The Impact of ChatGPT on Part-Time Translators Working with the English Language: A Threat or a Complementary Tool?

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Abstract

Since its launch on November 30, 2022, the artificial intelligence (AI) language model ChatGPT has garnered immense attention and experienced exponential growth in popularity. As one of the largest and most sophisticated models in the market, ChatGPT presents both challenges and opportunities for part-time translators, especially those working primarily with the English language. However, there exists a pervasive perception that part-time translators may face unemployment due to AI advancements. This study examines the attitudes of part-time translators toward the fear that ChatGPT will replace them and explores strategies for adapting to the AI-driven environment. Using an empirical sociological approach with mixed methods, this research finds that part-time translators view ChatGPT as a tool that can augment their capabilities and enhance job efficiency when translating into or from English. The findings suggest that AI can serve as a complement rather than a replacement, providing valuable support for less creative or repetitive translation tasks. This study provides a foundation for future research on the impact of AI on vulnerable occupations within the English language sector.

Keywords: part-time translators, AI replacement, ChatGPT, English language translation, job efficiency

1. Introduction

ChatGPT, created by OpenAI, is an AI model designed to produce conversational replies in response to question prompts. ChatGPT is also a platform where users can provide text questions and receive fast text responses. These responses are generated using machine learning and the information it has gained through online interactions. The model is trained on a vast number of parameters, exceeding 150 billion, using a combination of reinforcement learning algorithms and human input. In its initial week of public availability, the platform garnered a million users and has been hailed as the upcoming major disruptor in the business (Dowling & Lucey, 2023; Pavlik, 2023). Moreover, translators can translate text between languages by properly prompting the model (Vilar et al., 2022). Hendy et al. (2023) demonstrate that the use of GPT-enabled translation yields excellent results when used to translate languages with abundant linguistic resources.

However, the prevalent viewpoint in academic literature is that digital transformation is having a significant impact on work and employment due to the introduction of AI, and other significant job losses are the outcome of digital technologies. According to the forecast by McKinsey (2020), 375 million workers will be forced to find new jobs by 2030. About one-fifth of jobs in Chinese manufacturing will be replaced by automation, leading to nearly 100 million workers (accounting for 12% of the total labor force) unemployed.

According to the International Labor Organization (ILO) Part-Time Work Convention, 1994 (No. 175), "part-time work" refers to working hours that are shorter than those required for comparable full-time work in the country, sector, and occupation (Fagan et al., 2014). While part-time work can offer certain advantages, such as decreased exposure to dangerous work environments and job-related stress, the drawbacks of being in a part-time job far outweigh the benefits. Part-time work, on average, has disadvantages in terms of job security, hourly compensation, and prospects for training and promotion. Part-time employees also experience limited availability of unemployment benefits and job search assistance programs in the event of unemployment. Additionally, they have a higher susceptibility to poverty, not only due to their reduced weekly wages resulting from shorter work hours but also because of the instability of their employment and their decreased likelihood of being protected by unemployment insurance programs. Part-time translators are often perceived by colleagues and employers as less engaged, lacking supervisory capacity, and prone to workplace disruptions (McDonald et al., 2009). Translation is also widely viewed as a low-skilled, low-prestige profession by both insiders and outsiders (Lambert & Walker, 2022; Dam & Zethsen, 2012). Furthermore, Dam and Zethsen (2016) characterize the field as largely part-time, freelance, and unstable, highlighting its porous and transient nature. Overall, part-time roles—translation included—tend to be of lower quality than full-time employment across various dimensions (Fagan et al., 2014).

Moreover, several experts contend that translators proficient in English are comparatively more vulnerable to replacement by AI, such as ChatGPT, due to the following criteria, than those specializing in less commonly spoken languages: a) Data Availability: The English language possesses a vast corpus of digital documents, facilitating effective AI training (Koehn, 2020); b) Standardization: English frequently adheres to established conventions, facilitating AI processing (Vaswani et al., 2017); c) Global Utilization: The worldwide

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significance of English fosters ongoing AI advancement in this language (Bender et al., 2021).

Given the aforementioned adverse circumstances, are part-time translators working with English facing a perilous situation when dealing with competition from ChatGPT? Do they believe that they will be replaced by ChatGPT? Current research in the field of AI investigates either the collective perspective of translators (Kirov & Malamin, 2022) or the viewpoint of the general public (Jangjarat et al., 2023). Clearly, past research has disregarded or marginalized part-time translators. Hence, it is crucial to analyze the perspective of part-time translators working with English regarding ChatGPT's impact on job security.

Specifically, the study, using a mixed-methods approach, intends to explore the extent to which part-time translators working with English perceive, understand, and trust ChatGPT and whether their profession was threatened by ChatGPT. Given that the disparity in job conditions between full-time and part-time workers varies significantly among different countries (Fagan et al., 2014), for analytical purposes, it is important to consider China's unique situation as one of the members in terms of automation readiness, as indicated by the ABB-sponsored Automation Readiness Index (ARI), which was developed by the Economist Intelligence Unit as showcased in Figure 1.



Figure 1. Automation Readiness Index Source: CSIS China Power Project

China has positioned itself as a global leader in AI development, strengthened by state-funded investments in machine learning, neural machine translation and AI-driven automation. China demonstrates excellence in AI research and innovation; nevertheless, it lags in educational policies and workforce reskilling, resulting in faster implementation of automation compared to workforce adaptation (EIU, 2020). Moreover, the Chinese government has heavily invested in AI-driven language processing technologies, including Baidu Translate, Tencent's AI translation, and iFlytek, thus increasing dependence on machine-assisted translation (He, 2021). All of these have implications for part-time translators. For instance, China's advancements in AI have substantially improved machine translation (MT), thereby reducing the need for human translators in low-complexity tasks (Zhou & Liu, 2023). Furthermore, part-time translators are especially vulnerable due to their limited specialization and involvement in generalist translation domains, which AI is increasingly able to perform accurately (Doherty, 2020).

