital medium. Unlike traditional print literature, this hypertext novel leverages digital tools and interactive structures that would not be possible outside the electronic environment, making it a quintessential example of literature conceived directly within and for the digital realm. The Storyspace platform imposes certain limitations and capabilities that shape how the narrative unfolds, allowing for a non-linear, interactive reading experience that is unique to hypertext literature. The technological constraints and affordances of Storyspace are essential to both the form and content of the novel, highlighting how this early form of electronic literature explores the "trans-/re-formative potential" of digital narrative structures. The paper situates *Twilight: A Symphony* within a historical trajectory, exploring how it influenced subsequent digital literature and emergent narrative forms. Here, the focus on contemporary digital literature relates not only to current examples but also to the understanding of how foundational works like Joyce's have paved the way for new digital genres. By examining how *Twilight* has influenced later experiments and remains relevant in evolving digital practices, the paper emphasizes the adaptive and formative nature of early hypertext literature in the broader landscape of electronic literature.

In this respect, the focus on how *Twilight* – as well as other hypertext-based works – continues to inspire kernels of later electronic literature aligns with our interest in works that are especially bound to technological developments. This also reinforces the idea that hypertext narratives – though no longer at the forefront of digital literature – remain influential as technological innovations continue to shape literary possibilities in new ways. At the same time, coming back to the origins of electronic literature posits some of the approaches presented within the framework of what has been defined as "media archaeology" (Parikka 2012), a critical perspective that could also provide literary studies with a potential field of encounter between poetics, aesthetics and practices of digital technologies from a *longue durée* outlook, thus mitigating the risk of mistaking what are just effects enabled by innovative technological devices for innovative practices.

Consistently with the *Iperstoria* 2018 issue dedicated to digital humanities in its connection with literary studies, the present collection of essays aims at providing readers with a tentative map to navigate the ever-increasing number of literary works produced and published in the USA, both shaping and reflecting our current techno-cultural scene and contributing to evolve our ways of considering literature.

Bionotes

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Mario Verdicchio (PhD) is an assistant professor at the University of Bergamo (Italy), where he teaches Information Technology to students in Digital Humanities, Foreign Literatures, and Philosophy. With a background in Artificial Intelligence, his research has expanded over the years to Philosophy of Computation, Ethics of Technology, and Computer Art. He has been a visiting scholar at the University of Virginia in Charlottesville and the Chukyo University in Nagoya, and he is currently a guest researcher at the Berlin Ethics Lab of the Technische Universität Berlin. He co-founded the international conference series on Computation, Communication, Aesthetics and X (xCoAx.org). His latest book *Che cos'è il digitale* is set to be published by Carocci Editore in January 2025.

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