

An Exploration of Current Affairs Translation based on Artificial Intelligence ChatGPT

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Abstract

Before the advent of the artificial intelligence ChatGPT, major translation software such as Baidu Translate, Youdao Translate, and Bing Translate-despite being equipped with machine translation engines-frequently encountered issues such as simple syntactic errors and semantic misunderstandings. However, in 2022, the American company OpenAI released ChatGPT, a powerful artificial intelligence tool. This led to pessimistic speculation within the translation industry, with many believing that human translation would eventually be replaced by efficient and accurate AI translation. Numerous translators, after testing ChatGPT, noted that in most cases, it can provide accurate translations quickly, demonstrating an efficiency irreplaceable by humans. However, for complex texts-such as classical Chinese or political and economic texts involving obscure vocabulary and semantic repetition-ChatGPT may not perform as well. This article aims to discuss ChatGPT's proficiency in translating political texts as a case study.

Keywords

ChatGPT; Artificial Intelligence; Machine Translation.

1. Introduction

In recent years, the translation industry has encountered unprecedented challenges with the introduction of the sophisticated Artificial Intelligence language generator, ChatGPT. This development has created an important dichotomy in the field. On one hand, ChatGPT and similar AI applications show immense promise in the domain of Machine Translation [1]. These AI-driven systems distinctly differ from their traditional counterparts by incorporating contextual information and placing a high emphasis on task-specific nuances. Consequently, the translations they produce often align better with diverse contextual needs [2]. Since the emergence of ChatGPT, there has been significant discussion within the translation community regarding its utility and the potential threat it poses to the profession. For any new technology, we should always adopt an open attitude, striving to leverage every possibility it offers to enhance efficiency and accuracy [3].

2. Literature Review and Problem Statement

2.1. Literature Review

ChatGPT (Full name: Chat Generative Pre-trained Transformer) is a chatbot program developed by the American company OpenAI and released on November 30, 2022. As an AI-driven Natural Language Processing (NLP) tool, it is capable of generating responses based on patterns and statistical regularities observed during its pre-training phase. It can interact by utilizing the context of a conversation, simulating human-like communication, and can even accomplish tasks such as drafting emails, video scripts, marketing copy, translation, coding, and academic writing.

The notable advantage of ChatGPT's translation capabilities is rooted in its adaptability within the learning paradigm. In contrast to traditional machine translation tools and earlier iterations

of AI models, which heavily relied on extensive corpora for training, contemporary AI models like ChatGPT employ a zero-shot translation approach. This method reduces data requirements while tackling more intricate translation challenges [4]. Insights from Carlos Guestrin, Professor of Computer Science at Stanford University, presented at the November 2022 Intelligent Applications Summit, underscored this paradigm shift, noting that "Big Data" has lost its centrality as a necessary condition [5].

Leveraging Large Language Models (LLMs) and related indexing, AI models utilize the efficacy of transfer learning to generate high-quality translations. These models can acquire and generalize knowledge and strategies applicable to translation tasks, even if these tasks were not explicitly taught during training. ChatGPT stands at the forefront of the wave of AI-Generated Content (AIGC). Conceptually, AI traces back to the 1950s and the visionary work of Alan Turing, who proposed the Turing Test to discern machine intelligence. Over time, AIGC has moved beyond experimental scope toward practical implementation [6]. Driven by the continuous evolution of deep learning algorithms, modern AIGC technologies, including ChatGPT-powered by robust AI models and vast data repositories-have thoroughly revolutionized Human-Machine Interaction. This has made AI systems increasingly human-like and capable of fulfilling a range of tasks with extraordinary proficiency. ChatGPT demonstrates powerful capabilities in natural language processing, dialogue, Q&A, text generation, and text translation [7].

2.2. Problem Statement

Regarding the six types of translation pairs formed between Chinese, English, German, and Romanian, ChatGPT's sentence translation performance in high-resource languages (such as European languages) is comparable to Google Translate and DeepL. However, its performance in low-resource or distant language pairs is far inferior to these two major commercial machine translation engines. Furthermore, its robustness in translating biomedical texts and online community comments is also weaker than the former two [8].