Major enterprises and governmental organizations in China are currently implementing AI-based translation systems, resulting in fewer job opportunities for part-time translators (Feng, 2022). The ARI ranks China lower in reskilling and workforce adaptability, suggesting insufficient policies that support the retraining of human workers (EIU, 2020). Full-time translators at government-funded organizations or large enterprises may receive AI training; however, part-time translators typically lack institutional support to develop AI-related skills (Schäffner, 2019). According to Jiménez-Crespo (2017), automation in China has reduced translation costs, as AI-driven systems provide more cost-effective alternatives than human translators. Pym (2010) argued that part-time translators, lacking secure contracts, must compete in a price-sensitive market, thus diminishing their earning potential.

Unlike previous studies, such as the research conducted in Thailand by Jangjarat et al. in 2023, or the study set in Bulgaria by Kirov & Malamin in 2022, this study addresses the contextual gap by examining China as the sample due to its relatively high automation readiness. Therefore, this study seeks to investigate the perceptions of part-time translators working with English regarding ChatGPT's impact on job security and the adaptation strategies for part-time translators after recognizing the long-term effects of ChatGPT on job security.

2. Research Statement

The following research questions are addressed:

- 1. How do part-time translators working with English perceive ChatGPT's impact on job security?
- 2. What coping mechanisms do they employ in response to the potential AI replacement crisis?

The paper is organized as follows: an introduction, a review of the relevant literature and essential topics, and a brief discussion on the methodology employed. The article analyzes the findings considering the socio-professional profiles of respondents, their attitudes toward ChatGPT and other machine translation tools used in their work, as well as their perspectives on ChatGPT's influence on the future of the

profession and its automation. The findings of this study will help better understand how part-time translators perceive the state-of-the-art Large Language Model (LLM) ChatGPT to explore viable strategies for surviving the potential AI displacement crisis. This study establishes a foundation for subsequent research about the influence of AI on at-risk professions within the English language sector.

3. Literature Review

3.1 The Pros and Cons of ChatGPT

Since its launch in November 2022, OpenAI's ChatGPT has emerged as a transformative influence in the field of natural language processing. Although not initially conceived as a translation-specific tool, a growing body of research has investigated its capabilities and limitations in machine translation contexts.

Numerous studies underscore the exceptional fluency and coherence of ChatGPT's responses, particularly during dialogic exchanges. Jangjarat et al. (2023), Dwivedi et al. (2023), and Rathore (2023) emphasize its ability to generate human-like conversational text, establishing it as a state-of-the-art LLM. Notably, despite ChatGPT not being explicitly fine-tuned for translation tasks, Chang et al. (2024) and Hendy et al. (2023) suggest that it performs comparably to or exceeds other LLMs in many translation scenarios. Moreover, Wang et al. (2023) present compelling evidence that GPT-4, specifically, outperforms commercial MT systems in both human evaluations and BLEU score assessments, a conclusion that aligns with the findings of Jiao et al. (2023) and Peng et al. (2023).

This praise is not without caveats. While ChatGPT demonstrates proficiency in translating X to English (Bang et al., 2023), its performance is less consistent in the English to X direction. This asymmetry raises concerns over its deployment in multilingual environments, especially where adherence to target-language norms is crucial. Lyu et al. (2023) explore ChatGPT's practical application in specialized fields, demonstrating its ability to convert complex radiological terminology into comprehensible descriptions for patients. This suggests transdisciplinary potential, but also highlights the need for context-sensitive adaptations, particularly in technical or domain-specific translation tasks.

Conversely, a growing body of work critically examines the ethical and technical limitations associated with the utilization of LLMs such as ChatGPT in translation. Researchers including Škobo and Petričević (2023), Lu et al. (2023), and Meade et al. (2022) identify bias in both training data and output generation. These biases may arise from the integration of multiple translations within a single prompt (Lu et al., 2023), resulting in inconsistent or distorted interpretations. Kimera et al. (2024) warn that the absence of a comprehensive framework to address bias may perpetuate harmful perceptions, thus raising reputational and ethical concerns in professional translation contexts.

A persistent issue is hallucination—the generation of content that lacks foundation in the input. Bang et al. (2023) and Huang et al. (2022) distinguish between two types of hallucinations: intrinsic and extrinsic hallucinations. These challenges undermine the reliability of LLMs in tasks requiring high semantic precision, such as legal, medical, or literary translation.

Further critique is provided by Wu et al. (2024a) and Karpinska and Iyyer (2023). Wu et al. conduct a systematic analysis of error types—mistranslation, grammatical inconsistency, and omission—noting that although models such as LLaMA7B mitigate some issues, they continue to face challenges regarding stylistic authenticity. Karpinska and Iyyer argue that LLMs, despite their contextual capabilities, cannot replicate the aesthetic, cultural, and ethical dimensions of human-mediated literary translation. This aligns with the broader view that LLMs serve as auxiliary tools, rather than replacements for professional translators.

Previous research collectively suggests a dual reality: ChatGPT is indeed capable of producing fluent, contextually aware translations, especially at the sentence and paragraph levels. However, it exhibits inherent limitations regarding bias, hallucination, and contextual accuracy—particularly when evaluated in multilingual, domain-specific, or culturally nuanced translation assignments.

3.2 The Status Quo of Part-time Translators

Currently, literature is dominated by those who believe that digitalization, automatization, and AI will have a significant impact on the translation industry (Frey et al., 2017). Sandrini (2022) identified two additional factors that have influenced communication and language services: the global health crisis resulting from the COVID epidemic, which has accelerated the adoption of communication technologies, and the ongoing conflict in Eastern Europe, which has affected language policies and usage. The editorial also mentions the expanding use of technology in the translation profession, which is evidenced by the increasing demand for translators and the limited number of available translators. Aligned with the pursuit of efficiency, the implementation of digitalization and automation has significantly influenced industrial processes. However, it may also lead to a decrease in the availability of skilled translators.

