

Exploring Narrative Intelligence in AI: Implications for the Evolution of Homo narrans*

*Hochang Kwon***

*Cinema Studies, Korea National University of Arts
Lecturer*

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** Corresponding author; cinethink@karts.ac.kr

Abstract

Narratives are fundamental to human cognition and social culture, serving as the primary means by which individuals and societies construct meaning, share experiences, and convey cultural and moral values. The field of artificial intelligence, which seeks to mimic human thought and behavior, has long studied story generation and story understanding, and today's Large Language Models are demonstrating remarkable narrative capabilities based on advances in natural language processing. This situation raises a variety of changes and new issues, but a comprehensive discussion of them is hard to find. This paper aims to provide a holistic view of the current state and future changes by exploring the intersections and interactions of human and AI narrative intelligence. This paper begins with a review of multidisciplinary research on the intrinsic relationship between humans and narrative, represented by the term *Homo narrans*, and then provide a historical overview of how narrative has been studied in the field of AI. This paper then explore the possibilities and limitations of narrative intelligence as revealed by today's Large Language Models, and present three philosophical challenges for understanding the implications of AI with narrative intelligence.

Keywords

Homo narrans, Narrative Intelligence, Large Language Models, Human–AI Interaction, AI Storytelling

1. Introduction

In the realm of human experience, narratives have always been the foundation of communication, culture, and understanding. The concept of Homo narrans, or the storytelling human, is not just an academic notion but a reflection of our intrinsic nature. Narrative shape our identities, our societies, and our understanding of the world.¹ As we stand at the precipice of a new era marked by rapid advancements in artificial intelligence (AI), it becomes imperative to explore how this technology intersects with and influences our fundamental narrative nature. This paper aims to take a comprehensive look at narrative intelligence, both in humans and AI, to understand the current state of play and to anticipate future changes and considerations.

Narrative intelligence in humans, a cognitive ability that has evolved over a long period time, enables us to construct, interpret, and engage with stories, providing a framework through which we perceive and interact with our environment. This ability is not just a tool for entertainment but a crucial mechanism for learning, empathizing, and making sense of complex social dynamics.² On the other hand, the emergence of AI as a narrative entity introduces a new agent in the domain of storytelling. In particular, today's sophisticated Large Language Models (LLMs) demonstrate a different level of story creation and understanding ability than previous AI, based on excellent natural language processing capabilities.

¹ Dray, William H. "On the nature and role of narrative in historiography." *History and theory* 10.2 (1971): 153-171.

² Randall, William Lowell. "Narrative intelligence and the novelty of our lives." *Journal of aging Studies* 13.1 (1999): 11-28.

This situation raises several questions. Does this technological process equate to true narrative intelligence, or is it merely a sophisticated mimicry devoid of the depth and empathy inherent in human storytelling? How does AI influence the way we create, share, and consume stories? What changes might we anticipate in the structure, nature, and reception of narratives? And most importantly, what impact and implications will AI with narrative intelligence have on Homo narrans and the society in which we live?

To address these questions, we first examine the narrative nature of humans. We'll take a comprehensive look at the research on narrative in philosophy, the humanities, cognitive science, neuroscience, and more, and see why this is important for developing AI with narrative intelligence. Chapters 3 and 4 review research on narrative in the field of AI. This paper examines the evolution of narrative intelligence in AI, tracing its journey from rudimentary story-generating programs to the current state where AI systems like LLMs demonstrate an unprecedented ability to understand and generate coherent and rich narratives. Lastly, Chapter 5 presents three philosophical tasks to accurately understand the changes that AI with narrative intelligence will bring about and to respond appropriately to them.

Through a comprehensive analysis that intertwines technological advancements, cultural shifts, and philosophical inquiries, this paper seeks to provide a holistic understanding of narrative intelligence in the age of AI. It aims to offer insights not just into where we currently stand, but also into the uncharted territories we might navigate in the future as the lines between Homo narrans and artificial narrators continue to blur.

