Narrative Techniques in Digital Space

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Abstract:

This study aims to explore a new space where text has begun to take shape, altering the structure of its elements. It now requires tools to read and decode its various symbols. The rapid transformations witnessed in human life during the mid-twentieth century led to an accumulation of knowledge across various domains. The scientific and technological advancements of the third millennium played a crucial role in driving these changes, especially in terms of production, reception, and tools. One such development was the emergence of interactive literature, which is regarded as an activity incorporating various literary, artistic, and technical components, where image, sound, interaction, connection, and branching all play major roles. The new reader assumes significant responsibilities that differ from those that prevailed before the digital revolution. This study seeks to examine the nature of interactive literature and its genres.

Key words: *Digital literature, Digital narrative, Technology, Communication, Interactive literary genre.*

1. Introduction:

Interactive literature is a new literary genre with unique writing and reading features, as well as distinct literary forms. It differs in its production and presentation from traditional literature and could not have emerged without advancements in communication technology, particularly electronic computing. In this literary type, the author does not rely solely on language; instead, he seeks to convey meaning through expressive media such as sound, images, and movement, among others. It offers the recipient the opportunity to feel as though he possesses everything presented on the network. In other words, it elevates the role of the reader, who had long been neglected by critics and literary scholars who focused primarily on the creator and then the text. Interactive literature does not recognize a sole creator of the text.

Literature has emerged in a new form, benefiting from technological advancements, especially the multimedia capabilities that offer visual and auditory content. It elevates the role of the reader/recipient, focusing on their positive contribution to the process of reading creative work. Thus, it confidently invites the reader into the digital aesthetics, where the reader, who was once a passive consumer of the text, is now encouraged to participate in writing the literary text as a contributor, assuming a key role in modern creativity. The ultimate goal is to elevate the reader from a consumer to an active participant who, in the end, can delve into the depths of the literary work.

The rise of digital technology, along with the widespread use of electronic publishing through websites, forums, blogs, and digital magazines, as well as the use of email and programmed disks, has offered momentum and motivation for many to continue engaging and contributing across various domains. This is especially true for creative writing and poetry, which have witnessed considerable achievements.

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2. Interactive Literature Fields

Digital literature is a compound term with two distinct references. The first pertains to literature as knowledge, while the second refers to the electronic medium. Thus, the concept of literature always combines these two references, representing the convergence of literature and technology.

Interactive literature has produced several forms of literary products, some are traditional but, in this context, have been given the features of interactivity or digitization. In other words, it builds upon literary activities that have existed—and continue to exist—and transfers them from the paper world to the electronic realm, employing different technological tools to present them in a form rich in diversity, responsiveness, and accessibility for the recipient, moving from reality to the virtual world. The following areas include (El-Hadi, 2001):

- Electronic literary forums;
- Electronic literary salons (dialogical);
- Electronic conferences and meetings;
- Electronic literary websites;
- Electronic literary magazines;
- E-books (reading devices, digital content);
- Literary blogs of authors;
- Authors' pages on various social media platforms.

Literature is a human activity and a vast field of knowledge that includes various arts and genres, opening up to several fields of knowledge, whether adjacent or non-adjacent. It is noteworthy that its concepts vary from era to era and from one movement to another, due to its changing nature and function, as well as the diversity of its forms, styles, and genres. The phenomena mentioned earlier—such as forums, salons, websites, electronic literary magazines, and e-books—represent the initial "primitive" outcomes of the intersection of literature and technology.

3. Interactive Literary Types:

Interactive literature has become one of the most controversial movements of our time, facing a range of positions from acceptance to rejection across the literary and cultural landscapes of the Arab world. However, it is undeniable that not all opinions seek to exclude the old and revive the new. Several positions have strongly defended traditional paper literature while embracing the positive aspects of interactive literature that are accessible to the public. The latter, regarded as a new literary genre, brings with it new forms of expression that differ from the traditional. Among these interactive literary types are interactive novels, interactive poetry, and interactive plays. All of these digital literary forms have introduced new ways of expression in the literary field, thanks to the digital technology brought by globalization, which has swept through the Arab world with its characteristics. This has established an interactive connection between the creator and the recipient, who has now become an active participant in the literary process. Moreover, it has transformed the literary text into the property of everyone (Yaktine, 2008).