The concept known as 'digital Taylorism', characterized by the standardization of jobs and documentation of methods (Moorkens, 2020, p.4), diminishes the autonomy of translators and relegates their role to that of a minor component within the overall process. Consequently, translators may lose sight of the broader context. The possible marginalization of translators can be depicted as a negative cycle, symbolizing the diminishing scope of their expertise caused by these advancements and the intrusion of technology, which can be referred to as the translators' 'obsolescence cycle' (Sandrini, 2022).

The study conducted by Joseph Lambert and Callum Walker in 2022 also discovered three factors that cause disruption. One of the most apparent factors causing disruption is the ever-expanding impact of translation technology. Another, more recent factor that has caused significant changes is the emergence of the platform economy. The third significant disruptor is the rise of highly expansive and geographically dispersed super-LSPs that handle a substantial amount of translation work on a global scale.

To exacerbate the issue, research indicates that translators working with English are more vulnerable to automation, as mentioned in the introduction. Nevertheless, experts emphasize AI's difficulties with cultural subtleties, colloquial phrases, and context-specific adjustments, whereby human proficiency is essential (Venuti, 2017). Data biases in AI models exacerbate the challenges of achieving complete automation (Bender et al., 2021). According to Monz 6-Nebot (2019), the translation profession's low position is well recognized in the field of Translation Studies (TS). Survey data consistently corroborate the notion that translators, particularly those who work part-time, perceive themselves as being inadequately compensated and unappreciated. Furthermore, financial considerations continue to be a prominent ethical and practical concern, particularly due to the strong correlation between low remuneration and minimal requirements for entering the profession (Inbox Translation, 2020; ITI, 2020).

Although both part-time translators and freelancers work independently, significant differences are evident in their commitment levels, workload, and professional status. Freelancers are self-employed, full-time professionals, while part-time translators engage in translation as a secondary activity, thus limiting their competitiveness in the professional market (Garc á, 2022). A full-time agency translator is typically employed on a salary basis by a translation company, governmental entity, or multinational corporation. These professionals benefit from stable working conditions, opportunities for professional development, and legal employment protections that part-time translators lack. Unlike agency-employed translators, part-time translators face reduced job stability, a lack of structured career progression, and restricted access to high-quality translation tools and training (Jim énez-Crespo, 2017). Part-time translators endure greater economic instability than freelancers or agency translators due to their inadequate client base, reduced negotiating power, and restricted access to AI-assisted workflows that benefit full-time professionals. In contrast to agency translators, who may transition to post-editing machine translation (PEMT) or quality assurance roles, part-time translators are more vulnerable to replacement by AI-driven translation platforms (Moorkens & Rocchi, 2021). Moreover, freelancers exhibit the flexibility to integrate AI advancements via translation, transcreation, and specialized expertise, while part-time translators sometimes lack the time or resources for skill training (Sch äffner, 2019).

Previous studies prioritize both full-time and part-time translators, such as studies conducted by Kirov & Malamin in 2022; it is legitimate to say that part-time translators have never been the center of a sociological investigation of professions in the same way that doctors, attorneys, architects, and artists have been. However, the opinions on technologies like MT are still varied among professionals (Läubli & Orrego-Carmona, 2017; Vieira, 2020). Moreover, a limited number of studies have chosen China as the location for their research since the discrepancy in job circumstances between full-time and part-time workers varies considerably across different countries (Fagan et al., 2014). China's position as the 12th ranked member in terms of automation readiness, as revealed by ARI, should be taken into account. Consequently, it is crucial to examine the circumstances of part-time translators in China regarding the obstacles and potential presented by ChatGPT. The objective of this study is to bridge the knowledge and contextual gaps by examining the perspectives of part-time translators working with English regarding ChatGPT's impact on job security. It specifically explores their concerns about potential displacement in the translation labor market and identifies adaptation strategies for part-time translators in light of the long-term effects of ChatGPT on job security.

4. Methodology

Present research employs a mixed-methods approach aligned with the pragmatist paradigm. Fundamentally, the researchers adopt pragmatism as our philosophical foundation. Pragmatism remains the predominant paradigm in mixed methods research (MMR) (Johnson, 2017). Mixed methods can enhance depth and breadth beyond what a single technique might achieve through their emphasis on meaningful integration of quantitative and qualitative data (Ivankova et al., 2009). Consequently, the researchers implement a mixed methodology to investigate part-time translators' perceptions of ChatGPT. The study follows an explanatory sequential mixed method design, specifically applying Creswell's (2003) established framework: (QUAN/qual). Figure 2 illustrates the explanatory design procedures in this study.

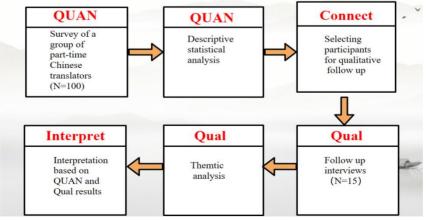


Figure 2. The Explanatory Research Design

The survey instrument is carefully modified and refined based on established research in machine translation perception (Liu et al., 2022a; Vassil et al., 2022). The survey comprises 34 questions in total; the initial section (questions 1-6) aimed to comprehend translators' demographic data and translation proficiency. The items regarding ChatGPT are 28 and are segmented into six sections: a) Items pertaining to knowledge of ChatGPT; b) Items concerning experience with ChatGPT; c) Items related to perceived translation quality of ChatGPT; d) Items addressing attitudes towards ChatGPT; e) Items regarding concerns about ChatGPT; f) Items reflecting perceived future of ChatGPT in translation. The questionnaire comprises single-choice, multiple-choice, and Likert scale items. This framework facilitates the effective gathering of distinct, measurable data across a wide range of pertinent subjects.

Convenience sampling and snowball sampling are employed to recruit participants for surveys. Specifically, convenience sampling is employed to recruit participants from online translation forums and social media groups, while snowball sampling is utilized to motivate individuals to recommend other suitable part-time translators to organically augment the sample size. Purposive sampling is employed to select participants for interviews, because the objective of purposeful sampling is to fully understand a certain phenomenon or population (Limna & Kraiwanit, 2022). The reason why the present study utilizes multiple recruitment methods is to mitigate self-selection bias, thus ensuring a more representative and balanced sample.