Political text translation is a specialized field dedicated to rendering sensitive, authoritative, or persuasive communications-such as treaties, speeches, and diplomatic documents-from one language into another, sitting uniquely at the intersection of linguistics, diplomacy, and ideology. Its core challenge is managing functional transference, where the translator must capture the original text's intent (to inform, persuade, or negotiate) while navigating high-stakes difficulties like constructive ambiguity, ideologically loaded terminology, and complex cultural or historical references. Consequently, the translator's word choice often carries political weight, demanding deep knowledge of both language and international relations to avoid misrepresentation or causing diplomatic incidents. It involves new judgments, new thoughts, new strategies, and new requirements, with language that advances with the times, is rich in meaning, and possesses distinct characteristics of the era [9]. Translating such distinct political texts challenges ChatGPT's ability to handle inter-sentential relationships, information-dense single sentences, and specific vocabulary. It also serves as a test for its application prospects in this field and its potential to replace human translation.

3. Case Analysis

Unlike traditional machine translation tools, AI tools have significantly improved translation precision and fluency. While machine translation often struggles with complex content, AI translation goes beyond mere literal conversion. It delves into the inherent connotations of idiomatic expressions, discerns cultural nuances, and effectively elucidates technical terminology. The result is a translation that exhibits higher precision and human-like comprehension.

Furthermore, the inherent learning proficiency of AI translation allows it to dynamically adapt to changing linguistic landscapes and cater to the diverse urgencies of a discerning client base. This is exemplified by ChatGPT's versatile role as Infrastructure as a Service (IaaS), employing prompt modes to customize translations for specific audiences and background scenarios [10]. Since ChatGPT's release in November 2022, the academic community has expressed mixed opinions regarding the use of this technology. This AI-based chatbot interacts with users conversationally, answering questions and generating content using human-like language. It is also trained to create computer code. ChatGPT tracks previous prompts and responses, correcting and adjusting subsequent answers based on the sequence of input and output. ChatGPT is supported by LLMs, a type of deep learning model that emerged around 2018 [11]. These models are trained on massive amounts of public text data (such as books, articles, and web pages) to generate human-like responses in conversation [12].

Professor Li Changshuan [13] holds an objective view of ChatGPT's Chinese-to-English translation level. He believes that for translators, the use of GPT has both pros and cons: the advantage is that GPT generates idiomatic English, while the disadvantage is that GPT's understanding of repetitive or special expressions in Chinese is not accurate enough, still requiring human correction.

The following examples and English translations are excerpted from political news and speeches. Based on the ChatGPT-4o model, the instruction used was uniformly "Please provide the (TGT) translation for these sentences" [14]. The results are from the first translation attempt, without prompting, human modification, or multiple iterations.

3.1. Lexical Analysis

Example 1: “两个一百年”奋斗目标

Official Translation: the Two Centenary Goals

ChatGPT Translation: The Two Centenary Goals

Analysis: In Example 1, the translation provided by GPT is consistent with the official translation. The "Two Centenary Goals" is a political term that has appeared frequently in recent years. Given that ChatGPT-4o was launched in November 2023, it is highly likely that its pre-training model parameters included this term. Additionally, ChatGPT can accurately translate terms like "Belt and Road Initiative" and "Chinese Dream." In cases where text expression is relatively straightforward and cultural background content is not high, GPT can achieve accurate translation, even matching the official version. Therefore, the possibility of applying GPT to political translation in the future remains.

Example 2: “四个自信” (The "Four Confidences" refers to confidence in the path, theory, system, and culture of socialism with Chinese characteristics.)

Official Translation: Four-sphere Confidence

ChatGPT Translation: The Four Confidences

Analysis: Without any prompt words, GPT interpreted the confidence in the four aspects of "path, theory, system, and culture of socialism with Chinese characteristics" as a numerical "Four Confidences." According to the Cambridge Dictionary, when "confidence" is used as an uncountable noun, it means "the quality of being certain of your abilities or of having trust in people, plans, or the future"; as a countable noun, it means "a secret that you tell someone." Therefore, the translation provided by GPT not only misunderstood the connotation of the original text but also incorrectly used the plural form of the noun. In handling words with high cultural connotation or independent context, GPT's translation ability still needs improvement compared to human translators.

