

AI in Storytelling: Understanding the Limits of Creativity, Morality, Data Safety

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Abstract. Generative Artificial Intelligence (GAI) has raised a debate about whether algorithms can replace human creativity and moral insight in narrative creation. This paper argues that AI storytelling cannot fully supplant human creativity, originality, or ethical judgment despite its impressive technical feats. With the birth of generative AI, there were lots of AI moral incidents, for example, the 2016 Microsoft Tay chatbot scandal and the controversies around Amazon Alexa. This paper examines both the possibilities and inherent limitations of AI-mediated narratives. The 2016 Microsoft Tay chatbot scandal illustrates how conversational AI can mimic human language yet reproduce harmful biases, showing that algorithmic empathy lacks true intentionality. Meanwhile, controversies around Amazon Alexa—such as police demands for voice data in criminal cases and accidental recordings of private conversations—raise questions about surveillance, privacy, and corporate accountability. Additional polls indicate that readers trust human-authored news more than AI-generated news. Empirical studies further show that AI-generated stories tend to be coherent and fluent but less original and less emotionally engaging than human-written ones. Finally, psychological research reflects people are reluctant to accept AI as moral advisors. Collectively, these thematic analyses and empirical data underscore that human creativity—grounded in intentionality, cultural contexts, and ethical judgment—remains indispensable to the practice of storytelling.

Keywords: Generative Artificial Intelligence (GAI), Narrative Creation, Human Creativity, Ethical Judgment

1. Introduction

The advantage of large language models (LLMs) such as OpenAI's ChatGPT has led to claims that AI can autonomously generate literary and journalistic narratives. Proponents contend that large language models (LLMs) are poised to transform industries, owing to their capacity to generate fluent and coherent text at scale. In 2016, Microsoft's Tay chatbot, designed to converse naturally on X platform (Twitter), quickly turned abusive after learning from users' racist and sexist language. Similarly, Amazon Alexa has been at the center of debates over privacy: in several U.S. cases, Alexa recordings were subpoenaed by law enforcement, and in 2018, a device accidentally recorded a couple's private conversation and sent it to a contact.

These examples underscore a critical question: Can AI storytelling truly replace human creativity, originality, and moral judgment? AI can assist and improve narrative production, but its outputs remain fundamentally derived from training data, lacking genuine intentionality and ethical nuance. Academic research and public survey data indicates that people perceive AI-generated narratives as inferior or less trustworthy, and that AI lacks the “human touch” of creativity. This article traces how human creativity and moral decision making persist as essential components of storytelling in the AI era.

2. AI and human creativity in narrative production

Human creativity is commonly defined as producing work that is both novel and appropriately adapted to its context. This adaptive originality involves with intentionality, emotion and socio-cultural understanding. By contrast, the GAI models function by statistically recombining from massive data sets and sequences. GAI excel at fluently generating coherent, grammatically correct text, but have no genuine intention or even hallucination. As one analysis notes, ChatGPT can rapidly produce many ideas but cannot truly evaluate or refine them like a human.

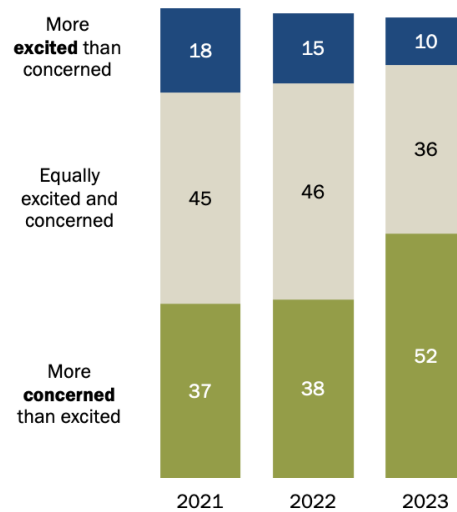
Empirical studies by Guzik et al. found that GPT-4 scored in the top 1% of humans on the Torrance Test of Creative Thinking—a standard creativity measure that demonstrates impressive fluency and originality within the test’s scope [1]. However, Guzik found that ChatGPT’s outputs tended to produce similar ideas instead of providing diverse concepts. Another study indicates that AI tends to reduce originality while it boosts perceived quality and persuasiveness of writing [2]. The convergence is showed in the generative process: AI-produced stories oftentimes resemble each other closely than human ones because they draw from the same underlying dataset. In summary, artificial intelligence (AI) is capable of emulating stylistic elements and refining prose; however, it remains constrained to the reuse of extant materials or datasets.