The quantitative survey is conducted via Wenjuanxin (a Chinese platform). The population that the research focuses on mainly consists of a group of part-time translators who are self-employed or translators who don't belong to any agencies or possess any civil contracts. English must be the only language that the respondents translate to/from. SPSS is used to process the data. Statistical studies for non-representative samples, such as descriptive statistics and multiple responses are used to interpret the results.

Subsequent to the formulation of the questionnaire, the researchers executed a pilot test including 33 participants. Nevertheless, the findings for both reliability (the Cronbach α coefficient is 0.468) and validity (Kaiser-Meyer-Olkin (KMO) statistic is 0.352) are suboptimal. Therefore, the researchers scrutinize the questionnaire structure and items based on the research questions. After all the participants submit the questionnaire, the researchers utilize a third-party program called SPSSAU, which is an online software like SPSS, to conduct the validity and reliability test. Figure 3 and Figure 4 provide screenshots displaying the results. The minimum value for Cronbach α coefficient should be 0.7. The greater the elevation, the more favorable the outcome. The final Cronbach α coefficient of 0.873 indicates that a person's responses on an item are consistently correlated with the responses on other items in the scale. If the KMO statistic surpasses 0.7, it signifies that the correlations are robust enough. In this study, the final KMO value is 0.918, exceeding the criterion of 0.7, indicating that the survey data are legitimate.



Figure 3. The Screenshot of the Result of Reliability



Figure 4. The Screenshot of the Result of Validity

In-depth interviews are done as part of the qualitative methodology. According to Francis et al. (2010) and Namey (2017), qualitative research generally regards a minimum of six interviews as ideal for obtaining data saturation. Therefore, based on the quantitative findings, the

researchers choose 15 respondents to conduct interviews after creating an interview protocol. To eliminate questions that would not work, the researchers make adjustments accordingly with the pilot testing. The interview is semi-structured and conducted and recorded through Tencent Meeting. The researchers have promised confidentiality and anonymity and obtained permissions. After transcribing by software-Lark, the researchers utilize qualitative data analysis software called NVivo to code the oral data transcripts. The recurring patterns would be noted to establish key links between conceptual categories that became the thematic strands in the interpretation.

5. Data Analysis and Results

In this section, the researcher details the findings of the online survey and the content analysis of the interview.

5.1 Results of Online Survey

Table 1. The Demographic Information of Participants

Category		Number	Proportion
Gender	Male	37	37%
Gender	Female	63	63%
	20-30 years old	59	59%
A	31-40 years old	31	31%
Age	41-50 years old	9	9%
	Over 51	1	1%
	Bachelor	46	46%
Level of education	Master	27	27%
	PhD	27	27%
Type of translator	Part-time	95	95%
	Full-time	5	5%
Whether you have certificate	Yes	53	53%
or not	No	47	47%

In Table 1, among 100 respondents, the majority are female, comprising 63%. This finding aligns with previous research by (Fagan et al., 2014), which asserts that part-time employment is predominantly pursued by women with familial obligations, thus perpetuating gender inequities. The largest share is between 20 to 30 years old (59%), with only 1% being over 51 years old. Among the participants, 46% have earned a bachelor's degree, while 27% have acquired a master's degree. Notably, the rest are PhD holders but also choose to be translators. Clearly, 95% of them are part-time translators, which aligns with the previous study. According to Dam and Zethsen (2012), there is strong evidence to suggest that the translation profession is predominantly composed of part-time workers, freelancers, and women.

The general proportion of those who have obtained qualifications is 53%, while those who have not is 47%. However, they still work as translators. According to the Professional Qualifications Directive (2005/36/EC), translators' general line of work does not appear to be a "regulated profession" because unqualified individuals are permitted to operate as translators.

Table 2. How Many Years Have You Been Working on Translation

Type/Years	Frequency	Percent	Valid Percent
Less than a year	43	43.0	43.0%
One-three years	22	22.0	22.0%
Three-five years	21	21.0	21.0%
Five-ten years	8	8.0	8.0%
More than ten	6	6.0	6.0%
years			
Total	100	100.0	100.0%

In Table 2, the data from the survey indicates that the general proportion of those who have been working in translation for less than a year is 43%. By contrast, 22% and 21% of respondents have been working in translation for one to three years and three to five years, respectively. What is noteworthy is that only 6% of them have been working in this field for more than ten years.

Table 3. What Kind of Translation Tools Do You Prefer to Use

Res	ponses
N	Percent
37	12.4%
54	18.1%
55	18.5%
33	11.1%
30	10.1%
11	3.7%
11	3.7%
14	4.7%
5	1.7%
5	1.7%
4	1.3%
	N 37 54 55 33 30 11

The following translation tools in Table 3 are mostly utilized by respondents: ChatGPT, Google Translate, Youdao Dict, Powerword, NetEase, Deepl Translator, SDL Trados, Universal Document Translator, Wordfast, Microsoft Translator, Babylon Translator, MemoQ, MemSource, Google Translator Toolkit, Abby Finereader, PROMT Translator. Obviously, the respondents favor Chinese translation tools more than foreign tools, with Youdao Dict at 18.5%. Powerword and NetEase follow Youdao Dict, taking up 11.1% and 10.1%, respectively. Among the foreign tools, translators' first choice is Google Translate, accounting for 18.1%. Only 12.4% of individuals use ChatGPT, which means despite ChatGPT's notable competence in several NLP tasks, including MT and text summarization (Lu et al., 2024), Chinese part-time translators prefer using Chinese translation tools over ChatGPT.

Table 4. What's Your Purpose in Using ChatGPT

	Resi	ponses
Category	N	Percent
Chatting	35	17.9%
Look up the words	51	26.0%
Translation	53	27.0%
Academic writing	35	17.9%
Others	22	11.2%
Total	196	100.0%

Among individuals who select ChatGPT, Table 4 illustrates that some individuals use ChatGPT for conversation, while others employ it for word lookup, text translation, and academic writing. Few individuals utilize it solely for translation; as previously mentioned, ChatGPT is not their primary choice when seeking translation resources.