Our national leaders have always frequently cited classics in their speeches. For instance, former Premier Wen Jiabao once cited "One hundred li is half of ninety" (meaning the last part of a journey is the hardest) from Strategies of the Warring States, and "Actions are seen in the present, rights and wrongs are judged by future generations" from The Admonitions of Emperor Taizu of Ming. The speaker cited "Take the people's heart as one's own" from Laozi's Tao Te Ching and "Seeing is not as good as knowing; knowing is not as good as acting" from Xunzi. Therefore, discussing GPT's translation ability in current affairs cannot bypass its understanding and translation of allusions and classical Chinese. From a lexical perspective, for some obscure idioms, GPT can translate their connotations literally very well and provide the specific source and background of the idiom. For example, GPT's translation for "魑魅魍魎" is: "The Chinese phrase '魑魅魍魎' can be translated as: 'Monsters and demons.' It refers to various types of evil spirits, ghosts, or supernatural creatures in Chinese folklore. The phrase is often used metaphorically to describe sinister or malevolent forces, whether supernatural or human." For "狡兔三窟", the translation is: "The Chinese phrase '狡兔三窟' can be translated as: 'Gibbons pulling a cart, flying squirrels lifting a carriage.' This phrase is a metaphorical or literary expression describing an impossible or fantastical situation..." However, for some obscure words appearing in classical texts, GPT struggles. For example, in the line "Their position in the world is not yet so numerous" (a mistranslation of "彼其于世，未数数然也" from Zhuangzi), the term "数数然" actually means "in a desperate or eager manner, referring to anxiously seeking fame and fortune." GPT's translation "not yet so numerous" indicates an error in understanding the original text, leading to mistranslation.

From this, we can roughly conclude: When translating common political vocabulary, GPT is already adept at expressing basic meanings; the translation effect is relatively plain and tends towards literal translation, which is slightly inferior to the word choice of master translators. However, for content requiring certain literary background and knowledge of classical Chinese, the translations provided by GPT may contain errors and require human polishing and modification [15].

3.2. Sentence Analysis

Example 3: “与君远相知，不道云海深。”很高兴出席博鳌亚洲论坛2021年年会，同大家在“云端”相聚。

Official Translation: "True friendship brings people close however far apart they may be." It gives me great pleasure to attend the Boao Forum for Asia Annual Conference 2021 and meet you all in this cloud meeting.

ChatGPT Translation: "Though we are far apart, our understanding remains deep, undeterred by the vast clouds and sea." I am delighted to attend the Boao Forum for Asia Annual Conference 2021 and to meet with all of you in the virtual space.

Analysis: Professor Wang Li [16] proposed the concepts of hypotaxis and parataxis in Theory of Chinese Grammar: "Because Chinese mostly uses parataxis, connecting components are not necessary; Western languages mostly use hypotaxis, where connecting components are indispensable in most cases."

This case clearly demonstrates the fundamental difference between human translation Official Translation and AI translation when processing the parataxis inherent in Chinese rhetoric versus the hypotaxis required for formal English structure. The Official Translation treats the quote, "与君远相知，不道云海深," as a functionally equivalent and highly idiomatic English maxim, entirely abandoning the literal translation of the "clouds and sea" imagery to prioritize the quote's rhetorical function and core diplomatic message. Conversely, the ChatGPT translation attempts to render the original sentence's paratactic structure into a more hypotactic form, using explicit subordinating conjunctions and retaining the literal imagery of

"vast clouds and sea." This approach, while semantically accurate, results in a slightly verbose and stiff phrase that lacks the polish and fluency required for a political speech. Therefore, the human translation prioritizes the text's function and stylistic appropriateness in the target culture, while the AI translation tends toward a more direct, literal rendering with greater semantic fidelity to the source text.

Example 4: “沉舟侧畔千帆过，病树前头万木春。”后疫情时代的世界，必将如凤凰涅槃、焕发新生。

Official Translation: As a Chinese poem reads, “Past a fallen ship, one thousand sail onward; for a sick tree, ten thousand thrive by spring.” I believe that when COVID-19 is over, our world will rise from the pandemic and emerge even stronger.

ChatGPT Translation: “Beside the wrecked boat, a thousand sails pass by; in front of the withered tree, ten thousand trees flourish in spring.” In the post-pandemic era, the world will surely emerge like a phoenix reborn, full of new vitality.

