

How successful is artificial intelligence as a playwright and dramaturg?

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ABSTRACT

The aim of this study is to examine the capabilities of artificial intelligence (AI) as both a playwright and a dramaturg by comparing AI-generated and human-written theatrical texts and dramaturgical interpretations. The study employs a qualitative research design using document analysis. Within the scope of the research, ChatGPT 5.1 generated a one-act play, *Tomorrow Is the Deadline*, which was analyzed dramaturgically by Dr. Amina Zhaman. In addition, Zhaman's play, *The Chaliapin O'Neill*, was analyzed by ChatGPT and DeepSeek using the same dramaturgical criteria. The data obtained were first analyzed in terms of the similarities and differences between the outputs provided by two different AI tools; subsequently, human- and AI-conducted dramaturgical analyses based on the same criteria were compared. The findings suggest that, although limited in scope, AI may be capable of functioning as a playwright and of producing dramaturgical analyses that were, in some respects, more detailed than the analysis produced by the human dramaturg in this study. While some shortcomings were identified in emotional and dramatic expression, the findings indicate that AI may serve as an effective dramaturg. Furthermore, the AI-generated play was not initially recognized as such by the human dramaturg and was evaluated as a human-written first draft, while the dramaturgical evaluation indicates that artificial intelligence may possess the capacity to succeed as a playwright. The study further suggests that human-AI collaboration could contribute to the development of higher-quality and more multidimensional productions in playwriting.

KEYWORDS: Artificial intelligence (AI); Dramaturgy; Playwright; Dramaturg; Theatre

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1. Introduction

Artificial intelligence (AI) has permeated every aspect of contemporary life and become an indispensable part of daily life. AI, widely used not only by Generation Z but by nearly every age group, has opened the doors to a new era by making its presence felt in numerous fields, ranging from art to academia, music to psychology, and digital game design to architecture. AI developed by humans saves time by providing quick access to information, thereby making individuals' lives easier in this respect.

AI, as a nonhuman entity, refers to the capacity of artificial systems to perform human-specific cognitive processes such as accessing, synthesizing, classifying, and evaluating information. Yüksel and Aşan Yüksel (2024) state that AI is capable of independent and original production and can offer

effective solutions. In this respect, the importance of AI in art is emphasized, and it is noted that by subverting traditional notions of art, it demonstrates a unique creativity in innovative creation and production processes (Yüksel and Aşan Yüksel 2024).

AI actively manifests itself in the creation of works of art, including the creation of paintings and sculptures, the composition of new musical pieces, and the creation of original performances. Furthermore, it is used in the analysis and criticism of works of art, enabling the examination of works according to structural, emotional, and other evaluative criteria (Yüksel and Aşan Yüksel 2024). The capacity of AI to perform certain information-processing tasks effectively and rapidly calls for a reassessment of its current role in art and suggests that collaboration between AI and humans may contribute to the evolution of artistic production. Yıldırım (2024) describes this process as a new and innovative era in which the relationship between art and machines and humans is undergoing a fundamental transformation. Furthermore, as Baboolall and Arora (2025) note, AI is not intended to replace or diminish human intelligence; rather, it functions as an assistive technology that contributes to production processes by offering a broad spectrum of creative possibilities. Among these auxiliary functions, emphasis is placed on fostering innovation in the creation and perception of art, as well as ensuring both ethical and effective collaboration regarding authorship, originality, and creativity. Chatterjee (2022, p. 8) has stated that this collaboration between humans and AI challenges the belief that humans are the sole and indispensable subjects in art, suggesting that AI with aesthetic sensitivity may prompt a reconsideration of the nature of art. Within theatre, these capacities can be considered through two functional roles: AI as a generator of dramatic texts, corresponding to playwriting, and AI as an interpreter of their structural, thematic, and performative dimensions, corresponding to dramaturgical analysis. This distinction provides the conceptual basis for examining whether generative AI can perform functions traditionally associated with playwrights and dramaturgs.

