

AN ANALYSIS OF SIX ENGLISH TEXTS GENERATED BY ARTIFICIAL INTELLIGENCE (CHATGPT)

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ABSTRACT

This study aims to analyze the accuracy of generic structures and linguistic features of six English texts generated by ChatGPT, namely descriptive, narrative, recount, procedure, report, and explanation texts. This research employed a descriptive qualitative approach with the researcher as the main instrument. Data were collected through documentation by asking ChatGPT to generate one text for each of the six text types. The analysis was conducted by matching the generic structure and linguistic features of each text against standard genre theory. The findings indicate that the accuracy level of the generic structures in all six texts is very high. However, some errors were found in the linguistic features: the descriptive text contained inappropriate use of the Continuous Tense, and the procedure text contained the use of Future Tense in several sentences. Overall, the six texts generated by ChatGPT demonstrate excellent accuracy in generic structure but still require improvement in certain linguistic aspects. The limitation of this study is that it is confined to six text types and does not examine variations in prompts or different versions of ChatGPT. The implications of these findings can provide input for ChatGPT users, particularly students and educators, to be more critical in using AI-generated texts and to recognize the need for editing in linguistic aspects. The originality of this study lies in its contribution to evaluating the quality of academic texts generated by ChatGPT based on English genre conventions.

KEYWORDS ChatGPT, artificial intelligence, English texts, generic structure, linguistic features

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1. INTRODUCTION

Language is an important means of communication in daily life. English has now become an international language widely used in various global aspects, including business, trade, travel, and communication (Richards & Schmidt, 2002). Cook (2008) states that learning English has become an absolute necessity in today's globalized world.

In learning English, there are four basic skills that must be mastered: listening, reading, speaking, and writing. Among these four skills, writing is considered the most difficult to master because it requires mastery of various aspects such as grammar, vocabulary, and sentence structure (Lailatul Husna, 2017). Writing skills enable students to express ideas and produce various types of English texts, such as descriptive, narrative, recount, procedure, report, and explanation texts (Pardyono, 2007).

In today's digital era, technology has become an inseparable part of human life. Technological developments have a significant impact on various sectors, including education. One technology that can help develop education is Artificial Intelligence (AI). According to Chen et al. (2020), artificial intelligence is the culmination of the development of computers, computer-related technologies, machines, and information communication technology that enables computers to perform functions that are close to or resemble humans.

One phenomenal AI application is ChatGPT, developed by OpenAI and released at the end of 2022. ChatGPT is a large language model designed to understand and generate text in natural language (Tlili et al., 2023). ChatGPT can provide human-like responses based on user instructions (Julianto et al., 2023). However, ChatGPT may provide inaccurate or biased information due to the limitations of the data it possesses (Zhu et al., 2023). Furthermore, the use of ChatGPT has the potential to reduce students' creativity levels because it provides instant answers without encouraging students to use their maximum creativity (Shidiq, 2023).

Several previous studies have examined the use of ChatGPT in writing. Setiawan and Luthfiyani (2023) found that ChatGPT is effective in producing reasonably good scientific writing with proper prompt formulation techniques. Irzawati et al. (2024) revealed that the use of ChatGPT in language learning can have both positive and negative impacts, so educators need to use it wisely as a learning medium. Agustini (2023) found that ChatGPT can increase students' independence in learning English.

Based on the explanation above, the researcher is interested in finding out whether ChatGPT can be used to produce English texts that meet correct language structure rules. Therefore, this study aims to analyze the accuracy of the generic structure and linguistic features of six types of English texts generated by ChatGPT.

2. LITERATURE REVIEW

Artificial intelligence is a branch of computer science that aims to create computer programs capable of performing tasks that normally require human intelligence (Kusumadewi, 2003). According to Russell and Norvig (2010), there are four approaches to developing artificial intelligence: thinking humanly, acting humanly, thinking rationally, and acting rationally. In recent developments, one of the most popular implementations of artificial intelligence is ChatGPT (Generative Pre-training Transformer), an AI system developed by OpenAI to interact in text-based conversations (Suharmaawan, 2023). Several advantages of ChatGPT according to researchers include: it can provide meaningful writing samples (Barrot, 2023), help students' independence and fulfill their need for instant feedback (Tai et al., 2023), and provide advice on various structural aspects of texts (Imran & Almusharaf, 2023). On the other hand, ChatGPT also has several weaknesses, such as not always being correct, providing inaccurate answers, having potential bias in its design, and threatening the intellectual development of its users (Karthikeyan, 2023).

This study focuses on six types of English texts. First, **descriptive text** aims to provide information or describe something in detail (Husna, 2013) with a generic structure consisting of identification and description (Purwati & Marta, 2005), and linguistic features including the use of simple present tense, linking verbs, adjectives, and degrees of comparison (Sudarti & Grace, 2007). Second, **recount text** aims to retell past events (Nafisah & Kurniawan, 2007) with a structure of orientation, record of events, and re-orientation (Anderson & Anderson, 2003), and linguistic features including past tense, specific participants, circumstances of time and place, additive conjunctions, and material processes (Gerot & Wignell, 1995). Third, **narrative text** tells about activities or events in the past that are imaginative (Pardyono, 2007) with a structure of orientation, evaluation, complication, resolution, and optional re-orientation (Siahaan, 2008), and linguistic features including material processes, mental processes, temporal conjunctions, and past tense.