Analysis: This example highlights how the two translations handle Contextualization, specifically the management of culturally specific literary references in a political setting. The Official Translation employs a High Contextualization strategy by immediately framing the quote—a renowned couplet by Liu Yuxi—with the phrase, “As a Chinese poem reads,” thereby validating its use for a global audience and bridging the cultural gap. Furthermore, the translation of the subsequent political message is functionally adjusted to a powerful, universally recognizable phrase, “rise from the pandemic and emerge even stronger,” which perfectly aligns with Western diplomatic rhetoric. In contrast, the ChatGPT translation utilizes a Low Contextualization approach, presenting the quote literally without any cultural framing, and offering a literal transfer of the post-pandemic message (“phoenix reborn, full of new vitality”). While semantically accurate, this approach risks sounding verbose or overly poetic, sacrificing the immediate clarity and robust diplomatic tone achieved by the human translator who prioritized the message's communicative effectiveness and political context.

Example 5: 我们要坚持用马克思主义观察时代、解读时代、引领时代，用鲜活丰富的当代中国实践来推动马克思主义发展，用宽广视野吸收人类创造的一切优秀文明成果，坚持在改革中守正出新、不断超越自己，在开放中博采众长、不断完善自己，不断深化对共产党执政规律、社会主义建设规律、人类社会发展规律的认识，不断开辟当代中国马克思主义、21世纪马克思主义新境界！

Official Translation: We need to use Marxism to observe and decipher the world today and lead us through it, and develop it in dynamic and abundant practice in contemporary China. We should learn from all the achievements of human civilization with an extensive view. To outdo ourselves we need to protect our foundations while innovating, and learn widely from the strengths of others to improve ourselves. Finally, we need to have a deeper understanding of governance by a communist party...

ChatGPT Translation: We must persist in using Marxism to observe, interpret, and lead the times; use the vibrant and rich contemporary Chinese practice to promote the development of Marxism; absorb all outstanding achievements of human civilization with a broad perspective; adhere to principles while making innovations in the process of reform, constantly surpassing ourselves; in openness, learn from the strengths of others and continuously improve ourselves; deepen our understanding of the laws of Communist Party governance...

Analysis: The original text of Example 5 is an ultra-long single sentence with 150 Chinese characters. It starts with the four-character structure common in current affairs “observe the times, interpret the times, lead the times,” and uses four “continuously” to link the sentences,

promoting the content level by level. As a machine translation, although GPT's structure is simple, it is basically free of grammatical errors, showing great progress over traditional machine translation software.

The official translation uses the splitting technique, dividing the original text into four single sentences for paraphrase, making the translation concise and clear as a whole. The subject selection follows the thematic progression pattern consistent with Systemic Functional Linguistics. Conversely, the translation provided by GPT adopts a literal translation strategy. The entire sentence consists of 93 words, with only semicolons carrying the sentence-breaking function. The translation does not demonstrate specific techniques; the effect follows the original text step by step, but the single sentence carries too much information, easily causing readers to lose patience.

Syntactically, GPT shows certain translation skills when dealing with short sentences, such as adjusting sentence order in Example 4, and the translation remains fluent and grammatically correct. However, for the processing of long sentences, GPT obviously does not exert subjective initiative like human translators to split and integrate the original text. The step-by-step translation method makes GPT's translation very rigid, lacking the division of levels and integration of content found in human translation.

3.3. Discourse Analysis

Example 6: 世界是丰富多彩的，多样性是人类文明的魅力所在，更是世界发展的活力和动力之源。“非尽百家之美，不能成一人之奇。”

Official Translation: The world we live in is diverse and colorful. Diversity makes human civilization what it is, and provides a constant source of vitality and driving force for world development. As a Chinese saying goes, “Without achieving the good of one hundred various schools, the uniqueness of one individual cannot be achieved.”

ChatGPT Translation: The world is rich and diverse, and diversity is the charm of human civilization as well as the source of vitality and momentum for global development. As the saying goes, “Without embracing the beauty of a hundred schools, one cannot achieve individual uniqueness.”

Analysis: This case clearly demonstrates the superior command of Cultural Appropriateness and Register Shift exhibited by human translation over AI translation in a diplomatic context. For the main content, the Official Translation employs more engaging and fluent expressions (e.g., “The world we live in” and “driving force”), aligning the language register better with a formal speech. More crucially, in handling the ancient quote “非尽百家之美，不能成一人之奇,” the Official Translation employs a strategy of explanatory domestication by translating “美” (beauty) into the more universally understood “the good,” and explicitly clarifying “百家” as “one hundred various schools.” This ensures the maxim is immediately intelligible and appropriately solemn for an international audience. Conversely, while semantically accurate, the ChatGPT translation's literal retention of “beauty” and “a hundred schools” (an act of literal foreignization) and its slightly less forceful register make it fall short of the Official Translation's political impact and cultural relevance, underscoring the necessity of human intervention to maximize the text's communicative effectiveness in the target context.