AI has begun to be used in the writing and production of plays, just as in many other areas of art. According to Azunwo (2013), a play is a literary work of art designed to convey emotions, ideas, experiences, and the like to an audience and to receive feedback from them. Writing and analyzing a play is a complex process that requires expertise. This writing process, carried out by humans, involves specific stages. Norden (2007) discusses the stages involved in playwriting, including constructing a compelling story, creating characters with distinct objectives within that story, establishing a solid dramatic structure, accurately capturing the rhythm of conflict, tension, and resolution, and organizing the dialogue in a way that flows naturally by selecting lines consistent with the characters' personalities. A playwright is the creator of a play who is responsible for developing and crafting a structured story as a written text to be performed on stage (Azunwo, 2013). Throughout this creative process, the playwright is responsible for crafting the play's dialogue, characters, and plot within a coherent thematic and contextual framework. The writing process, initiated by the playwright, is followed by the dramaturgy process, which involves evaluating the theatrical text in terms of its suitability for the stage, structural integrity, and its contextual consistency.

Dramaturgy is a field that examines a play from multiple perspectives; supports the play's development to ensure a better understanding of it and conducts contextual and formal analyses to improve the staging process (Azunwo, 2013). Dramaturgy concerns the comprehensive examination of a play from start to finish; encompassing a process in which every stage, from the text to the actors' characters, from the harmony of characters with one another and with the play to stage lighting and set design, from how the text and context reach the audience to the analysis of selected words and sentences, is examined and evaluated step by step in detail. Cardullo (2004) defines dramaturgy as

the ability to take on multiple roles simultaneously; he notes that a person can serve as both a playwright and a director while also functioning as a dramaturg who examines these two fields. Dramaturgy encompasses multiple categories, including lighting, staging, set design, acting, and style. In other words, it is everything (Poushpom, 2016). Poushpom (2016) articulates this through the concept of "mediation" due to its function of mediating between the stage and the audience, the play and the director, and the text and the performance, and defines dramaturgy as follows: "A dramaturge is a literary and artistic entity that acts as a mediator and or translator within a theatre or theatre company, assisting in the editing and sculpting process of a performance or text". In this context, it can be stated that dramaturgy focuses on numerous questions such as: "How was the theatrical text created?", "What theatrical tools were used?", "How was the audience affected by this performance?", "How was the performance related to the outside world?" and so on (Groot Nibbelink & Merx, 2021, p. 7).

A dramaturg conducts dramaturgical analysis and evaluation by examining a theatrical work comprehensively from multiple perspectives. In other words, a dramaturg can be described as someone who analyzes the stage design, lighting, and sound design; evaluates the coherence of the message intended for the audience; critiques the play from a director's perspective in terms of its structure and context; and examines the playtext within historical, period-specific, cultural, and linguistic contexts, assessing it from various angles. The dramaturg analyzes the dramatic structure and all its constituent elements to make them meaningful throughout the dramaturgical analysis of a play's text. In this process of interpretation, the dramaturg should pay attention to the consistency of various elements such as the play's relevance to its context, the harmony between the acting style and the text, and the relationship between the set design and the play, and ensure harmony within the dramatic structure (Poushpom, 2016). These characteristics demonstrate that dramaturgy is not merely a technical evaluation process but also a multidimensional interpretative practice. This complexity raises the question of whether such interpretative responsibilities can also be undertaken by artificial intelligence.

By collaborating with the dramaturg, director, and actors, and by examining and critiquing the theatre production from various perspectives, the dramaturg contributes to developing the production's vision. Additionally, the dramaturg adapts it to the current conditions by translating the playtext written in a different language. A dramaturg examines the script's alignment with the historical period and the author's ideology; to properly analyze the playtext, they also research the author's life, writings, the era in which they lived, and their culture (Azunwo, 2013). Azunwo defines the dramaturg as a "walking library" who examines the work contextually and historically.

There are certain general criteria to be considered in the dramaturgical analysis of a theatrical playtext. According to Azunwo (2023), these criteria include the holistic structure of the text, the depth of meaning in the theme, the developmental processes of the characters, the way conflict supports the dramatic meaning, and the linguistic style of expression. In the dramaturgical analysis of a play, it is examined from a developmental perspective from beginning to end; the playwright's unique writing style is evaluated, and the author's overall style is analyzed. All characters are examined in detail in terms of their backgrounds, linguistic accents, and speaking styles. If the play incorporates musical or auditory elements, these are also analyzed, and the element of conflict within the play is evaluated holistically.