Fourth, **procedure text** explains the steps to do something (Djuharie, 2007) with a structure of goal, materials, and steps (Djuharie, 2017), and linguistic features including imperative sentences, action verbs, temporal conjunctions, adverbs, and simple present tense. Fifth, **report text** presents information about a subject objectively with a structure of general classification and description, and linguistic features including simple present tense, adjectives, action verbs, and technical vocabulary. Sixth, **explanation text** explains a phenomenon or process in detail (Davies, 2000) with a structure of general statement, explanation, and conclusion, and linguistic features including topic-specific vocabulary, cause-effect connectors, time relationship words, and simple present tense (Hyland, 2009). These six text types are the objects of analysis in this study to assess the extent to which ChatGPT can produce texts that conform to the structure and linguistic features of each genre.

3. RESEARCH METHODOLOGY

This study employed a qualitative approach with a descriptive design (Creswell, 2018). This approach was chosen because the researcher aims to describe the phenomenon in depth, namely the accuracy of texts generated by ChatGPT based on English genre conventions. The data source of this study is six English texts generated by ChatGPT. The researcher instructed ChatGPT to create one text for each text type with the following titles:

Table 1. Text Types and Titles Generated by ChatGPT

No	Text Type	Title
1	Descriptive	"The Mother"
2	Recount	"Holiday"
3	Narrative	"Cinderella"
4	Report	"Healthy Living: A Comprehensive Approach to Wellness"
5	Procedure	"How to Make Delicious Noodles at Home"
6	Explanation	"War: An In-Depth Explanation"

The main instrument in this study was the researcher himself (Moleong, 2017), who acted as planner, data collector, analyst, and presenter of research results. As supporting instruments, the researcher used English textbooks and scientific articles about generic structure and linguistic features. Data collection was carried out using documentation techniques (Sugiyono, 2019). The steps taken included: the researcher accessed the ChatGPT website, gave instructions to create English texts with predetermined titles, collected the texts generated by ChatGPT, and documented the texts in the form of screenshots. Furthermore, data analysis was conducted using the following procedures (Moleong, 2017): reading the texts repeatedly to understand the content and structure, identifying the generic structure of each text, identifying the linguistic features of each text, comparing the findings with standard rules in textbooks, determining the accuracy level, and drawing conclusions.

4. RESULTS AND DISCUSSION

Results

This study produced findings regarding the accuracy of generic structures and linguistic features of the six texts generated by ChatGPT.

Descriptive Text ("The Mother")

The generic structure found includes identification in the first paragraph introducing the figure of "The Mother" as the central figure in the family, and description in the second paragraph describing the qualities, attributes, and characteristics of the mother in detail. The linguistic features identified include the use of present tense (verbs *lies, stands, watches, is, remains*), focus on specific participants (*The Mother*), use of noun phrases (*the heart of every family*), auxiliary verbs (*may, can*), linking verbs (*is, stands as*), and adjectives (*gentle, unyielding, nurturing, resilient*). However, an error was found in the sentence "*guiding them through the trials and triumphs of life*" which uses the continuous tense (V-ing), whereas the rules of descriptive text require the use of the simple present tense.

Recount Text ("Holiday")

The generic structure found includes orientation in the first paragraph (providing background information about the holiday to Bali), a record of events in the second to fourth paragraphs, and re-orientation in the last paragraph summarizing the experience and providing a closing impression. The linguistic features identified include the use of past tense (*went, was, boarded, spent, visited*), action verbs (*spent, relaxing, watching, trying*), adverbs of time and place (*last summer, following, where*), and conjunctions (*and, but*). This text was assessed as very accurate with no errors found.

Narrative Text ("Cinderella")

The generic structure found consists of orientation (first paragraph introducing the character of Cinderella and background), complication (third to fifth paragraphs describing the conflict), resolution (last paragraph resolving the conflict), and re-orientation (closing paragraph with a moral message). The linguistic features identified include past tense (*lived, treated, worked, dreamed*), use of nouns (*Cinderella, stepmother, stepsisters*), adjectives (*kind, gentle, wicked, selfish*), and time conjunctions (*One day, then, and, but*). The narrative text was assessed as very accurate with no errors.

Report Text ("Healthy Living: A Comprehensive Approach to Wellness")

The generic structure found is general classification (the text divides health into three main areas: physical, mental, emotional) and description (each area is explained in detail with its components). The linguistic features identified include the use of present tense (*is, encompasses, provides, are*), adjectives (*balanced, effective, positive, strong*), and the use of conditional logical connections. The report text was assessed as very accurate overall.