4. Digital Narration:

Digital narration involves the use of various media, both linguistic and non-linguistic, often implemented through applications and developed programs offered by the information system. This raises the question of the illusory nature of this technical aspect, which is regarded as an aesthetic condition in every digital literary practice. Thus, one effective way to approach digital literature—

and, by extension, digital narration—is to explore the conditions for its realization and its techniques, allowing to, at least initially, assess this new arrival.

Notably, digital narration is not a homogeneous entity; it includes new narrative forms that are still in the process of formation. Hence, we can discuss digital, interactive, and hypertextual novels, as well as plays, short stories, and microfiction. Some critics, such as Labiba Khammar, have referred to 'concise narration,' which is digital narration resulting from writing novels in the style of short stories, microfiction, and news reports, as mentioned earlier. Such issues will inevitably challenge any critical theory and must be studied within this new literary phenomenon, regarding the latest developments in digital narration and describing its theoretical and procedural conditions. In describing his view of digital realism novels, Mohammed Sanajleh argues that this represents one of the available and limitless possibilities for writing an open Arabic digital narration that is constantly evolving through experimentation and exploration. He states, 'Digital realism novels are the future, and narration will not stop there. What will distinguish this type of narration from others is its constant ability to take on different forms, employing the various digital techniques that are continuously evolving.' (Sanajleh)

5. Digital Narration Techniques:

Digital narration employs the innovations of the technological age, with the computer connected to the World Wide Web at the forefront. This medium requires precise programming languages that enable a series of instructions to be executed during both the production and reception of the interconnected text. The preparation of the medium and its provisioning with several capabilities provided by software are necessary to the content of the hypertext, which still necessitates certain conditions and techniques to be realized. Among these, we mention the following:

a) Hyperlinked Medium:

The hyperlinked medium is a crucial mechanism in all digital narration. It presents a set of links that can be activated by the reader-navigator, who will use these links as passageways to the narrative nodes. Behind each link, another text is hidden. As Zohour Karam explains the function of the link: "The link forms a fundamental technique in activating the hypertext and pushing it toward realization. A link, as defined by Vannevar Bush, connects two pieces of information, and it is this connection that produces meaning". (Karam, 2014)

Navigation may be random and unplanned for a hurried reader. Naturally, the reader's choice of link determines the meaning, rather than the act of navigation itself. Links function both as narrative and commentary; they serve as engines for the narrative while also organizing it. The emergence of links is often accompanied by iconic, linguistic, and visual markers, such as a phrase or word that may be underlined or highlighted in a distinct color. (Chibani, 2014)

Links take us to the space of hypertext, a repository of absent texts, voices, panels, and signs, all of which intertwine and intersect. While the linking process may not follow a strict order, these links enable the user to move between diverse topics without adhering to a specific system in their arrangement. (Yaktine, 2008)

Thus, the reader can leave one link and activate another, giving digital narration its interactive character. The texts are read in various ways by readers, who differ in how they activate the links and follow their paths**.**

Said Yaktine describes the process of activating links as follows: "Knowing what we called the 'execution process' in writing is essential in reading, as it relies on a central principle that the

hypertext is fragmented or 'tree-like,' with 'markers' within it that allow for transitions to different text fragments as soon as they are activated by clicking with the mouse. Every time we perform this activation process, we encounter new textual structures through new windows, which in turn contain markers that require activation." (Yaktine, 2008)

Thus, it is essential to talk about a studied process of navigation through the body of the hypertext narrative, conducted by a 'generous' reader—using Yaktine's term—a reader who follows the instructions of the text, activates the links, and explores the absent texts and moving scenes, but connects the endings to the beginnings without getting lost in the maze of hypertext narration**.**

The reader navigating between links and narrative nodes always grasps the precise meaning of the hypertext, which is viewed as 'a digital document composed of information "nodes" that can be connected through links. Therefore, the node can be seen either as an explicit text referring to a certain link or as independent entities governed by links (Yaktine, 2008) in establishing their interrelationships'. Thus, they are part of a structure of groups united by the relationships formed by links. The link connects two nodes in a specific direction, and once activated, it leads the user of the hyperlinked medium from one node to another. (Chibani, 2014)

The links move between narrative nodes, causing the narrative text to expand in all directions. One text refers to another, which in turn refers to a third, and so on. This process reveals hidden texts that were previously concealed behind each link.

b) Hyperlinked Media:

The hypertext employs multiple media (multimedia), which interweave within the fabric of the narrative structure and interact with it through links. It also performs a foundational function for storytelling, opening the hypertext to representational scenes, images, and sound effects. This is considered a significant development in the concept of digital narration and its expressive capabilities.