2. Human and narrative: Homo narrans

The 'narrative turn' is a significant intellectual movement that emerged in the latter half of the 20th century, fundamentally reshaping how narratives are perceived across various disciplines. While it's challenging to pinpoint an exact moment when this term first appeared, its widespread usage and influence became particularly notable from the 1970s onwards. This shift marked a growing recognition across fields such as the humanities, social sciences, and even natural sciences, that narratives are not merely tools for storytelling or entertainment but are central to human understanding and knowledge construction.³ The narrative turn, therefore, represents a broad-based intellectual movement that acknowledges the fundamental role of narratives in shaping human thought, culture, and understanding. It challenges the notion that knowledge and understanding are purely objective or empirical, highlighting the subjective, interpretive, and constructed nature of human experience. This shift has had profound implications across disciplines, leading to new ways of thinking about and studying human behavior, culture, history, and science, emphasizing the power of narratives in constructing and conveying meaning.

The term 'Homo narrans' has been used in this context. The concept of "Homo narrans," or the storytelling human, is pivotal in understanding the unique way humans make sense of the world. This idea posits that storytelling is not just a cultural artifact but an intrinsic part of human nature. Narratives are

³ Goodson, Ivor F., and Scherto R. Gill. "The narrative turn in social research." *Counterpoints* 386 (2011): 17-33.

fundamental to human cognition and social culture, serving as a primary means through which individuals and societies construct meaning, share experiences, and transmit cultural and moral values.⁴

Narratives play a crucial role in human cognition. They are the framework through which we process experiences and information. From a young age, humans are not only receptive to stories but also learn to structure their perceptions and memories in narrative forms. This narrative structuring is evident in how we recall past events, plan for the future, and even dream. The narrative format helps in organizing and retaining information efficiently, making it a natural tool for learning and teaching.⁵ In social culture, narratives are instrumental in defining group identities, norms, and values. They are a means of passing down traditions and history, ensuring continuity and coherence within communities. Stories, whether in the form of myths, legends, or personal anecdotes, provide a shared set of references and understandings that strengthen social bonds and foster a sense of belonging.⁶

The importance of narrative has been extensively explored across various academic disciplines. In philosophy, narratives have been studied for their role in shaping human understanding of self and the world. Philosophers like Paul Ricoeur have delved into the narrative identity theory, suggesting that individuals form their identities through the

⁴ Mechling, Jay. "Homo narrans across the disciplines." *Western folklore* 50.1 (1991): 41-51.

⁵ León, Carlos. "An architecture of narrative memory." *Biologically inspired cognitive architectures* 16 (2016): 19-33.

⁶ Minami, Masahiko. "Narrative, cognition, and socialization." *The handbook of narrative analysis* (2015): 76-96.

stories they tell about themselves, highlighting the interplay between personal experiences and the broader cultural narratives.⁷ In the humanities, particularly in literary studies, narratives are analyzed for their thematic and structural elements. Literary theorists examine how narratives convey meanings, evoke emotions, and reflect societal contexts. This exploration extends to understanding the role of the narrator, the audience's engagement, and the cultural significance of storytelling forms and genres.⁸ Cognitive science has contributed significantly to understanding how the human brain processes narratives. Research in this field has shown that engaging with narratives activates multiple areas of the brain, not just those responsible for language processing but also those involved in empathy and emotional response. This suggests that narratives are a holistic experience for the human brain, engaging it at multiple levels.⁹ Natural sciences, particularly neuroscience, have explored how narratives affect brain activity and emotional responses. Neuroscientific studies using techniques like fMRI have revealed that when individuals engage with stories, their brain activity mirrors not only the language processing but also the actions, emotions, and sensations described in the narrative. This mirroring effect is a testament to the power of narratives in human cognition and empathy.¹⁰

⁷ Ricoeur, Paul. "The human experience of time and narrative." *Research in phenomenology* 9 (1979): 17-34.

⁸ Todorov, Tzvetan, and Arnold Weinstein. "Structural analysis of narrative." *NOVEL: A forum on fiction*. Vol. 3. No. 1. Duke university press, 1969.

⁹ Sanford, Anthony J., and Catherine Emmott. *Mind, brain and narrative*. Cambridge University Press, 2012.

¹⁰ Crawford, Frances, Julie Dickinson, and Sabina Leitmann. "Mirroring meaning making: Narrative ways of reflecting on practice for action." *Qualitative Social Work* 1.2 (2002): 170-190.

Understanding human narrative nature is crucial when studying narrative intelligence in AI for several reasons. First, it provides a benchmark for what narrative intelligence entails – not just the ability to generate coherent text but to create narratives that resonate on a human level, with emotional depth and cultural relevance. Second, insights from human narrative processing can inform the development of AI systems, particularly in designing algorithms that mimic human narrative comprehension and generation. Finally, understanding human narratives is essential for ensuring that AI systems interact with humans in ethically responsible and culturally sensitive ways, especially in applications like education, therapy, and entertainment where narrative understanding is key.