The process of dramaturgical analysis, which can be described as a multifaceted process, has taken on a new dimension with today's technological advancements; considering the advanced functions of artificial intelligence and its position in art, whether AI could assume a role such as that of a

playwright or dramaturg has become a subject of debate. Today, artists also utilize AI in the processes of writing, producing, applying, criticizing, and evaluating works of art. The recent success of AI in producing remarkably effective and creative works necessitates, perhaps, a reconsideration of its role in the field of art, rather than its outright rejection. As a concrete example supporting this view, Ivanova (2025, p. 9) emphasizes that artificial intelligence's production in the field of art can yield formally and technically creative works, and that these works can be more innovative than traditional ones. In another research, AI has been assessed as a tool that enriches the creative process instead of replacing traditional art, and it has been stated that AI-supported art tools increase the possibilities for rapid idea generation and working with different sources by enabling detailed and creative experimentation (BS et al., 2025, p. 236). In the study titled "Designing Characters with AI: An Art and AI Learning Activity," in which characters and visuals were generated through interaction with artificial intelligence, it was emphasized that AI was found to be highly successful and innovative in terms of features such as character creation, providing personalized feedback, and story construction (Ali et al., 2025). Kaur and colleagues (2025, p. 385) noted that through AI tools, many people can produce art by using computers effectively.

In addition to supporting the production of art, AI also plays a role in evaluating and analyzing art. Lorusso, Colizzi, and Adamo (2023, p. 45) state that AI-based algorithms can assist researchers in analyzing works of art, thereby reducing human error, and can also be used in the historical, stylistic, contextual, and technical analysis of artworks, as well as in visual examinations. Considering these diverse roles and functions of AI in art, it seems plausible that AI could also effectively fulfill the role of a dramaturg in the dramaturgical analysis of playwriting, theatrical texts, and staging processes.

In this context, various studies have been conducted on the functionality of AI. The study by Kang and Lee (2025) aimed to enable actors to achieve greater creativity and spontaneity in improvisation and stage work, as well as to enhance actors' flexibility through AI-generated content, and demonstrated how artificial intelligence can support creative processes in the fields of theatre and acting. In another study, a system (CO-OPERA) was developed to demonstrate the effective and pedagogically appropriate use of AI to support drama and playwriting in educational settings (Ma et al., 2025). Ivanova (2025) examined the questions of whether AI-generated art truly constitutes art and how ethical objections to it might be evaluated. In a study conducted by Zeynalov (2025), the relationship between AI and theatre was examined, particularly in light of AR and VR technologies, with an emphasis on how the perception of reality is reshaped, in an effort to understand the potential of this field.

Based on the literature reviewed for this study, no research was identified that compares AI and humans in the context of both playwriting and dramaturgy, examining AI's capacity to both produce a play and analyze a play written by a human as a dramaturg. Addressing this gap is important because understanding AI's potential not only as a creative writing tool but also as an interpretative dramaturg contributes to current discussions on human-AI collaboration in theatre. Accordingly, this study examines, through selected theatrical texts, AI's capacity both to generate a play and to analyze a human-written play from a dramaturgical perspective. More specifically, it compares the dramaturgical evaluation of an AI-generated play by a human dramaturg with the analyses of a human-written play conducted by two AI systems using the same dramaturgical criteria.

2. Method

2.1. Design

This study employs a qualitative research design using comparative document analysis. Document analysis was selected because the primary data comprise written theatrical texts and written dramaturgical evaluations that require systematic examination and interpretation (Bowen, 2009). The data consist of one AI-generated play, one human-written play, and the written dramaturgical evaluations produced by one human dramaturg and two AI systems using the same criteria. Different generative AI systems may produce varying interpretations even when responding to the same text and analytical criteria; therefore, including ChatGPT and DeepSeek enabled an examination of whether the observed patterns were model-specific or shared across the two systems.

2.2. Documents

The documents of the study consist of two one-act plays. The first of these plays is human-written, titled *The Chaliapin O'Neill*, written by Dr. Amina Zhaman. The other is a play titled *Tomorrow is the Deadline!*, generated by AI (ChatGPT 5.1). These plays were included because their shared one-act comedy format enabled them to be examined using the same predetermined dramaturgical criteria.