Table 5. Which Type of Translation Activity Will Use ChatGPT

Category	Frequency	Percent	Valid Percent
Routine translations	48	48.0	48.0%
Rough translations	7	7.0	7.0%
Complex translations	22	22.0	22.0%
All translations	19	19.0	19.0%
Don't know	4	4.0	4.0%
Total	100	100.0	100.0%

Most respondents (48%) believe that ChatGPT will primarily be utilized for routine-type translations in Table 5. The term "routine translation" often describes the practice of translating common or conventional writings that have a predictable structure or pattern. These translations are frequently straightforward and don't use specialized or sophisticated vocabulary. Translations done on a regular basis could include simple website material, basic product descriptions, and general communications like emails, letters, and memoranda. Because these texts don't require in-depth research or specialized subject expertise for typical translation. As previously indicated in the literature review, ChatGPT may perpetuate biases present in the training data, leading to inequitable or biased results. Another issue is its potential for malevolent applications, such as the creation of fraudulent or misleading language; therefore, many who utilize ChatGPT for translation restrict its use to routine translations.

Table 6. Which Occupations Will be Replaced by ChatGPT or Other AI

	Re	esponses
Category	N	Percent
Translators	21	6.8%
Teachers	40	12.9%
Assembly line worker	45	14.6%
Computer programmer	19	6.1%
Software engineer	19	6.1%
Data analyst	26	8.4%
Content creation	15	4.9%
Technical writing	16	5.2%
Advertising	16	5.2%
Journalist	13	4.2%
Financial analyst	16	5.2%
Personal financial Advisor	14	4.5%
Accountants	16	5.2%
Customer service agents	33	10.7%
Total	309	100.0%

Now that ChatGPT can perform multiple arrays of jobs, there are jobs displayed in Table 6 that are at risk of being replaced by ChatGPT. Respondents indicated that assembly-line workers (14.6%), teachers (12.9%), and customer service agents (10.7%) are the three most vulnerable occupations, followed by data analysts (8.4%). Computer programmers (6.1%) and software engineers (6.1%) face identical levels of risk. Only 6.8% of respondents believe that translators will be replaced by ChatGPT, indicating that they are confident about their careers and they do not view ChatGPT as a threat. This trend is supported by Karpinska and Iyyer (2023), asserting that although LLM translators can provide proficient paragraph-level translations, they cannot fully replace human translators in preserving the artistic integrity and value of literary works, nor address the ethical concerns related to the role of machine learning in literary translation.

Table 7. New Activities Unknown So Far That Might Emerge

	Res	ponses
Category	N	Percent
Translation and summary at	25	7.2%
the same time		
Editor/proofreader of AI	61	17.7%
translated text		
AI trainers	57	16.5%
Interaction with AI	42	12.2%
Translation of large arrays of	28	8.1%
texts		
Certification of AI	32	9.3%
translations		
Facilitating the process	13	3.8%
AI operator	24	7.0%
Interpretation of translations	17	4.9%
Multilingual	18	5.2%
referent/translator		
More simultaneous	18	5.2%
translations		
I cannot predict	10	2.9%
Total	345	100.0%

Science and technology are advancing by leaps and bounds. Accordingly, new technologies and activities, as depicted in Table 7, are emerging every second. Similar to ChatGPT, newly emerging activities will sustain the translation industry and keep translators employed, suggesting ChatGPT poses minimal or no threat to translators. Editor/proofreader of AI-translated text is deemed the job that is most likely to emerge, with the proportion being 17.7%. AI trainers are not far behind, accounting for 16.5%. People who take responsibility for interacting with AI are also expected to succeed, with a possibility of 12.2%.

Table 8. Do You Feel Threatened by ChatGPT

Frequency	Percent	Valid Percent
6	6.0	6.0%
8	8.0	8.0%
86	86.0	86.0%
100	100.0	100.0%
	6 8 86	6 6.0 8 8.0 86 86.0

In Table 8, the translators who were surveyed are generally confident about their future, holding the view that the advent of ChatGPT will not pose a threat to their occupation, as 86% of the respondents don't feel threatened by ChatGPT. They rely on themselves more than any other machine translation tools and believe they are more creative than machines. Whenever they need to turn to machines, they regard them as translation tools. That is why only 6% of the participants feel they will be replaced by ChatGPT. While AI disrupts the translation industry, significantly impacting lower-skilled translators, it does not entirely supplant experienced translators, particularly in specialized domains. As stated in previous studies, Pym (2021) asserts that AI enhances efficiency and productivity but does not supplant creative or high-context translation. This has also been supported by Toral and Way (2018), asserting that AI enhances, but does not perfect, English-language translations, necessitating human post-editing. This outcome is consistent with Moorkens' (2020) perspective, which posits that translators are progressively utilizing AI as a tool rather than perceiving it as a rival.

Table 9. When Do You Expect the ChatGPT Threat to Become Real

Category	Frequency	Percent	Valid Percent
Up to five years	8	8.0	8.0%
Up to ten years	9	9.0	9.0%
Up to twenty years	8	8.0	8.0%
I do not expect	75	75.0	75.0%
Total	100	100.0	100.0%

The surveyed respondents in Table 9 essentially reached a consensus that they do not expect the ChatGPT threat to become a reality, with the proportion being 75%. For 8% of respondents, the ChatGPT threat will occur in five years. By contrast, 9% feel that it will happen within ten

years. The remaining 8% hold the view that ChatGPT replacement will come true in the next twenty years.