3. AI and narrative: computational narrative modeling

Since the inception of AI, narrative has been a focal point of research due to its fundamental role in human cognition, communication, and culture. For AI to truly mimic, augment, or interact with human intelligence, it must be able to comprehend, generate, and engage with narratives effectively. This involves not only processing language but also understanding context, emotions, and cultural nuances embedded in stories.¹¹

Early AI research on narrative has focused on developing story

¹¹ Gervás, Pablo, et al. "Narrative models: Narratology meets artificial intelligence." International Conference on Language Resources and Evaluation. Satellite Workshop: Toward Computational Models of Literary Analysis. LREC: Génova, 2006.

generation systems and studying story understanding models. In the realm of story creation, the first approach were centered around rule-based systems. These systems, which operated on predefined sets of rules and logic, were among the first attempts at automated storytelling. A notable example is the Tale-Spin system developed by James Meehan in the late 1970s.¹² Tale-Spin used AI to create simple stories by simulating characters with goals and emotions, and it could generate narratives based on the interactions of these characters within a defined set of rules. Another pioneering system in story generation was the Universe system, developed by Sheldon Klein in the 1970s.¹³ This system was designed to simulate a small community of characters over a period, creating narratives based on the interactions and life events of these characters. Universe was notable for its attempt to model complex character interactions and its use of a more sophisticated world model compared to earlier systems. Systems like MINSTREL, developed by Scott Turner, utilized problem-solving techniques to generate stories.¹⁴ MINSTREL was innovative in its approach to creative storytelling, as it attempted to simulate the problem-solving processes a human author might use. In the field of story understanding, research focused on developing AI systems that could interpret and analyze narratives. This involved not just processing the language of a story but understanding its plot, characters, and underlying themes. An

¹² Meehan, James R. "TALE-SPIN, An Interactive Program that Writes Stories." *Ijcai*. Vol. 77. 1977.

¹³ Klein, Sheldon, et al. *Automatic novel writing: A status report*. University of Wisconsin-Madison Department of Computer Sciences, 1973.

¹⁴ Turner, S 1993. *MINSTREL: a computer model of creativity and storytelling*. Dissertation, University of California at Los Angeles Los Angeles, CA, USA. 218

influential project in this area was the story understanding system developed by Roger Schank and his colleagues at Yale University in the 1980s.¹⁵¹⁶ Schank's approach was based on the concept of scripts, which were structured representations of stereotypical sequences of events in certain standard situations. By using these scripts, the AI system could interpret stories by matching narrative elements to its database of known scripts. Early AI studies on narrative took a variety of approaches. These studies had their own assumptions about what a story is and their own theoretical frameworks to build on. The studies described above can be summarized in a table as follows.

Table 1 | Categorization of the early AI studies on narrative

	Assumption about what a story	Theoretical framework
Rule-Based Systems (e.g., Tale-Spin)	A story could be constructed from a logical sequence of events, where characters pursue goals based on their desires and the constraints of their environment. It is defined as a sequence of events driven by character goals and actions within a rule-governed world.	A rule-based system that used a set of predefined rules to simulate characters and environments. It focuses on logical progression and causality in narratives.
Character-Driven Simulation (e.g., Universe)	A story naturally emerges from the dynamics of character relationships and events. A story as an emergent property of complex character interactions within a simulated environment.	It modeled a community of characters over time, generating narratives based on their interactions and life events.

¹⁵ Schank, Roger C. "Conceptual dependency: A theory of natural language understanding." *Cognitive psychology* 3.4 (1972): 552-631.

¹⁶ Schank, Roger C., and Robert P. Abelson. "Scripts, plans, and knowledge." *IJCAI*. Vol. 75. 1975.

Problem-Solving Models (e.g., MINSTREL)	Storytelling is a creative problem-solving activity, where the narrative is shaped by the author's responses to narrative challenges such as resolving conflicts and achieving a satisfying conclusion.	It simulated the creative process of a human author, using AI to overcome obstacles and conflicts in narrative creation.
Script-Based Story Understanding (e.g., Roger Schank's Work)	A story follows certain predictable patterns that can be encoded as scripts, a series of events that fit into recognizable patterns. Understanding a story meant identifying and interpreting these patterns.	The scripts were structured representations of stereotypical sequences of events. These scripts allowed the AI to interpret stories by matching narrative elements to its database.