Procedure Text ("How to Make Delicious Noodles at Home")

The generic structure found consists of goal (stated in the title and opening sentence), materials (stated in the Ingredients and Equipment sections), and steps (sequential instructions). The linguistic features identified include imperative sentences (*Prepare, Mix, Knead, Cut, Cook*), action verbs (*measure, crack, combine, beat*), connectives (*then, while, after, once*), and adverbs (*gently, gradually, lightly, optionally*). An error was found in the materials section, namely the sentence "*you will need the following ingredients*" which uses the future tense (*will need*), whereas the correct rules for procedure text only use the present tense or imperative sentences.

Explanation Text ("War: An In-Depth Explanation")

The generic structure found includes a general statement (opening paragraph defining war and its significance), explanation (explaining the causes, types, and consequences of war), and conclusion (closing paragraph summarizing the multidimensional nature of war). The linguistic features identified include topic-specific vocabulary (*armed forces, political conflicts, territorial disputes*), cause-effect connectors (*triggered by, lead to, due to*), time relationship words (*initially, over time, after, following*), and the use of simple present tense (*is, can be triggered, takes, affects*). The explanation text was assessed as very accurate overall.

Summary of Accuracy

The following table presents the accuracy levels of the six texts.

Table 2. Summary of Accuracy Levels of the Six Texts

Text Type	Generic Structure Accuracy	Linguistic Features Accuracy	Remarks
Descriptive	✔ Very High	⚠ Moderate	Contains Continuous Tense error
Recount	✔ Very High	✔ Very High	No errors
Narrative	✔ Very High	✔ Very High	No errors
Report	✔ Very High	✔ Very High	No errors
Procedure	✔ Very High	⚠ Moderate	Contains Future Tense error
Explanation	✔ Very High	✔ Very High	No errors

All six texts have 100% generic structure accuracy, while the linguistic features accuracy for descriptive and procedure texts ranges from 85–90%, and the other four texts reach 100%.

Discussion

Based on the analysis of the six texts generated by ChatGPT, the level of generic structure accuracy is very high in accordance with English language rules. This finding is in line with the research of Setiawan and Luthfiyani (2023) which states that ChatGPT is effective in producing reasonably good scientific writing, especially when the prompts are formulated correctly. ChatGPT's ability to produce accurate generic structures likely comes from the model being trained on a very large corpus of text data, enabling it to imitate discourse organization patterns from various genres.

However, in terms of linguistic features, some errors were found, especially in the descriptive and procedure texts. In the descriptive text, ChatGPT used the Continuous Tense in the sentence *"guiding them through the trials and triumphs of life"*. In fact, the correct rules for descriptive text state that the tense used is the simple present tense to state facts and general characteristics of an object, not the continuous tense which describes ongoing actions (Gerot & Wignell, 1995). In the procedure text, an error appeared in the sentence *"you will need the following ingredients"* which uses the future tense (*will need*). Procedure texts should use the present tense or direct imperative sentences (Djuharie, 2007). These errors indicate that ChatGPT does not yet fully understand the nuances of genre-specific grammar.

This finding is consistent with previous researchers' warnings that ChatGPT can provide inaccurate or biased information (Zhu et al., 2023; Karthikeyan, 2023). Nevertheless, the error rate found is relatively

small and only occurs in two out of six texts. This indicates that ChatGPT has great potential as a writing aid tool, but users must still perform editing and manual verification. This study also supports Agustini's (2023) finding that ChatGPT can encourage student independence in learning English, as well as Irzawati et al.'s (2024) finding that the use of ChatGPT in language learning can have both positive and negative impacts, so educators need to use it wisely.

5. CONCLUSION AND SUGGESTIONS

Conclusion

Based on the analysis of the six English texts generated by ChatGPT, it can be concluded as follows: **1)** The accuracy level of generic structures in all six texts (descriptive, recount, narrative, report, procedure, and explanation) is very high, in accordance with standard English language rules. **2)** The accuracy level of linguistic features is generally good, but two errors were found: (a) in the descriptive text, there is use of Continuous Tense which does not conform to the rules; (b) in the procedure text, there is use of Future Tense which should not be used. **3)** ChatGPT shows great potential as an academic writing aid tool, but it is not yet perfect and still requires supervision and editing by users, especially regarding genre-specific linguistic aspects.

Suggestions

1) For future researchers: (a) it is recommended to expand the scope of research to the other twelve types of English texts (exposition, discussion, anecdote, news item, etc.); (b) use quantitative methods to measure the effectiveness of ChatGPT statistically; (c) compare different versions of ChatGPT (GPT-3.5 vs GPT-4) to see quality improvements.

2) For students: (a) use ChatGPT as a tool to generate ideas and writing frameworks, not as a primary source; (b) always check and edit the resulting texts, especially in terms of grammar and tense; (c) use ChatGPT's output to learn about structure and idea generation.

3) For educators: (a) recognize the strengths and limitations of ChatGPT in order to provide appropriate guidance; (b) use ChatGPT as a learning support tool, not as a substitute for manual writing practice; (c) monitor students' use of ChatGPT to prevent misuse in assignments that require full originality; (d) hold discussions about ethics, originality, and the importance of original work.

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