Example 7: “天不言而四时行，地不语而百物生。”地球是人类共同的、唯一的家园。让我们继往开来、并肩前行，助力《巴黎协定》行稳致远，开启全球应对气候变化新征程！

Official Translation: As a Chinese poem reads, “Heaven does not speak and it alternates the four seasons; Earth does not speak and it nurtures all things.” Earth is our only and shared home. Let us build on past achievements, work together to make steady progress in implementing the Paris Agreement, and launch a new journey for global climate actions.

ChatGPT Translation: "Heaven says nothing, yet the four seasons turn; Earth remains silent, yet all things grow." The Earth is humanity's shared and only home. Let us build on past achievements and move forward together, supporting the steady and long-term implementation of the Paris Agreement and embarking on a new journey in global climate action!

Analysis: This final example effectively encapsulates the differing philosophies of human and AI political translation, particularly in managing the rhetorical shift from an ancient, poetic metaphor to a modern, actionable diplomatic call. The Official Translation prioritizes rhetorical cohesion and political agency by framing the classical quote, "天不言而四时行，地不语而百物生," with the contextual marker, "As a Chinese poem reads," thereby lending cultural weight to the subsequent argument without sacrificing flow. It then translates the call to action, "开启全球应对气候变化新征程," into the powerful and active diplomatic phrase, "launch a new journey for global climate actions." In contrast, the ChatGPT Translation opts for higher lexical fidelity in the quote ("Heaven says nothing... Earth remains silent") and offers a more literal, less active rendering of the call to action, such as "supporting the steady and long-term implementation of the Paris Agreement and embarking on a new journey." This difference reveals the human translator's consistent preference for adapting source language rhetoric into politically assertive and functionally suitable target language phrases, while the AI translator tends toward semantically faithful word choices that, while accurate, occasionally lack the necessary dynamism and political force required in high-level diplomacy.

It can be seen that due to the specificity of political discourse, which usually involves sensitive topics or subtle diplomatic tones, GPT cannot precisely grasp euphemisms and rhetorical choices in political discourse. This may make the translation appear mechanical in cohesion and coherence, with more literal translation and less flexibility. Moreover, the translation of political discourse has high requirements for wording; imprecise word choice and slight mistranslations may lead to different political implications. GPT cannot judge whether such translations will be misread as a certain political view or stance. Therefore, in the short term, GPT may not be able to replace human translators in completing political discourse translation.

4. Conclusion

In the era of artificial intelligence, ChatGPT, as a leading AI-driven natural language processing tool in the industry, possesses three advantages: speed, multilingualism, and usability. According to the requirements of CATI Level 2 translation, a translator is required to reach a speed of 500-600 words per hour for English-to-Chinese and 300-400 characters per hour for Chinese-to-English. Level 1 translation requires reviewing 1200 words per hour for English-to-Chinese and 800 words per hour for Chinese-to-English. In ideal conditions with good hardware performance and load, GPT-4 Turbo can translate approximately 30,000 to 42,000 Chinese characters per hour. ChatGPT-4 Turbo also supports processing in multiple languages, including many widely used ones such as English, Chinese (Mandarin), Spanish, French, German, and Japanese, capable of understanding and generating text in over 50 languages. Additionally, as a tool, AI is available for use at any time, unrestricted by time and location.

However, it is worth emphasizing that although ChatGPT is very proficient in generating coherent linguistic responses, it still lacks the nuanced understanding, empathy, and creative ability inherent in human interaction. Nevertheless, while repeatedly posing challenges, it has played a driving role in its further development and updates. In summary, ChatGPT demonstrates a versatile intelligent program with powerful natural language processing capabilities in many fields, and it can be widely applied, offering robust NLP capabilities for various applications. In the future, with the continuous development of natural language

processing technology, ChatGPT will see increasing application, bringing more convenience and innovation to people.