Houssam Al-Khatib believes that what is referred to as 'rich text' involves 'the integration of images, sounds, videos, and other forms within a primarily relational system for storing and retrieving information (Al-Khatib, 1996). In this regard, the task of creating this specific blend of written narrative, documents, poetic fragments, moving scenes, images, sounds, video clips, and more is left to the navigating reader. This breaks the linearity of the hypertext through the hybridity of signs, giving the rich text its semiotic dimension. As Labiba Khammar argues, 'The feature of hypertext lies in the use of hypermedia to convey information and ideas by linking written text, drawings, images, and video clips, enabling the navigator to freely control how the material is presented. However, it is the interconnectivity and links—the "links"—that are relied upon to link these multiple and interactive communication media. (Khammar) **(Keddou)**

The use of multimedia within hypertext leads to its branching out, making it impossible for the navigating reader to fully grasp it all at once. The reader is often viewed maneuvering through links irregularly—entering, exiting, copying, storing, saving, and returning to the beginning. This gives hypertext its interactive nature, which is essentially an open exchange between the author and the navigating reader.

Fatima Keddou returns to define the media text, stating: "It is worth noting that by 'media text,' we refer to a text read on a computer screen, relying on various media that grant it its 'media' status through the use of still and moving images, music and song clips, as well as film segments. Furthermore, it involves poetic or narrative fragments, which, once incorporated into the media text—whether drawn from poetry collections, novels, or stories—lose their 'paper' status and

instead use the electronic medium as a bridge to connect with new readers. This media text is distinguished by its interactive nature, where the reader engages through links, the 'technical tool' that, when clicked, breaks the apparent stillness of the visible text, allowing entry, exploration, and navigation of its structure. (Keddou)

Due to the interactive nature of hypertext, the reader assumes a new role: that of a co-writer. **(Khammar)** By freely assembling text fragments, the reader creates a second layer of writing over the author's original text. However, it's important to note that not all readers reach the level of co-writer. Some may click on only a few links, and, frustrated by the complexity of the hypertext's narrative maze, they may leave without fully exploring it or reconstructing what was left unwritten by the author.

c) Linguistic Narration:

Digital narration includes linguistic narrative texts, which serve as a primary element of digital storytelling. Once the representational scene has introduced the narrative knot, linguistic narration resumes what the hyperlinked medium previously expressed. Therefore, the interplay between these two types of narration—hyperlinked and linguistic—becomes a central feature in digital narratives.

How, then, is the connection between the two narratives—linguistic and hyperlinked—established? The character may serve as a common anchor between them. In some instances of Arabic digital narrative models, such as Saqia'and Shat by Mohammed Sanajleh and Hafnat Jamr by Ismail Al-Bouyahyaoui, the character appears as the element that connects the different sections and nodes of hypertexts. This is because digital narration tends to expand, and the character's movement from the novel's writing to other forms becomes a method for structuring digital narration. Labiba Khammar prefers to describe these types of characters as 'connecting characters,' stating: 'Among the strategies that enable the writer to compose the novel through short stories or mini-stories is the use of the central character or a unified thematic component as the dynamic generator of narration, around which all the short stories revolve. Therefore, its material and semantic construction remains stable as long as it is written with narrative focus, breaks linearity, avoids filler, and embraces density, relying on links that branch out to form a temporal and spatial maze. (Khammar)

The linking character unites text fragments in a hypertext. Each time a new link is activated, the character reveals new traits. This character serves as a reference to previous hypertexts. One of the character's tasks is marking the links. In examples of Arabic narrative hypertexts, we can observe the frequency of these character-linked connections. This is supported by Abdelkader Fahim Chibani, who notes: 'In hypertexts narratives, characters play a major role in ensuring the coherence of pages and organizing narrative events. While the character drives the action and gives it meaning, their links can clearly reflect the diversity and complexity of those actions. They also demonstrate the overall structure of the character network within the narrative, distinguishing the most important characters from the less significant ones in the narrative's interplay. (Chibani, 2014)

Since the break between digital narration and critical approaches—particularly structuralist and semiotic narratives—has not been absolute, this strengthens the case for analyzing the character and tracking its systems of reference in narrative hypertexts. Furthermore, a review of digital narrative works indicates that the character continues to evolve, often defined by its actions and perceptions, though in some texts, its characteristics may be obscured, giving it an abstract quality. This transforms the character into a flexible model that can be generalized to represent any

individual who experiences isolation, alienation, despair, or marginalization, overwhelmed by the rapid advances of a digital era that nearly surpasses him.