5.2 Content Analysis of the Interview

Sample data-driven codes, definitions and example

Table 10. What's the Strength of ChatGPT for Translating from or to English

Codes	Descriptions	Examples
Enhancing Efficiency	ChatGPT can improve translation efficiency by automating the preliminary translation	"Since it is trained with English, ChatGPT can efficiently manager routine and high-volume tasks. It can generate initial drafts that are contextually coherent, hence minimizing the time allocated to fundamental translations. This enables human translators to concentrate on enhancing the product, addressing cultural subtleties, and managing intricate content."
	process.	"ChatGPT can facilitate translation memory management, enhancing consistency in terminology over extensive projects."
		"ChatGPT guarantees stylistic flexibility by examining the tone formality, and register of the input text and implementing suitable linguistic modifications during translation. It can transition amon diverse styles, including formal, informal, academic, or conversational depending on the circumstances."
Stylistic adaptation	ChatGPT possesses exceptional style adaptation abilities.	"ChatGPT's training on varied linguistic patterns allows it to emula stylistic elements such as comedy, emotion, and cultural reference corresponding with the original's intended effect. Nonetheless, althoug it may stylistically adapt, human assistance remains essential for high specialized or innovative works that necessitate profound cultur comprehension."
		"ChatGPT can markedly decrease costs in translation processes by automating repetitive procedures, efficiently managing substantial tex volumes, and diminishing the necessity for manual labor in producing translations. This results in a reduction of total expenses for enterprise necessitating multilingual content."
Reducing costs	ChatGPT can significantly reduce expenditures.	"By producing preliminary translation drafts and offering translation recommendations, ChatGPT can optimize processes, enabling human translators to concentrate on enhancing the final output instead of engaging in laborious chores. Moreover, the scalability of AI facilitate economical solutions, particularly for firms handling high-frequency translation requirements."

According to the respondents, ChatGPT can boost efficiency, facilitate style adaptation and minimize costs, as stated in Table 10. ChatGPT can markedly enhance translation efficiency by automating labor-intensive processes, enabling human translators to concentrate on more intricate and creative elements of the work (Vaswani et al., 2017). It also enables stylistic adaptability by modifying tone and formality based on the situation, thus improving the relevance of translations (Devlin et al., 2018). Moreover, by automating preliminary drafts and enhancing workflow efficiency, ChatGPT aids in reducing translation expenses, especially for large-scale projects (Koehn, 2020). Interestingly, respondents acknowledge the importance of human interaction, aligning with Venuti's (2017) assertion that although ChatGPT can stylistically adapt, human involvement is crucial for specialized or creative texts that demand profound cultural comprehension.

Table 11. How Do Part-time Translators Working with English Perceive ChatGPT's Impact on Job Security

Codes	Descriptions	Examples
ChatGPT serves merely as an assistant for English translation	ChatGPT functions solely as an assistant when dealing with English	"ChatGPT's comprehensive training data in English aids translators by offering access to a wide array of linguistic patterns, idiomatic idioms, and contextual subtleties. Utilizing extensive datasets, ChatGPT can provide precise translations, propose stylistic alternatives, and manage variances in syntax and tone."
ChatGPT serve as a complement rather than a replacement	ChatGPT functions merely as a translation apparatus rather than a substitute.	Owing to its extensive English training data and its capabilities in processing extensive text volumes, automating repetitive operations, and producing rapid translation drafts, ChatGPT functions as a supplement. Nonetheless, its constraints in cultural sensitivity, emotional profundity, and the management of highly specialized texts require human involvement."
ChatGPT is neither an adversary nor a malevolent entity,	n adversary nor a ChatGPT is neither an	"ChatGPT is regarded as a translation tool as Google, Youao Dic etc. It can be used for translation at the beginning; however, its rendering still requires human post-evaluation and correction."
but rather a it is, rather, a partner collaborative assistant	"We should relinquish the perspective that whether human will beat machine or vice versa. What we need to do is to regard it as a part of our life, as a product of the development of as industry to a certain stage. It is not an enemy or devil but a helper."	

Notably, part-time translators working with English perceive ChatGPT as a helper, assistant, translation machine, and co-adjutant rather than a competitor in Table 11. When dealing with English translation, ChatGPT's English training data significantly aids translators, particularly in English-language translation. Primarily, ChatGPT demonstrates proficiency in comprehending context, which is essential for precise translations (GTE Localize, 2024). Furthermore, the model's comprehensive training on varied linguistic data enables it to manage a broad spectrum of English language pairs, thus facilitating translations across numerous languages, particularly less prevalent ones. The extensive language support renders ChatGPT a multifaceted resource for translators addressing varied linguistic requirements (McKay, 2024). In this context, ChatGPT serves as an excellent resource for part-time translators engaged with English.

Conversely, ChatGPT is merely a computer devoid of cognition; hence, it can never match the creativity of human translators. It will never replace human translators for critical thinking, originality, and adaptability in unforeseen circumstances. Consequently, ChatGPT will not supplant human intellect; it merely serves as an auxiliary tool that can alleviate workload. Furthermore, regarding literary masterpieces, academic papers, or governmental documents, ChatGPT is not an optimal choice. The text needs post-editing and revision.

Table 12. The Coping Mechanism of Part-time Translators in Response to the Potential AI Replacement Crisis

Codes	Descriptions	Examples
Improve English language competency	Enhance English language proficiency through several ways that emphasize both linguistic skills and cultural comprehension	"Part-time translators must engage in regular practice with a variety of English texts—spanning literature, technical writing, and contemporary media—to enhance their vocabulary, grammar, and syntax. Extensive reading is essential for comprehending diverse registers, tones, and linguistic variances, facilitating the development of a more adaptable translator."
Do not harbor animosity towards ChatGPT	Refrain from exhibiting hostility towards ChatGPT	"We should relinquish the perspective that whether human will beat machine or vice versa. What we need to do is to regard it as a part of our life, as a product of the development of as industry to a certain stage. It is not an enemy or devil but a helper."
Acquire the ability to live with ChatGPT	Acquire the skills necessary for cohabitation	"We should learn to coexist, cooperate and learn from ChatGPT. Only in this way, can I say that we will achieve mutual benefit. ChatGPT, as a potential helper and opponent will help translators to be more prudent, agile and professional. Anyway, we should be more positive and look at the bright side."
Adhere to our areas of expertise	Part-time translators ought to cultivate proficiency in domains where human discernment is essential	"Part-time translators ought to cultivate proficiency in fields necessitating human judgment, such as legal, medical, or technical translation, where precision and specialized knowledge are essential. These domains are less susceptible to automation owing to the necessity for specialized knowledge and the significant consequences associated with misinterpretation."
Enhance capabilities in technology	Enhance proficiency in technology and Computer-Assisted Translation (CAT) tools	"The growing use of AI into translation systems indicates that expertise in these technologies will be a crucial distinction. By embracing this technological transition and highlighting their value-added contributions in translation processes, part-time translators may effectively address the problems presented by AI."
Pursue diversified growth	Have interdisciplinary awareness	"We must realize that English alone is not enough, you've got to train some other skills. Someday, English might lose its strength in terms of helping you make a living. At that time, you could make a turn to other fields. What I mean is not seeking job hopping. What I am saying is that you should learn to equip yourself with a combination of skills. Primarily, one should engage in extensive reading across several areas to amalgamate diverse information."