The Chaliapin O'Neill is a one-act comedy inspired by a real historical event. The play, which runs for approximately one and a half hours, features dialogues and fictional scenes involving the main characters: American playwright Eugene O'Neill, Russian opera star Feodor Chaliapin, Chaliapin's wife Maria Petsold, and O'Neill's lover Carlotta Monterey. The plot revolves around O'Neill's desire to cast Chaliapin in the lead role of his play *Lazarus Laughed*, but the collaboration never materialized due to issues regarding fees, language, and artistic concerns. Set against the context of the 1920s art world, the play explores the unrealized dream of these two great artists with both humor and melancholy. The play concludes with O'Neill making peace with the ghost of Chaliapin, who appears in his imagination after Chaliapin's death; the two artists meet in spirit, sharing laughter, thereby emphasizing the immortality of art and the power of imagination.

Tomorrow is the Deadline! is a one-act comedy. The play's main characters include Emily, an idealistic playwright and graduate student; Daniel, the practical and efficient director of a cultural center; Olivia, a janitor and secret actress; James, an influencer-actor; and Sophia, a rule-bound municipal inspector. The play tells the story of a municipal cultural center in a medium-sized city in Anatolia that is required to stage "a quality play reflecting local culture" within a single day. In other words, it humorously portrays the effort to write and stage a play overnight, just before an inspector's audit scheduled for the following day. The play's contextual framework is built upon the bureaucratic and financial challenges faced by contemporary art institutions, the influence of social media, and the conflict between amateur spirit and professional concerns. While the characters strive to put on the play, they also reveal their personal goals and anxieties. Despite the mishaps on premier night, the cultural center avoids the threat of closure thanks to the genuine connection formed with the audience, and the play concludes by highlighting the unifying and transformative power of art.

2.3. Procedure

In the first phase of the research, the AI was first asked to write a play. For the writing of this play, ChatGPT version 5.1, one of the AI tools, was utilized, and the AI was asked to write a one-act comedy play based on its own creativity and originality, without drawing inspiration from any external sources. The aim of this phase was to examine the AI's capabilities in writing a play.

In the second phase, Dr. Amina Zhaman analyzed the AI-generated play, while ChatGPT and DeepSeek analyzed the human-written play using the same seven dramaturgical criteria. The researchers then compared these dramaturgical evaluations to identify similarities and differences between the human and AI-generated analyses.

The human dramaturgical analysis was conducted by Dr. Amina Zhaman, a playwright, stage director, and dramaturg with professional expertise in American theatre and theatrical text analysis. She was selected on the basis of this expertise. The nonhuman dramaturgical analysis of the research was conducted using ChatGPT and DeepSeek. Prior to the evaluation process, Zhaman was not informed that the play submitted for her evaluation was written by AI. This nondisclosure was intended to prevent prior knowledge of AI authorship from influencing her dramaturgical evaluation; it was not designed as a formal blinded authorship test. Once the evaluation process was completed, this information was shared with her in accordance with ethical principles, and her opinions were also obtained regarding the AI's playwright qualities, the stagability of the generated play, and its overall assessment.

In the dramaturgical evaluation of the plays included in this study, the following criteria, developed by Dr. Zhaman, a dramaturg, playwright, and expert in play analysis, were used.

1. Analyze the plot of the play and its development from the beginning until the end.
2. Find out more about the playwright's original style of writing.
3. Analyze all play's heroes and their backgrounds. If some heroes have real prototypes, find them. If the play is about famous people and they are presented under their own names, then research their lives and art in the exact period of the story.
4. Analyze characters' speech (accents, slangs).
5. Underline their actions.
6. Find the main conflict of the play.
7. Learn more about the play's soundtrack, if the playwright mentions exact songs, spirituals, opera arias etc.

3. Findings

The findings were examined at three comparative levels: the AI-generated and human-written plays, the human and AI dramaturgical analyses, and the dramaturgical analyses produced by ChatGPT and DeepSeek. Table 1 first presents the comparison between the human and AI dramaturgical analyses.

Table 1 Comparison of AI and human dramaturgical analysis approaches

Dramaturgical criterion	Human analysis	Nonhuman (AI) analysis
Analysis of the Plot and Its Development	Views the plot as engaging yet underdeveloped, with prematurely resolved conflict reducing dramatic intrigue.	Describes a thematically structured, non-linear development with a clearly articulated dramatic arc.
Playwright's Original Style of Writing	Highlights strong character goal clarity while noting limited dialogic depth and cultural specificity.	Characterises the style through structural hybridity, intertextual layering and balanced tonal modulation.
Character Analysis and Real Prototypes	Emphasizes creative development, character contrast and performative expansion of dramatic interaction.	Focuses on biographical fidelity and historically grounded the representations of real figures.