The theoretical frameworks in this era were largely influenced by early AI research's focus on symbolic reasoning and logic. The aim was to replicate aspects of human intelligence and cognition in a computable form. In story understanding, the focus was on developing models that could parse and interpret narratives based on a structured understanding of language and events, as seen in Schank's work.

Intelligent agents, which appeared along with parallel processing computing in the 90s, bring about great changes in the study of story generation systems. An intelligent agent is a type of computer program, but it is not a mechanical model that produces a set result based on input values. Intelligent agents act autonomously according to surrounding changes in the computer environment and have their own decision-making structure to achieve their goals. It can imitate the behavior of other agents and has the ability to learn, changing its behavioral patterns and priorities. Even for programmers who design

intelligent agents, it is impossible to predict all spontaneous and unexpected behavior. Researchers in story generation systems are turning away from the task of creating an all-encompassing central processing unit and focusing on the creation of worlds composed of groups of intelligent agents, each pursuing a separate goal. Here, the story is not a system where everything is planned in advance, but a simulation of events that occur in unpredictable interactions between humans and intelligent agents, or between intelligent agents.¹⁷ Creating stories in this dynamic and flexible way is called interactive storytelling. Representative project like *Façade*, an interactive drama created by Michael Mateas and Andrew Stern, showcased how AI could be used to create a responsive narrative experience, blending techniques from AI, narrative theory, and game design.¹⁸

These studies led to the establishment as distinct research field called 'Computational Narrative Modeling (CNM)' in the 2000s. The term refers to the capability of computer systems to understand, generate, and interact with narratives or stories. This field intersects AI, computer science, linguistics, and narrative theory. It aims to create AI systems that can not only construct and understand stories but also potentially use them for communication, education, entertainment, and more. The field's emergence can be traced back to the broader exploration of AI's potential beyond strict logical reasoning and problem-solving, expanding into domains traditionally associated with human creativity and cognition, such as storytelling.¹⁹ By enabling machines to understand, generate,

¹⁷ Okada, Naoyuki, and Tsutomu Endo. "Story generation based on dynamics of the mind." *Computational Intelligence* 8.1 (1992): 123-160.

¹⁸ Mateas, Michael, and Andrew Stern. "Façade: An experiment in building a fully-realized interactive drama." *Game developers conference*. Vol. 2. 2003.

and interact with narratives, this field opens up possibilities for a wide range of applications, from more engaging and personalized entertainment systems to educational tools that can adapt storytelling techniques for effective learning. Moreover, it holds the potential for creating AI systems that can better understand human emotions, motivations, and cultural contexts, leading to more natural and effective human-computer interactions.

4. Large Language Models and narrative intelligence: artificial narrator

The advancement of narrative intelligence in AI models, particularly with the advent of advanced LLMs like ChatGPT-4, represents a significant leap from previous AI systems. This progression can be understood by comparing the frameworks, methodologies, and resulting capabilities of these models. Previous AI models for narrative generation and understanding often relied on rule-based systems, script-based approaches, or simpler machine learning techniques. Rule-based systems, like the early story generation programs, operated on a set of predefined rules and logic to create narratives. These systems were limited by the scope of their programmed rules, often resulting in stories that were logically coherent but lacked depth and creativity. Script-based systems, used for story understanding, worked on identifying and matching narrative elements to known patterns or scripts. While effective in

¹⁹ Riedl, Mark O. "Computational narrative intelligence: A human-centered goal for artificial intelligence." arXiv preprint arXiv:1602.06484 (2016).

recognizing common narrative structures, they struggled with stories that deviated from these predefined patterns.

In contrast, advanced LLMs employ a fundamentally different approach. They are based on deep learning architectures, particularly transformer models, which allow for the processing of large amounts of text data. These models are trained on vast and diverse datasets, encompassing a wide range of narrative styles, genres, and contexts. This training enables them to learn complex patterns of language use and narrative structure, far beyond the capabilities of rule-based or script-based systems.²⁰ Some people express concerns about AI, especially the language skills and narrative intelligence shown by LLMs. For example, Yuval Harari believes that humanity will be threatened by AI's ability to create its own stories. He says that the core of the human cognitive revolution was the ability to tell stories, that the operating system of human culture has always been language, and that now AI can handle this tool very well. Therefore, AI has become able to form an intimate relationship with us and become deeply involved in our minds, emotions, thoughts, and actions, and in this respect, Harari says that it is necessary to regard AI as a theological entity.²¹

At the moment, these worries and concerns seem to coexist with the opposite praise and expectations about LLMs. While these optimistic and pessimistic outlooks are important, this paper aims to focus on assessing the current state of narrative intelligence in LLMs and examining the possibilities and limitations from an intrinsic perspective. The current

²⁰ Yuan, Ann, et al. "Wordcraft: story writing with large language models." 27th International Conference on Intelligent User Interfaces. 2022.