The respondents acknowledged the strengths of ChatGPT in Table 12. Although they don't hold the view that ChatGPT will oust them from the market, they do realize the need for change. Most importantly, they have developed coping mechanisms in response to the AI replacement crisis. Their strategies include enhancing English language competency and technological abilities such as CAT, embracing ChatGPT, and learning to coexist with it.

Table 13. How Translators Should Navigate AI Integration

Codes	Descriptions	Examples
Understand the mechanisms of AI translation	Comprehend the Mechanisms of AI Translation	"It is essential for translators, particularly us working part-time, to comprehend NMT, LLMs, and AI-assisted post-editing."
		"We ought to remain cognizant of biases and mistakes in AI-generated translations."
Obtain training in AI-enhanced translation	Acquire Training in AI-enhanced translation	"On one side, we ought to enroll in AI and translation classes; it is not the time to be frugal. Conversely, we must proficiently utilize CAT (Computer-Assisted Translation) programs such as SDL Trados, MemoQ, and Smartcat."
		"Acquiring PEMT skills to enhance AI-generated material is very important."
Concentrate on specialized translation domains	Focus on niche translation fields	"Creative and literary translation is unequivocally the domain in which AI encounters significant challenges, as it is incapable of conveying tone, humor, or cultural nuance."
		"In my opinion, marketing and transcreation play a significant role in this context, as AI is incapable of producing persuasive, culturally nuanced marketing content."
		"Medical and pharmaceutical translation is a critical sector, as inaccuracies in AI translations can pose life-threatening risks."
Become an AI evaluator and quality assurance specialist	Assume the role of an AI Evaluator and quality assurance specialist	"AI necessitates human supervision to ensure precision, comprehensibility, and cultural relevance. Besides, translators may specialize in the improvement of AI-generated content."
		"AI is capable of generating initial drafts for translators to improve and localize, and it can also aid with terminology lookup, consistency verification, and text summarizing."
Utilize AI to augment efficiency	Employ artificial intelligence to enhance efficiency.	"AI-powered CAT technologies can enhance workflow efficiency. Additionally, they can facilitate the automation of glossary generation, translation memory maintenance, and formatting chores."
Minimize dependence on AI	Avoid over-reliance on AI	"AI-generated translations should consistently undergo verification for inaccuracies and prejudice. Furthermore, guarantee confidentiality in sensitive documents (e.g., legal or corporate materials)."
Promote AI transparency and equitable compensation	Advocate for AI transparency and fair remuneration	"As a matter of fact, I think it is imperative to implement proper disclosure when utilizing AI-assisted translations. Advocate for equitable remuneration for post-editing work, as PEMT demands cognitive exertion that surpasses mere proofreading."

In terms of navigating AI integration, respondents believe that the future of translation lies in "AI + Human Collaboration" rather than a competition between "AI and Human." The most effective translators will be those who utilize AI as a tool, refine their skillsets, and concentrate on high-value knowledge. However, they also recognize the necessity of reducing reliance on AI while promoting openness and equitable compensation in its use.

6. Discussion and Conclusion

6.1 Perceptions of Part-time Translators Utilizing English Regarding ChatGPT's Influence on Job Security

The research demonstrates that part-time translators utilizing English do not regard ChatGPT as a threat to their profession, corroborating the prior study that asserts such pessimistic forecasts of extensive job displacement are unfounded (Kirov & Malamin, 2022). Part-time translators see ChatGPT as a tool that can help them become more proficient and productive while translating into or out of English. English is the most frequently translated language in the world due to its standing as the main language of international communication in domains such as commerce, science, and diplomacy (Hewson, 2009) and as a "global" language (Crystal, 2003), which guarantees a sizable market for English translation. Additionally, the vast amount of English training data that ChatGPT offers gives translators useful tools for precise and contextually-relevant translations. The model can distinguish multiple registers (formal, casual), adjust to varied tones (e.g., technical, literary), and suggest idiomatic words based on huge, diverse text corpora. This assistance improves efficiency and helps translators navigate intricate linguistic structures. The model also assists by providing rapid drafts that human translators can edit for accuracy, style, and cultural nuances (Vaswani et al., 2017; Devlin et al., 2018). ChatGPT's cutting-edge technology also enables it to interact with the subtleties of the English language.

6.2 The Coping Strategies Employed by Part-time Translators Encountering Competition from ChatGPT

To survive the potential AI replacement crisis, clients may expect lower translation rates due to AI, and AI could replace lower-quality translation tasks, reducing demand. Part-time translators have developed the following strategies: A) Improve English language proficiency; B) Do not harbor animosity towards ChatGPT; C) Acquire the ability to coexist with ChatGPT; D) Adhere to areas of expertise; E) Enhance technological capabilities; F) Pursue diversified growth. Because modern translation technology extends beyond traditional bounds; it automates linguistic communication by assuming control of target text production. Translators will be pushed further into obsolescence if they fail to adapt to the situation and modify their job descriptions, gradually losing their competencies and self-worth. The faithful transfer of information across languages, known as "pure" translation, must evolve into "tailoring products to meet the needs of clients" if translators are to continue doing business and maintaining their position (Kujam äki, 2023). As Sandrini (2022) stated, "To succeed in such a rapidly evolving context, translators must adapt." Translators must offer diverse services that extend beyond individual translation projects to thrive in the modern service-oriented economy. These services include multilingual terminology work, language data analysis and management, multicultural marketing, translation technology consulting, and many others. Meanwhile, in a collaborative environment, machines and humans can optimally utilize their complementary skills and strengths (Antonelli & Bruno, 2023). Therefore, part-time translators working with English can address the potential challenges presented by AI by adapting to this technological transformation and emphasizing their valuable contributions to translation operations.