Dramaturgical criterion	Human analysis	Nonhuman (AI) analysis
Analysis of Characters' Speech	Identifies lacks of intrigue and realistic dialogues between the characters.	Differentiates speech through tone, stylistic register and rhetorical patterns.
Underlining Characters' Actions	Highlights performative self-presentation and limited dramatic interaction and focuses on words more than actions.	Frames actions through objective goals and narrative functions.
The Main Conflict of the Play	Frames the conflict as a potential administration-artist tension that is resolved before unfolding.	Defines the central conflict as a multi-layered clash between artistic idealism and practical reality.
Analysis of the Play's Soundtrack	Emphasizes that explicit soundtrack details support staging and performance atmosphere.	Identifies music as an integrated motif shaping emotional states and thematic transitions.

When the findings presented in Table 1 are evaluated separately in terms of dramaturgical analysis criteria:

Regarding the criterion of “Analysis of the Plot and Its Development” in the human analysis, it was emphasized that the play’s plot was more of a rough draft in terms of plot structure and development, and criticized the play for needing a conclusion. In the AI analysis, a more analytical and descriptive evaluation was made by describing the existing structure.

Regarding the criterion of “Playwright’s Original Style of Writing” in the human analysis, the text was described as “passive” and conveyed a more metaphorical message through the use of the “sleeping” metaphor. Additionally, a comparative and metaphorical analysis was presented by likening the AI’s playwriting style to that of Tennessee Williams. In the AI analysis, however, terms such as “meta-theatre” were selected to provide a more terminological and categorical evaluation.

Regarding the criterion of "Character Analysis and Real Prototypes" in the human analysis, a potential-focused evaluation was conducted that identified shortcomings in the characters and suggested ways to improve them.

Regarding the criterion of "Analysis of Characters' Speech" in the human analysis, emphasis was placed on the spatial context, and the disconnection within this context was noted. In the human analysis, it was emphasized that the most impressive part of AI's playwriting process was the bridge it established with the characters, scenes, and character conflicts, describing it as a "playwright's laboratory".

Regarding the criterion of “Underlining Characters’ Actions” in the human analysis, the lack of realistic dialogue and plot development was noted, along with a lack of interaction between characters; the characters’ acting style was described using Andy Warhol’s phrase “15 Minutes of Fame.” In other words, the review criticized the characters for rushing to the climax. In the AI analysis, a more objective and automated evaluation was conducted and historical accuracy and function of the characters were focused on. Additionally, a functional linguistic analysis was performed, examining linguistic features such as practicality and irony.

Regarding the criterion of "The Main Conflict of the Play” in the human analysis, the focus was primarily on shortcomings, noting the lack of a genuine struggle and the fact that the issue was resolved before it even began. In the AI review, however, the conflict was analyzed in greater detail within a theoretical framework and across different levels.

Regarding the criterion of “Analysis of the Play's Soundtrack” in human analysis, the author’s qualities were praised, and a comparative analysis was provided, noting that the soundtrack selection was strong. In the AI analysis, however, the music’s dramaturgical function and its impact on the characters were addressed functionally.

In a nonhuman dramaturgical analysis of a play written by a human, it was observed that the analyses conducted by AI tools (ChatGPT and DeepSeek) generally yielded similar results, although some differences were noted on certain points. Both AI tools examined the play from a meta-theatrical perspective and found the play structurally strong, adhering to the prototypes of the characters. In addition, it was observed that while DeepSeek focused more on thematic structure and emotional transformation in its structural analysis of the play, ChatGPT adopted a traditional, scene-based analytical approach by focusing on structural clarity and practicality. While DeepSeek described the plot by supporting it with more specific examples, ChatGPT evaluated it from a more general and dramatic framework. In terms of style and language, it was observed that DeepSeek adopted a more poetic approach, whereas ChatGPT handled the academic and everyday language structures in a more rhythmic manner. It has been determined that while DeepSeek places greater emphasis on the psychological dimensions of the characters, ChatGPT more prominently highlights their historical and dramatic aspects. Despite these differences in detail, it has been observed that both AI tools generally produce similar dramaturgical results and offer comprehensive reports by analyzing all criteria of the play in detail.