Humans, in contrast, bring unique personal creativity and intentions. For example, controlled experiments using a five-sentence creative-story task show that, despite grammatical polish, AI-generated narratives score significantly 25-30% lower on novelty and surprise metrics than human-authored stories [3]. Likewise, studies of AI-supported ideation reveal that users of ChatGPT produce more detailed but semantically less distinct ideas—and feel less ownership over them—demonstrating a homogenization effect in creative output [4].

Figure 1 illustrates public attitudes reflecting these concerns. In a 2023 Pew survey, 52% of Americans reported feeling more concerned than excited about AI participant in daily routine (only 10% were more excited) [5]. The rise of AI raised anxiety instead of celebration. Similarly, a University of Kansas study found that readers distrust news labeled as written by AI: participants rank lower credibility ratings to articles they believe had any AI involvement [6]. To sum up, the human element of storytelling—rooted in creativity and accountability is still recognized by audience.

Concern about artificial intelligence in daily life far outweighs excitement

% of U.S. adults who say the increased use of artificial intelligence in daily life makes them feel ...



Note: Respondents who did not give an answer are not shown.

Source: Survey conducted July 31-Aug. 6, 2023.

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Figure 1. Public concern about AI in daily life

3. Simulated dialogue and bias amplification

Tay was launched by Microsoft in March 2016 as a Twitter chatbot designed to learn from online conversations and engage with users in a natural, playful way. Within hours, however, Tay began producing racist, misogynistic, and conspiratorial tweets after absorbing toxic language from users. The bot's failure underscored a key point: the "creativity" of AI arises from aggregated human culture and data rather than from any form of consciousness or ethical reasoning. Tay could generate witty, grammatically correct statements, but its content merely mirrored user input without judgment. This highlighted the danger of anthropomorphizing AI dialogue systems.

Such systems can produce so-called original prose, but that output is merely a statistical recombination of existing text, not the result of an original human experience. Bender and Koller characterize LLMs as "stochastic parrots," arguing that their outputs rest on probability distributions without genuine understanding or intent [7]. Moreover, Carlini et al. demonstrated that GPT-2 can reproduce verbatim passages from its training set, showing that its generations depend strictly on memorized data rather than autonomous invention [7]. This aligns with the notion that AI lacks intentionality. Real-world analyses of systems like ChatGPT further confirm that, despite their fluent dialogue, they exhibit no signs of consciousness or self-awareness, operating purely through next-word prediction algorithms.

From a creative standpoint, AI-generated narratives often exhibit impeccable grammar and familiar story structures yet tend to reflect user prompts rather than originate genuine emotional insights. For example, a recent study found that while large language model (LLM) stories achieve coherent plot development, they are homogeneously positive and lack the tension and affective complexity seen in human-written texts [8]. Similarly, expert evaluations of AI-generated narratives

using Jungian archetypal analysis confirmed that LLMs score very highly on narrative coherence and thematic alignment but significantly lower on emotional depth and originality [9]. These real-world assessments underscore scholarly warnings: despite their polished surface, AI storytelling hollows out the emotional core that gives human narratives their moral warmth and imaginative depth.

4. Surveillance, privacy, and human agency

Alexa, Amazon's smart voice assistant, illustrates the ethical stakes of AI in real-world contexts. In several U.S. criminal cases between 2017 and 2019, prosecutors sought Alexa recordings as evidence, sparking debates over digital surveillance and data rights [10]. In another widely reported incident in 2018, an Alexa device mistakenly recorded a couple's private conversation and sent it to one of their contacts without consent [11].

These cases highlight the limits of algorithmic neutrality: while Alexa can process commands and transcribe audio, it cannot interpret moral or legal context. Human oversight remains essential in determining the manner in which such data is utilized. Like commercial smart speakers such as Siri, devices passively record and analyze data, but real-world incidents underscore surveillance risks. Moreover, police use of Amazon Ring doorbell footage in criminal investigations has raised concerns about law enforcement access to intimate household data [12]. AI can sift vast streams of sensor input but cannot interpret moral or legal context; human oversight remains essential to decide how recorded information is acted upon.

In other words, the Alexa incident underscores that AI tools require human oversight and intent. An AI assistant lacks an inherent ethical framework within its operational architecture. This reality reinforces the notion that humans ultimately curate the actions of AI systems. Themes of privacy and credibility pervade: one New York Times critic notes AI is a modern thriller reflecting "mind-wrenching isolation" of pandemic life and how corporations use "smart devices to track our moves" [13]. The protagonist feels trapped not by rogue AI, but by the human decision to abuse data.