²¹ <https://www.youtube.com/watch?v=LWiM-LuRe6w>

state-of-the-art LLMs exhibit a level of narrative intelligence that is unprecedented in the field of artificial intelligence, reflecting significant advancements in natural language processing and generation.

In terms of narrative generation, advanced LLMs can produce text that is not only coherent and grammatically correct but also contextually appropriate and stylistically varied. They are capable of crafting narratives that follow logical structures and can maintain thematic consistency to a considerable extent. This ability stems from their training on vast datasets of text, which provides them with a wide range of narrative styles and structures to draw from.²² However, while these models can mimic the surface features of narratives effectively, they often lack a deeper understanding of the subtleties and complexities that characterize truly engaging and emotionally resonant storytelling. Their 'creativity' is largely a result of algorithmic pattern recognition and combination, rather than genuine creative thought.²³ In terms of narrative understanding, advanced LLMs have shown a remarkable ability to parse and respond to narrative text. They can identify key elements of stories, such as characters, settings, and plot points, and can generate responses that are contextually relevant to the given narrative. However, their understanding is limited to the explicit content present in the text and the patterns they have learned during training. They lack the ability to truly comprehend narratives in the way humans do, with an understanding of

²² Simon, Nisha, and Christian Muise. "TattleTale: Storytelling with Planning and Large Language Models." ICAPS Workshop on Scheduling and Planning Applications. 2022.

²³ Franceschelli, Giorgio, and Mirco Musolesi. "On the creativity of large language models." arXiv preprint arXiv:2304.00008 (2023).

deeper themes, emotional nuances, and cultural contexts. One of the most significant advancements in these models is their ability to engage in interactive storytelling. They can respond to user inputs in a way that is coherent with the ongoing narrative, making them useful for applications like interactive fiction and role-playing games.²⁴ However, maintaining narrative coherence over extended interactions and more complex storylines remains a challenge.

With exhibiting advanced narrative intelligence of LLMs, several critical issues need consideration. Firstly, ethical concerns arise around the authenticity and originality of AI-generated content, including potential plagiarism and the erosion of human creativity. Secondly, there's the issue of bias and representation, as these models often reflect the biases inherent in their training data, which can perpetuate stereotypes and misinformation.²⁵ Thirdly, the impact of these AI systems on cultural narratives and storytelling traditions is significant, as they could lead to a homogenization of narratives and overshadow diverse, cultural storytelling practices. Additionally, there are concerns about privacy and data security, especially when these models interact with users in personalized settings. Finally, the potential for misuse of such technology in manipulating public opinion or creating deepfakes presents a serious challenge. Addressing these issues requires a

²⁴ Yong, Qing Ru, and Alex Mitchell. "From Playing the Story to Gaming the System: Repeat Experiences of a Large Language Model-Based Interactive Story." International Conference on Interactive Digital Storytelling. Cham: Springer Nature Switzerland, 2023.

²⁵ Taveekitworachai, Pittawat, et al. "What Is Waiting for Us at the End? Inherent Biases of Game Story Endings in Large Language Models." International Conference on Interactive Digital Storytelling. Cham: Springer Nature Switzerland, 2023.

multidisciplinary approach, involving not just technological solutions, but also ethical guidelines, regulatory frameworks, and public awareness and education.

5. The future of Homo narrans : philosophical challenges

AI with advanced narrative intelligence will bring about various changes and raise new issues. Research is needed to reduce the side effects of these changes and improve the positive effects, and the direction of the research should be holistic, ethically informed, and aimed at fostering a symbiotic relationship between AI and human narrative intelligence. In this chapter, I would like to conclude this paper by proposing three philosophical challenges for this research.