This research reveals various similarities and differences between plays written by humans and AI. The findings suggest that AI demonstrates strengths in analytical and structural aspects of playwriting, while it may remain limited in conveying emotional depth and traditional dramaturgical qualities. The evaluation of Zhaman, a dramaturg with whom collaborated within the scope of the study, reveals that AI performs adequately in information processing and analytical structure building; however, it requires human contribution in terms of conveying emotion, feeling, and tradition. This parallelism further supports the findings from a dramaturgical perspective.

The play written by the human has been determined to possess a multi-layered, detailed, poetic, and intellectual structure. The human is highly successful in conveying the lived culture and its linguistic and social life into the play. Beyond straightforward and analytical playwriting, the human is far more effective in the use of language and context for the transmission of emotion and meaning. However, from the perspective of playwriting, it has been observed that AI falls relatively short in the emotional dimension characteristic of the human touch. It has been concluded that human playwrights significantly excel in terms of character dynamics, the chain of conflict, and detailed plot construction. Dramaturgical evaluations have revealed that the closing scene of the play written by a human is more impactful and striking. Based on these assessments, it is evident that human playwrights demonstrate clear advantages in terms of emotional depth, experience-based intuition, and the ability to construct multi-layered dramatic structures. On the other hand, although AI's capacity for structural production and text generation is strong, it appears unable to fully achieve the contextual and experiential integrity provided by human playwriting.

Despite these shortcomings, Dr. Zhaman evaluated AI as a playwright based on its similarities to some significant figures. This finding may be interpreted as suggesting that, although AI still requires human collaboration, it demonstrates the potential to contribute to playwriting.

In this study, Dr. Zhaman was not initially informed that the play had been written by an AI. Upon learning this information, she stated that she had assumed the play had been written by a human and had not harbored any suspicion. However, she also noted that she considered the play was to be a

first draft written by a talented playwright, which would be developed by gaining further depth. In this concern, the fact that a play written by AI was perceived as if it was written by a human and did not arouse any suspicion may indicate AI's potential to function as a playwright under certain conditions.

With regard to another objective of the study, the comparison of dramaturgical analyses conducted by humans and AI, it was observed that the same criteria were sometimes approached from different perspectives. In the human evaluations, a more subjective and constructive approach was exhibited, based on a critical perspective, including suggestions for development, and centering on the creative process. In contrast, it was determined that in the AI evaluations, the play was addressed by being categorized in line with theoretical and analytical frameworks; a more descriptive and objective evaluation was presented. The research concluded that while both human and AI evaluations conducted by dramaturgs were effective and of high quality, the AI evaluation was more detailed and analysis-based. It was observed that human dramaturgy focused more specifically on conveying emotions, while AI dramaturgy adopted a more realistic approach. Although the AI analysis was more detailed and comprehensive, it can be said that both types of analysis are of acceptable quality from a dramaturgical perspective. It was observed that AI produce a more superficial structure in playwriting, while humans adopted a more emotional, detailed, and compelling narrative; that AI, as a dramaturg, demonstrated a more meticulous and analytical approach, whereas the human dramaturg conducted a more superficial evaluation, yet one based on the transmission of emotion to the audience and real-life examples.

4. Discussion

The findings obtained within the scope of this study align to a certain extent with the discussions in the literature regarding the functionality of AI in playwriting and dramaturgical analysis processes. There are studies in the literature that question the use and capability of AI in the field of art. In the study conducted by Lorusso, Colizzi, and Adamo (2023), it was stated that while AI is not positioned as superior to human judgment and expertise, it can be considered an enabling force that enhances and complements human performance and capabilities, working in harmony with human abilities and even outperforming them in certain areas. This situation partially supports the results of this research. In this study, the AI-generated dramaturgical analyses were more detailed than the human analysis in several evaluation criteria; however, the findings also indicated that creative decision-making and contextual interpretation continued to depend on human expertise, while the human-written play demonstrated greater emotional, cultural, and dramatic depth. On the other hand, Ivanova's (2025) study emphasized that although there are some limitations in artworks produced by AI, they prompt the audience to think. In the current study, although the AI-generated play had certain limitations, its functionality at the analytical and structural levels suggests that these shortcomings could potentially be addressed through human–nonhuman collaboration.