6. Key Cinematic Techniques:

The influence and interaction between the arts and literature, especially between literature and cinema, cannot be denied, despite their different languages. While novels employ written language, cinema uses audiovisual language, which follows a kinetic and auditory construction based on three possible elements: the movement of actors and others within the frame, camera movement, and the montage of shots, whether in harmony or contrast with the soundtrack and its elements **(Ata Naima)**. While the influence of literature on cinema is not our main concern, we are interested in how Arabic literature has used cinematic techniques and the aesthetic and semantic dimensions of this usage. Thus, it is essential to briefly examine the key cinematic techniques and their application in novels.

a) Montage:

It is one of the most significant cinematic techniques, referring to "the process of editing film shots and sound elements in sequence according to the order determined by the director in collaboration with the editor." (Ata Naima) It is also defined as "cutting a scene into edited shots from different points of view, establishing both semiotic and formal relationships between consecutive shots through alternating perspectives in the frame and its opposite, for instance, (Marie-Thérèse , 2007) (al-Ksentini, 2007) as well as through transitions".

Montage involves the arrangement of film shots and their assembly within a well-structured screenplay, which organizes scenes that were initially independent when captured. In cinematic criticism, a scene includes a series of shots that are linked to form a cohesive whole, which then develops into an event, situation, or dilemma. (al-Ksentini, 2007) Shots are viewed as scenes or a series of perspectives that make up a complete scene, incorporating temporal and spatial markers, introducing objects, and visualizing character movements and traits through visual embodiment **.**

Just like cinematic scenes, every narrative scene includes a series of views, akin to shots in cinema. Each view has its subject, movements, and features. However, it merges with the subsequent view, creating a uniquely woven narrative composition. Furthermore, scenes do not shy away from conveying a particular perspective, shaping an implicit semantic dimension that must be interpreted contextually. This can be explored by tracking the game of references—linking the present to the absent, and the inside to the outside, as will be interpreted in the elements below.

b) Frame :

The frame functionally contributes to the selection of the film's material cut from reality, identifying the content of the image and controlling its visual field. It is linked to the subject of the image before our eyes, leading to the idea that the frame differs from the visual field and does not align with it. Cinematically, the visual field is defined as 'the space within the frame that is viewed simultaneously as a flat area (the material two-dimensional space of the image). However, in the case of representational images, it appears to be part of a three-dimensional space (depth), though imaginary. Meanwhile, the frame that borders it acts as a veil, as Bazin suggests, by concealing the space at the sides which is not seen but imagined. This is called the 'off-screen space' or 'outside the field.' The illusion of depth, along with the perception of space extending beyond the frame's boundaries, creates a strong sense of realism. (Marie-Thérèse , 2007)

Each frame of an image is linked to a specific domain, which may expand or contract. Cinema critics refer to this as "inside the visual field" and "outside the field." The former includes

all visible elements within the viewer's immediate line of sight, while the latter encompasses elements that are not visible—they are absent from the image's visual space. However, what is outside the field can be mentally evoked. It is natural for the visible to refer to the unseen, and the present to suggest the absent, leading to the horizontal and vertical extension of the image's field through the interplay of the visible and invisible. The field of vision is an open, dynamic space shaped by transitions and the manipulation of distances, defining the frame's boundaries—near and far, inside and outside, present and absent. This also involves positioning elements at the forefront of the image while concealing others in the background of a distant, obscured picture. In cinema, this is referred to as "depth of field," a visual-imaginary movement that allows unseen elements, previously outside the image, to enter it, and vice versa.