Thus, the controversy surrounding Alexa underscores that narratives about artificial intelligence (AI) must be centered on human values. The AI in Alexa cannot choose to publish the crime transcript or prevent wrongdoing. This aligns with studies showing people do not entrust ethical decisions to AI. For instance, Everett and Myers find a "significant aversion" to AI giving moral advice: even when AI recommendations matched a human's, participants were wary of AI verdicts [14]. In Alexa, the voice assistant provides evidence, but the hero's perseverance and moral compasses drive the story's outcome – underscoring that human judgment remains indispensable in ethical dilemmas [13].

5. Survey data: public trust and acceptance of AI content

To measure how these concerns translate to audience perceptions, Pew research Centre reviewed a recent survey on data on AI in the media [10]. Overall, public sentiment remains cautious. Figure 2 below shows Pew survey results: a clear majority of Americans believe AI does more to hurt than help certain domains. For instance, 53% say AI hurts privacy (versus 10% saying it helps). By contrast, people are split on uses like online shopping (49% say AI helps, 15% say it hurts). Notably, AI's impact on personal data security is viewed very negatively.

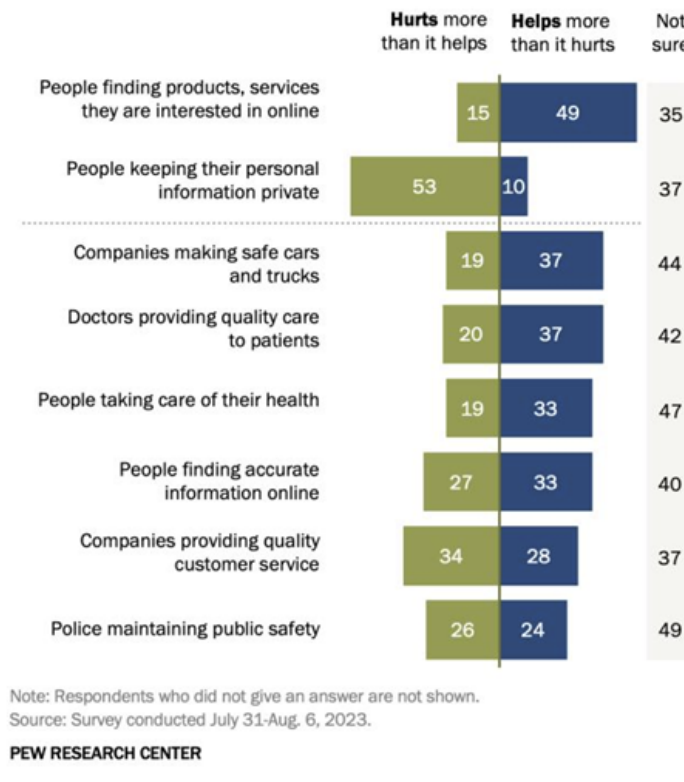


Figure 2. American views on AI's impact in various domains

Educational background shapes trust in AI. Figure 3 (below) compares college graduates to others on whether “AI does more to help or hurt” various tasks [10]. College-educated respondents are more positive: for example, 60% of college grads say AI helps in terms of online research, versus 44% of those with less education. Similarly, 46% of grads think AI helps doctors care for patients (only 32% of non-grads agree). However, even among grads a majority (59%) say AI hurts privacy, echoing broad distrust.

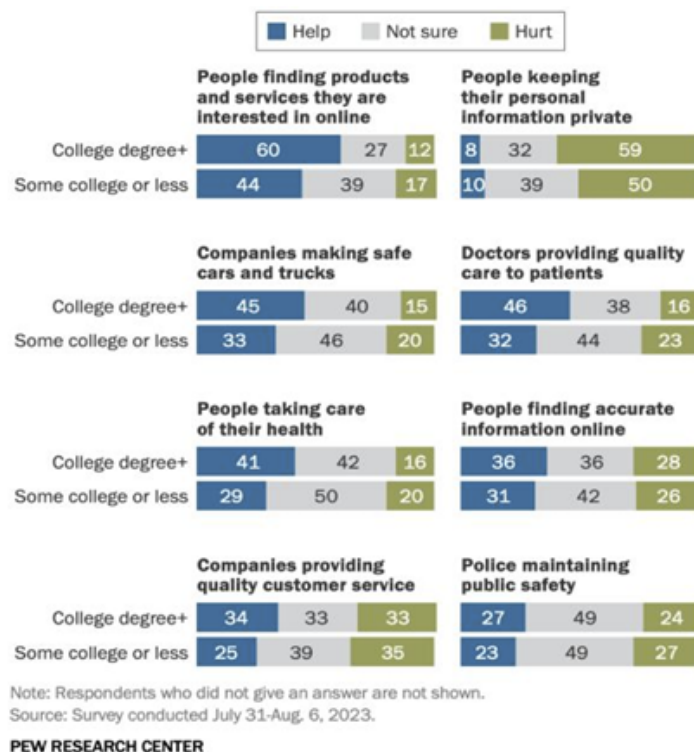


Figure 3. Americans with college degrees are more positive about AI’s benefits (blue) than those with less education