1) New narratology

The advent of AI with burgeoning narrative intelligence indeed necessitates a new approach to narratology, one that extends beyond the traditional human-centric view of narrative creation and comprehension. This new narratology needs to recognize AI not merely as a tool but as an active participant in the narrative process. It seeks to understand how AI's narrative capabilities compare to, intersect with, and diverge from human narrative processes, and what implications this has for the structure and nature of narratives. The following are topics that should be covered in the new narratology.

The first topic is AI as a entity in narrative activity. Traditional

narratology has primarily focused on human authors and audiences, analyzing how humans create, interpret, and engage with narratives. The new narratology expands this scope to include AI as a narrative entity, capable of both generating and interpreting stories. This shift acknowledges the growing role of AI in areas like automated storytelling, content creation, and interactive media.²⁶ The second topic is the redefining of narrative structures. AI's involvement in narrative creation challenges existing notions of narrative structure. AI-generated narratives may not adhere to traditional narrative arcs or character development models. This new narratology seeks to understand and theorize these emerging narrative forms, which are often the result of algorithmic processes rather than human creativity. The third topic is the redefining of narrative acceptance. Another key area of focus is how AI understands and interprets human narratives. Unlike humans, AI processes narratives based on data patterns and learned algorithms. This new field explores what this means for narrative comprehension and how AI's interpretation might differ from human interpretation.²⁷ The last topic is human-AI narrative interaction. As AI becomes more sophisticated in narrative intelligence, its interaction with human narratives becomes more complex. This includes collaborative storytelling where humans and AI co-create narratives, as well as AI's role in augmenting or influencing human storytelling. Methodologically, this new field should combine traditional narrative theory with computational approaches. It should

²⁶ Ogata, Takashi, and Jumpei Ono, eds. *Bridging the Gap Between AI, Cognitive Science, and Narratology with Narrative Generation*. IGI Global, 2020.

²⁷ Ogata, Takashi, and Taisuke Akimoto, eds. *Post-narratology through computational and cognitive approaches*. IGI Global, 2019.

employ theoretical frameworks and methods from both humanities and computer science to analyze narrative activity elaborately and richly.²⁸ And new narratology should examine the ethical and cultural implications of AI-generated narratives. This includes concerns about authenticity, bias, representation, and the impact of AI narratives on cultural and societal norms.

2) Narrative capitalism

The emergence of AI with sophisticated narrative intelligence indeed has significant implications for capitalism, particularly in how narratives are created, consumed, and monetized. There is a need to dialectically analyze the interactions and intersections between AI, narrative, and capitalism, and specifically the following topics must be considered.

The first topic is the monetization and control of narratives. AI's ability to generate compelling narratives can be harnessed by businesses to create highly engaging content tailored to specific audiences.²⁹ This capability extends beyond traditional advertising, encompassing storytelling in marketing, personalized content creation, and even automated news generation. The predictability and control offered by AI algorithms make narratives a powerful tool for capturing and retaining consumer attention, which is highly valuable in a capitalist economy. However, this raises concerns about the authenticity and ethical implications of AI-generated content, as well as the potential for these narratives to be used

²⁸ Ibid.

²⁹ Huberman, Jenny. "A single narrative will not do: Capitalism in the digital age." *Reviews in Anthropology* 50.3-4 (2021): 60-79.

manipulatively. The second topic is narrative-driven attention and expression economy. In the current attention economy, businesses strive to capture as much user attention as possible, often through sensational or engaging content. The advent of AI with narrative intelligence could deepen this by not only capturing attention but also influencing and shaping user expression and behavior.³⁰ AI systems capable of establishing intimate linguistic relationships with users could guide and manipulate user responses and interactions, potentially leading to more profound and sustained engagement. This shift could transform marketing and consumer engagement strategies, making them more interactive and personalized but also raising questions about user autonomy and the potential for subtle manipulation. The last topic is narrative imperialism. The dominance of large transnational technology companies, primarily based in the United States, in developing and deploying advanced AI systems could lead to a form of narrative imperialism.³¹ This scenario would see the global proliferation of narratives that reflect the values, ideologies, and interests of these dominant players, potentially at the expense of local, diverse, and indigenous narratives. Such a development could have far-reaching implications for cultural diversity and representation, echoing historical patterns of cultural imperialism.³²

³⁰ Baeza-Yates, Ricardo, and Usama M. Fayyad. "The Attention economy and the impact of artificial intelligence." *Perspectives on digital humanism* (2022): 123-134.