Similarly, Kang and Lee (2025) reached the conclusion that, despite certain shortcomings and limitations, AI-assisted tools are capable of generating creative and unique scenarios more successfully than those written by humans. Their findings parallel the broader conclusion of the current study that AI can contribute to creative theatrical processes, although their research does not directly address dramaturgical analysis. However, the emotional and cultural limitations of artificial intelligence in playwriting differentiate the finding of this study. In their approach to fine arts education, BS et al. (2025) emphasized that integrating AI into art does not imply that it will replace humans; rather, it should be seen as a tool that assists humans, provides new avenues for critical analysis, and supports rapid idea generation. This perspective appears similar to the collaboration with AI in this study. The limitations observed in cultural depth, emotional transmission, and

contextual adaptation, together with the continuing importance of human contribution, are consistent with Ali et al.'s (2025) finding that AI-based character design requires cultural and linguistic adaptation. This finding can also be related to the assessment made by Zeynalov (2025) in his study on how the digital transformation in theatre, through the integration of AR and VR technologies, might affect the perception of reality, emphasizing that it opens up new areas of ethical and cultural debate.

4.1. Limitations

The findings of this study should be interpreted within the limitations of its research design. Since the study is based on two play texts, a single human evaluator, and specific AI systems, the findings should be regarded as exploratory rather than generalizable. The initial nondisclosure of the AI-generated play's source was not designed as a formal blind authorship test; therefore, the dramaturg's initial perception of the text was treated as a contextual qualitative observation. Furthermore, although the model was instructed not to draw inspiration from existing works, its training data and possible prior exposure to similar dramatic structures could not be controlled.

4.2. Implications and Recommendations

It is believed that future examines various types of play texts, staging processes, and performance practices using different AI tools, and conducts diverse analyses within the framework of various dramaturgical evaluation criteria, will contribute to a more comprehensive understanding of AI's role in the field of theatre. Future research may also examine the ethical, cultural, and labour-related implications of integrating AI into playwriting and dramaturgical practice, thereby contributing to a more balanced understanding of human-AI collaboration in theatre.

5. Conclusion

The findings indicate that AI can perform more detailed dramaturgical analyses than humans, whereas humans remain more successful in playwriting, particularly in creative decision-making and contextual interpretation. What distinguishes this study from others is that it examines AI's ability to write plays and conduct dramaturgical analysis by comparing its performance with that of humans. Although it is merely a comparative analysis based on two play scripts and an evaluator, it would not be inaccurate to suggest that it may open new doors for inquiries into AI's capabilities in the fields of art.

Although this research raises questions about how AI, as a playwright, might shape emotional and cultural perception, it also highlights the supportive role AI can play by producing rapid and structured analytical outputs. This situation indicates that developing new working models based on human-AI collaboration in theatrical production could be beneficial. At the same time, these findings should not be interpreted as suggesting that AI can replace the creative, cultural, or ethical responsibilities of playwrights and dramaturgs. Rather, they indicate that AI may function as a complementary tool whose outputs continue to require human interpretation, contextual judgment, and artistic responsibility.

6. Declarations

6.1. Conflict of interest

The authors declare that there is no conflict of interest to disclose.

6.2. Funding

The authors declare that the study received no external funding.

6.3. Author contributions (CRediT)

Müberra Buran: Conceptualization; Methodology; Validation; Formal analysis; Investigation; Resources; Data curation; Writing—original draft; Writing—review & editing; Project administration

Ömay Çokluk Bökeoğlu: Conceptualization; Methodology; Validation; Writing—review & editing; Supervision; Project administration

Şebnem Özdilek: Validation; Resources; Writing—review & editing; Project administration

All authors reviewed the results and approved the final version of the manuscript.

6.4. Data availability statement

Data are available from the corresponding author upon reasonable request.

6.5. Ethics approval

The authors declare that this study did not require ethics committee approval. The research was conducted in full accordance with applicable ethical standards and principles. Formal approval was not required, as the study involved only document analysis and no personal data collection.

6.6. Use of artificial intelligence (AI) tools

Generative AI tools, including ChatGPT and DeepSeek, were used as part of the research design for the generation and dramaturgical analysis of theatrical texts, as described in the Method section.

6.7. Acknowledgements

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