The frame in the novel functions as the material of the narrative, which the narrator selects to structure in a particular way. It is likely that the narrator relies on introducing the image by executing carefully studied transitions between scenes and shots, much like in cinema. The narrator moves from one scene to another or shifts from one character's viewpoint observing the scene to another character's viewpoint, either from the same angle or a different one. In this way, the image frame is varied through the continuous oscillation between the elements within the frame and those outside it, as well as by changing the shooting angle. Based on this, we consider the technique of framing and composing scenes and shots to be one of the cinematic techniques that have been used in several Arabic novels to develop the plot and stimulate the progression of the narrative. (Marie-Thérèse , 2007)

c) From the Shooting Angle to the Point of View / or Camera Narration:

The shooting angle is cinematically connected to the movement and direction of the camera in relation to the subject being described. According to Marie-Thérèse Jornod, the shooting angle relies on the position of the camera lens relative to the filming field. When the camera is positioned horizontally at human eye level, the angle appears "normal." The director can film the subject in a descending manner (from above to below—also known as a "high angle") by placing the camera above the subject, or in an ascending manner by positioning it below the subject, either to suggest a view upwards or downwards, or to distort the perspective. When the camera moves while filming a scene, the angle changes.

Between camera movement and shooting angle, there are countless types of shots that experimental cinema critics have innovated. W. Griffith, in particular, deserves credit for pioneering the study of montage, shot variation, and cutting by moving the camera towards the scene, which creates a dramatic effect. Griffith applied the technique of cutting from a wide shot to a close-up and also experimented with moving the camera into a close-up shot to highlight clear facial characteristics. He later experimented with the technique of the very wide shot.

Griffith continued experimenting with various cutting positions, leading to the invention of many techniques that later became established as fundamental principles in the art of montage**.**

It is evident, in this regard, that novelists benefit from the rhythm of shot cutting and camera angles, which has led to the development of narrative concepts such as point of view and focalization. These concepts became central to structuralist narratives, especially in their meticulous analysis of narrative texts, especially in novels. However, camera narration—dominated by cinema—goes further by tracking the positions of the observing eye, highlighting the play of distances and the possible transitions between different points of view.

We conclude that the methods of constructing the auditory image in narrative fiction clearly derive from cinematic criticism. However, we believe that the arrangement of images and narrative shots does not occur in isolation in narrative fiction, as it often does in cinema, and it would be a mistake to think otherwise. Conversely, just as a film director supervises the execution of shots and scenes filled with suggestion, following a carefully crafted script, the novelist organizes scenes and views within a single, harmonious narrative fabric, then infuses them with their perspective and point of view, allowing us to sense a deliberate intent hidden behind those images.

7. Conclusion:

The mechanism of publishing has evolved from stone to tree, then to paper, and finally reached the digital realm. From printed text to hypertext, this shift is a natural result of the creator's engagement with digital culture and the production of interactive literary works. Undoubtedly, interactive literature will be more accepted by the new generation than printed literature. It is necessary for the contemporary Arab creator to take advantage of such scientific tools and electronic devices in the most effective way.

The study concluded with numerous results, the most significant are:

- The experience of digital creativity in Arabic literature is new and recent, still in its early phases. It has not yet accumulated the necessary momentum to develop and attract significant interest**.**
- The transition from paper to digital text has led to a significant transformation in the processes of creation and reception. Technology has granted the reader a power that would not have been possible outside this space. Along with reception theory, the concept of interactive literature has given the reader greater freedom in engaging with creative works, breaking the notion of the author being the dominant figure in the creative process. The author is no longer the owner of the text; he loses ownership once the text is finished. Instead, the reader, who no longer follows a predefined path, becomes the master of the creative process, also becoming a co-author of the work through the choices and pathways the text offers. He engages with the digital text in a non-linear, non-standard manner, selecting beginnings, writing endings, and participating in the authorship of the work.
- Interactive digital narrative is the result of modern digital technology that emerged in the West and was recently introduced to us. It has made digital narrative a viable option alongside, or even superior to, traditional paper narratives.
- Interactive digital narrative is born from the modern digital revolution and employs technological media for communication between individuals through interactive digital screens of technological tools such as computers, mobile phones, electronic tablets, and interactive digital future media like Internet Protocol Television (IPTV), among other digital media. These have become essential choices and new alternatives to traditional communication means such as books, magazines, newspapers, and the like**.**
- Digital narrative is created in a technical workshop made up of specialists in the field: the content creator, the designer, and the programmer, which contrasts with classical paper-based narratives that have only one author.

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