³¹ Kwet, Michael. "Digital colonialism: US empire and the new imperialism in the Global South." *Race & Class* 60.4 (2019): 3-26.

³² Ndlovu-Gatsheni, Sabelo J. "Metaphysical empire, linguicides and cultural imperialism." *English Academy Review* 35.2 (2018): 96-115.

3) New narrative ecosystem and evolution of Homo narrans

The emergence of AI with narrative intelligence heralds significant changes for Homo narrans. This shift is intertwined with discussions around strong artificial intelligence and post-humanism, challenging traditional notions of storytelling, creativity, and even the uniqueness of human intelligence. The traditional role of humans as the sole creators of complex narratives is being redefined. AI's ability to generate compelling stories challenges the notion that narrative creation is an exclusively human domain. This could lead to a collaborative storytelling landscape where humans and AI co-create narratives, blending human creativity with AI's computational power.³³ The way we consume narratives is evolving. AI-generated content, tailored to individual preferences and responsive to real-time feedback, could lead to more personalized and immersive narrative experiences. This shift might change our expectations and engagement with stories, potentially leading to a preference for AI-curated content due to its personalized nature. AI-generated narratives, by providing personalized stories and experiences, could influence individuals' self-perception and worldview, potentially leading to a more fluid and dynamic understanding of identity. At the same time, AI, driven by algorithms and data, might propagate narratives that lack cultural depth or authenticity, leading to a homogenization of stories and a dilution of diverse cultural narratives.³⁴

³³ Chu, Eric, et al. "AI in storytelling: Machines as cocreators." McKinsey & Company Media & Entertainment (2017).

³⁴ Augello, Agnese, et al. "A storytelling robot managing persuasive and ethical stances via act-r: an exploratory study." International Journal of Social Robotics

This shift raises a number of ethical questions about the authenticity, bias, and potential manipulation of narratives. There's a need for ethical frameworks to ensure that AI's involvement in storytelling respects cultural diversity and human dignity. This shift is also in line with post-humanist discussions that seek to move beyond anthropocentrism. The formation of narrative ecosystems involving non-human agents is not just a technological but deeply cultural and philosophical, prompting us to reconsider the essence of narrative and its role in shaping human identity and culture.³⁵ As we navigate this evolving landscape, it will be crucial to balance the benefits of AI-driven narratives with a commitment to preserving the diversity, authenticity, and human essence of narrative.

(2021): 1-17.

³⁵ da Silva, Marco Fraga, and Manuel Damásio. "Importance of storytelling and speculative fiction in the transition into a posthuman ecosystem." *International Journal of Film and Media Arts* 7.2 (2022): 74-97.

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초록

인공지능의 서사 지능 탐구 : 새로운 서사 생태계와 호모 나랜스의 진화

권 호 창

한국예술종합학교 영상이론과 강사

내러티브는 인간의 인지와 사회 문화의 기본이며 개인과 사회가 의미를 구성하고 경험을 공유하며 문화적, 도덕적 가치를 전달하는 주요 수단으로 사용된다. 인간의 사고와 행동을 모방하려는 인공지능 분야에서는 오랫동안 스토리 생성과 스토리 이해에 관해서 연구해 왔으며, 오늘날 대규모 언어 모델은 발전된 자연어 처리 기술을 바탕으로 괄목할 만한 서사적 능력을 보여주고 있다. 이런 상황은 다양한 변화와 새로운 문제를 제기하지만 이에 대한 포괄적인 논의를 찾아보기는 어렵다. 본 논문은 인간과 AI의 서사 지능의 교차점과 상호작용을 살펴봄으로써 현재의 상태와 미래의 변화에 대한 전체적인 조망을 제공하는 것을 목표로 한다. 먼저 호모 나랜스라는 용어로 대변되는 인간과 내러티브의 본질적 관계에 관한 다학제적 연구를 살펴보고, 인공지능 분야에서 내러티브에 관한 연구가 어떻게 이루어져 왔는지를 역사적으로 살펴본다. 그리고 오늘날 대규모 언어 모델이 보여주는 서사 지능의 가능성과 한계를 살펴보고, 서사 지능을 갖춘 AI가 갖는 함의를 파악하기 위한 세 가지 철학적 과제를 제시한다.

Keywords

호모 나랜스, 서사 지능, 대규모 언어 모델, 인간-인공지능 상호작용, 인공지능 스토리텔링



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