Based on the analysis above, we can roughly conclude that ChatGPT's advantage lies in its ability to generate natural language and translate proper nouns relatively accurately. Its weakness lies in limited understanding capability, a tendency to maintain the original phrasing, rigid translation methods, and difficulty in generating logical translations. As mentioned earlier, ChatGPT, like other machine translation engines, yields unstable results. If the original text is clear in meaning and concise in language, the translation effect is very good; if the original semantics are complex, the effect is poorer. In such cases, human translators are needed to make significant modifications to the machine translation results to ensure correct meaning.

In this study, ChatGPT was compared with official translations. The results show that ChatGPT performs more accurately and fluently as an AI translator in short contexts. Compared with the official human translations, human translation shows greater logical consistency when translating segmented texts. It can correctly use different expressions to translate the same vocabulary in different paragraphs, whereas ChatGPT translation may cause low-level grammatical errors due to overly pursuing adherence to the original text. AI translation has huge potential in promoting global communication, helping people overcome language barriers, and facilitating cross-cultural exchange and cooperation. This is crucial for social and business interactions in the era of globalization. However, it is important to recognize that globalization also brings challenges to translation, especially increasingly serious cultural conflicts. To solve this problem, translation systems need not only to translate texts accurately according to context but also to clearly understand the culture behind the target and source languages, reducing cultural gaps and alleviating cultural conflicts. In conclusion, the results of this study indicate that AI translation, such as ChatGPT, has great potential in the global translation field, and future technological advancements will further drive progress in this area.

References

- [1] K. Peng, L. Ding, Q. Zhong, L. Shen, X. Liu, M. Zhang and D. Tao: Towards Making the Most of ChatGPT for Machine Translation, SSRN Electronic Journal, (2023).
- [2] Y. Cheng and Y. Wang: Context-Based AI Translation From a Globalization Perspective: A Case Study of ChatGPT, Sino-US English Teaching, Vol. 20 (2023) No.9, p.370-380.
- [3] L.J. Cai: Algorithms and Translation, Chinese Translators Journal, Vol. 44 (2023) No.4, p.179-187.
- [4] Chan, et al.: GPT for Translation: A Systematic Literature Review, SN Computer Science, Vol. 5 (2024) No.8, p.1-9.
- [5] Information on: <https://lokalise.com/blog/machine-translation-vs-ai-for-translation/>
- [6] H.P. Zhang, L.H. Li and C.J. Li: ChatGPT Chinese Performance Evaluation and Risk Response, Data Analysis and Knowledge Discovery, Vol. 7 (2023) No.3, p.16-25.
- [7] Y. Lian, et al.: Public Attitudes and Sentiments Toward ChatGPT in China: A Text Mining Analysis Based on Social Media, Technology in Society, Vol. 76 (2024).
- [8] F. Geng and J. Hu: A New Direction for AI-Assisted Post-Editing—A Case Study of Translation Based on ChatGPT, Foreign Languages in China, Vol. 20 (2023) No.3, p.41-47.
- [9] X. Wen and Y.L. Tian: Research on the Effectiveness of ChatGPT Applied to the Translation of Discourse with Chinese Characteristics, Shanghai Journal of Translators, (2024) No.2, p.27-34.
- [10] G.H. Zhu and X.W. Wang: ChatGPT's Operation Mode, Key Technologies, and Future Prospects, Journal of Xinjiang Normal University (Philosophy and Social Sciences Edition), Vol. 44 (2023) No.4, p.113-122.
- [11] C.D. Manning: Human Language Understanding & Reasoning, Daedalus, Vol. 151 (2022) No.2, p.127-138.

- [12] J. Meyer, et al.: ChatGPT and Large Language Models in Academia: Opportunities and Challenges, BioData Mining, Vol. 16 (2023) No.1, p.1-11.
- [13] C.S. Li: Utilizing ChatGPT for Chinese-to-Foreign Translation, Minority Translators Journal, (2023) No.4, p.74-85.
- [14] W. Jiao, et al.: Is ChatGPT A Good Translator? Yes With GPT-4 As The Engine, Computer Science, Linguistics, (2023).
- [15] L. Yu: A Study on Lexical Diversity and Syntactic Complexity of ChatGPT Translation, Foreign Language Teaching and Research, Vol. 56 (2024) No.2, p.297-307.
- [16] L. Wang: Theory of Chinese Grammar (The Commercial Press, China 1944).