6.3 Implications

This section discusses the ramifications for translation agencies, comparing freelancers to full-time employees, as well as addressing educational and training programs and labor regulations.

The emergence of LLMs like GPT-4 and ChatGPT is initiating a new phase in the MT domain (Lyu et al., 2024). Certainly, ChatGPT exerts economic, ethical, and professional influences on translation. Consequently, translation agencies face both enhanced efficiency and quality issues. Specifically, ChatGPT enables organizations to manage substantial quantities of text at reduced costs. Simultaneously, AI decreases turnaround times, allowing agencies to undertake additional tasks. Primarily, PEMT has become a conventional workflow. Nonetheless, as AI-generated translations diminish the need for manual labor, agencies may decrease compensation rates for translators. PEMT rates are inferior to human translation rates, raising questions regarding equitable compensation. ChatGPT may produce translation inaccuracies, biases, and misinformation, necessitating proficient human supervision, which aligns with the statement of Mohamed et al. (2024) who assert that significant enhancement in MT efficacy necessitates the joint integration of human expertise. Lastly, agencies must reconcile cost efficiency with quality assurance.

The implications for both freelancers and full-time employees are analogous to those for part-time translators, specifically regarding job security and work schedules. However, this study assesses ChatGPT's function as a complementary tool; the potential for long-term skill degradation must not be overlooked. Carr (2015) posited that excessive dependence on automation may diminish profound cognitive involvement in language processing. Moreover, Bundgaard and Schjoldager (2016) assert that translators who regularly utilize MT often see a decline in problem-solving flexibility over time. AI-assisted workflows promote efficiency but may diminish the necessity for active language decision-making. To alleviate skill degradation, training in post-editing and judicious AI application could enhance productivity while minimizing potential skill attrition. To harness the full potential of ChatGPT to enhance efficiency and adaptation, and considering how ChatGPT interacts with the subtleties of the English language, the following are the implications for translation processes using English. First, ChatGPT's context-aware output can help translation methods by minimizing literal translations that misunderstand problematic terms. Second, to ensure that translations adhere to cultural norms and expectations, human translators may still be needed to check culturally sensitive texts. Third, translation experts need to adjust by concentrating on post-editing texts produced by machines, combining human creativity with efficiency. To guarantee fair language representation, ethical issues must be prioritized by translators and AI developers.

Regulation of AI-generated translations, fair compensation for AI post-editing work, and intellectual property and copyright issues are three primary concerns that policymakers must prioritize. Furthermore, pre-training or fine-tuning models on large datasets may add

inductive social biases, impacting translation equity (Meade et al., 2022). Thus, ethical principles in AI are especially vital during various phases of model development.

The implications of AI translation on education and training programs, especially concerning the English language in China, could be concluded as:

1) Systematization and Professionalization of TS

TS has notably broadened in recent decades, as academic institutions incorporate professional practices into their curricula to enhance experiential learning (Kiraly, 2000, 2005, 2015; Massey, 2005; Gonz Aez-Davies & Ra flo, 2016). Nonetheless, TS requires additional professionalization and systematization. Research increasingly examines the impact of translation technologies on translator education, particularly in relation to evolving industry demands. It posits that MT and AI are not the sole contributors to inferior translations; rather, the quality of corpora, term bases, and algorithms, often produced by non-professional translators, is crucial.

2) Curriculum System Reform

The primary focus of curricular system change is curricular adaptation. Translation education evolves from traditional human translation to PEMT. Translation programs should integrate AI-assisted translation modules, focusing on PEMT, AI bias correction, and human-AI collaboration. Students should receive training in AI customization, including the fine-tuning of language models for specific translation tasks. The secondary objective is to enhance collaboration between humans and AI. AI should be viewed as an auxiliary tool rather than a replacement, underscoring the importance of human expertise in creative, legal, and literary translation. Programs must emphasize hybrid workflows, allowing students to determine when to depend on AI and when human involvement is crucial. The primary emphasis should also be on industry preparedness. Graduates must possess AI-enhanced translation skills to meet evolving industry demands. Internships with AI-integrated translation companies will provide real experience with genuine AI-driven translation methodologies. Finally, educational programs must incorporate training on AI ethics, bias prevention, and data privacy, given increasing evidence that AI produces biased or harmful results (Bender & Koller, 2020; Chan et al., 2023; Rozado, 2023).

7. Limitations and Implications for Future Research

This study has several restrictions. The researchers initially recognize the limitations of sampling due to non-random selection and regional emphasis. The employment of convenience and snowball sampling within a single nation considerably restricts generalizability, because there are likely variations in how technologies are used in various nations or other communities, particularly those EU members with highly advanced digitalization, as evidenced by DESI. Secondly, the inaccessibility of full-time translators in China prevents statistics about them from being available; thus, future study should compare the perceptions of both full-time and part-time translators.

Furthermore, despite our examination of coping mechanisms and adaptation techniques, there is a lack of empirical information about their efficacy. Future research should investigate whether these changes improve productivity and job security. Currently, translation technologies are advancing rapidly. A forthcoming study on the adoption of these technologies by translation firms, especially those utilizing AI, could potentially transform the sector. Future studies should, from this angle, also cover the independent contractors who perform translation work as well as the specialized businesses that offer translation services.

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Authors' contributions

Lina Zhou managed data collection, analysis, and manuscript composition. Dr. Muhammad Alif Redzuan Abdullah, Dr. Syed Nurulakla bin Syed Abdullah and Dr. Junhua Peng directed the study's design, methods, and literature review. Both authors engaged in the discourse and amendments and sanctioned the final article.

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