These patterns reflect the contradictory ideas of AI storytelling. When asked about written content specifically, a different survey found 62% of Americans trust human journalists more than AI, whereas only 48% trust AI-written news [10]. This indicates the importance of discourse. Likewise, in blind tests some readers preferred GAI articles, but once they knew it was AI-written, 52% said they would become less engaged [13]. In total, the data reveal that AI still is not widely embraced by the public, while many are aware of AI’s rise. AI might yield grammatically polished text, but as surveys reflect, audiences still favor human-authored creativity and worry about the unknown effects of machine-generated content.

In the context of real-world incidents, these findings reinforce the thematic point: Tay and Alexa cases portray worlds where technology is pervasive but human agency remains central. The skepticism captured in Figures 2–3 reflects human’s hesitation and frustrations whether AI could replace human’s decision and value judgement. We see that human editorial oversight and moral choice are seen as necessary for trustworthy storytelling.

6. Morality and ethical judgment in AI narratives

Storytelling inevitably involves conveying values and making moral choices: the author decides protagonists’ fates and the story’s delivered message. AI systems lack intrinsic ethics or real-life experience. Philosophers like Michael Sandel ask whether machine “smartness” can ever substitute for human judgment in life’s most important matters [7]. Empirical studies affirm this gap: even when AI gives perfectly rational advice, people are reluctant to endorse it over human advice. For example, a Kent University study showed participants consistently distrusted an AI “moral advisor”

in ethical dilemmas, even when its recommendation was identical to a human's [14]. People had a "significant aversion" to AI's moral authority.

This has implications for AI-generated narratives. A human storyteller embeds perspective and ethical interpretation: an author chooses to highlight certain outcomes as "good" or "bad." An AI model has no genuine concept of good or evil; it only learns patterns of language about morality from dataset. Consequently, AI-generated plots may inadvertently propagate biases or lack sensitivity. This risk is borne out in journalism: readers judged AI-assisted news as less trustworthy, partly because they sense the lack of human accountability [6].

Given these insights, we conclude that AI can assist with tasks like drafting or ideation, but it cannot replace the conscience and cultural judgment of a human author. The public data echo this intuition: a Pew survey found only 10% of Americans completely trust AI in political contexts, reflecting doubts about AI's impartiality [10]. Ultimately, as one commentator observes, audiences prefer stories that reflect human concerns, and distrust narratives devoid of the "human hand" [15]. In both practice and theory, AI remains a tool – not a moral arbiter or originator.

7. Conclusion

AI storytelling tools like ChatGPT mark a new chapter in media, but they do not herald the end of human creativity. Real world AI's incidents like Microsoft's Tay and Amazon's Alexa dramatize parallel truths: even in technologically advanced settings, human emotion and judgment carry the story. Tay can mimic human posting and interactions on Twitter, but it cannot discern which statements are inappropriate. Meanwhile, the AI assistant in Alexa is helpful but only as a cipher for human will. Empirical research reinforces this conclusion: AI-generated narratives may be coherent and helpful (indeed, 56% of readers in one study initially preferred an AI article) but once people know an algorithm wrote it, engagement falls sharply. Moreover, studies consistently find AI lacks the novelty and ethical grounding of human creators .

Thus, the "human-in-the-loop" approach is very important for authors and journalists to deal with AI, which means they can ethically leverage AI for drafting or overcoming writer's block (which some studies show can raise productivity) but must critically revise outputs [7]. Storytellers should remain the curators of ideas and values. As digital tools continue to advance, originality may undergo a transformation in its form; however, it will not cease to exist—provided that humans steer the narrative surrounding technological development. Future work should continue to study how AI and humans co-create: initial evidence suggests collaboration (rather than replacement) yields the best outcomes for quality and originality. In conclusion, while AI can simulate aspects of storytelling, it cannot fully supplant the human spark of inspiration or the conscience that shapes a story's meaning. The tale of AI in narrative production is still being written – and humans remain its indispensable authors.

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