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Cognitive Processes in Culinary Translation: Implications for Mandarin Indonesian Translator Education

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Abstract

This study investigates the cognitive processes involved in translating Mandarin food menu items into Indonesian, with particular attention to pauses, self-corrections, and the use of online reading materials. Grounded in translation process research, the study adopts a qualitative descriptive approach to explore how a translator negotiates meaning, culture, and linguistic equivalence during translation. The data consist of a Mandarin food menu comprising 15 items (85 words), translated by a qualified Mandarin–Indonesian translator. The data were collected using Translog II to record keyboard activities and pauses, and VLC Media Player to capture screen activities related to online resource consultation. The findings reveal that pauses are a crucial indicator of the translator’s cognitive effort, particularly when resolving cultural and semantic ambiguities. Self-corrections emerged as a dominant strategy, including meaning correction, word substitution, addition, deletion, grammar correction, and capitalization. Notably, meaning correction was frequently motivated by cultural sensitivity, such as replacing the term *Cina* with *Tionggok* to avoid discriminatory connotations in Indonesian. The study also shows that while machine translation tools—especially Google Translate—play a supportive role in comprehension, they are insufficient for producing culturally and contextually appropriate translations without human intervention. Overall, this research highlights the complexity of the translation process and underscores the importance of cognitive awareness, cultural knowledge, and critical revision skills in culinary translation. The findings contribute to translation process studies and offer pedagogical implications for translator training, particularly in the use of technology-assisted translation tools.

Key words: cognitive effort, cultural mediation, Mandarin food, revision competence, translation pedagogy

Introduction

Translation has long been recognized as a complex cognitive activity that goes far beyond the mechanical transfer of words from one language to another (Adha et al., 2024; Ritonga & Yusuf, 2020; Rojo, 2015; Shreve, 2018; Sofyan et al., 2023, 2026). Within the field of Translation Studies, scholars have increasingly emphasized that translation involves intricate mental processes in which translators continuously negotiate meaning, structure, culture, and context while simultaneously functioning as readers of the source text and writers of the target text. This recognition has led to the development of translation process research (TPR), a branch of Translation Studies that seeks to uncover what occurs in the translator's mind during the act of translation (Holmes, 2000).

Translation Studies can be broadly divided into three interrelated domains: theoretical, descriptive, and applied studies (Laviosa, 2018; Toury, 2012; Tymoczko, 2006). Within descriptive translation studies, particular attention has been given to the translation process as opposed to translation products alone. Translation process research focuses on how translation is rather than merely the what, aiming to explore the cognitive, psychological, and behavioral dimensions underlying translators' decision-making processes (Jakobsen, 2014; Latif, 2025; Risku, 2014). From this perspective, translation is understood as a dynamic, non-linear activity in which comprehension, interpretation, reformulation, and revision often occur recursively rather than sequentially.

In recent years, the role of technology in the translation process has attracted increasing scholarly attention (Adnan et al., 2025; Bundgaard et al., 2016; Kaba & Gjinali, 2023; Risku, 2014; Rojo, 2015; Schiopu, 2026). The widespread availability of online dictionaries, corpora, encyclopedias, and machine translation tools has significantly transformed translators' working environments. Tools such as Google Translate, Youdao Dictionary, and online encyclopedias are frequently used not as final solutions but as cognitive aids that support comprehension and decision-making. While machine translation can provide quick access to tentative equivalents, several studies have shown that its output often lacks cultural sensitivity, contextual appropriateness, and pragmatic nuance. As a result, human translators remain indispensable, particularly in contexts where cultural meaning plays a crucial role.

As translation process research evolved, scholars increasingly acknowledged that translation cannot be adequately explained without reference to cognition. Jääskeläinen (1999) argues that translation is a problem-solving activity in which cognitive effort varies depending on task difficulty, text type, translator expertise, and situational constraints. Cognitive effort manifests itself through observable behaviors such as pauses, revisions, and self-corrections. These behaviors provide valuable insights into translators' mental activities and decision-making processes, making them central objects of investigation in TPR.

Among the observable indicators of cognitive processing, pauses have been widely studied as signals of increased cognitive load. Pauses often occur when translators encounter difficulties in understanding the source text, selecting appropriate equivalents, or ensuring grammatical and stylistic adequacy in the target language (Fang, 2020; Kruger, 2016; Muñoz Martín & Cardona Guerra, 2019; Musselman et al., 2019; O'Brien, 2006). Jääskeläinen (1999) notes that longer or more frequent pauses typically indicate moments of heightened cognitive effort, such as lexical search, semantic disambiguation, or cultural adaptation. Similarly, Ortiz-Martínez et al. (2016) emphasize that pauses often coincide with the use of external resources, reflecting translators' need for additional information or confirmation.

Another key feature of the translation process is self-correction, which refers to the translator's revision of previously produced target text segments (Antunović & Pavlović, 2011; Cao et al., 2023). Self-correction is not merely an error-correction mechanism but an integral part of meaning negotiation. Malkiel (2009) demonstrates that self-corrections reveal translators' evolving understanding of the source text and their growing awareness of target-language norms. Revision and self-correction are essential professional skills, enabling translators to improve accuracy, fluency, and appropriateness. In translation process research, self-corrections are often categorized into types such as word substitution, addition, deletion, grammar correction, and meaning correction, each reflecting different cognitive operations.

One such context is culinary translation, which involves the translation of food-related texts such as menus, recipes, and food descriptions. Culinary texts pose unique challenges due to their dense cultural content, culture-specific terminology, and pragmatic functions (Aminulloh et al., 2025; Gradinaru, 2025; Rebecchi & Da Silva, 2017; Rebecchi & Tagnin, 2020). Food names often carry cultural associations, preparation methods, and social meanings that may not have direct equivalents in the target language. Consequently, translators must balance fidelity to the source text with comprehensibility and acceptability in the target culture. This balancing act often leads to increased cognitive effort, frequent pauses, and extensive self-correction.

In the context of Mandarin–Indonesian translation, culinary texts present additional complexities. Mandarin food names frequently employ metaphorical expressions, cooking method indicators, and cultural references that may be unfamiliar to Indonesian readers (Chen et al., 2020; Kencana et al., 2025; Setyaningsih, 2020; Wundari & Wiratikusuma, 2026). Moreover, certain lexical choices have sociopolitical implications. For instance, the term *Cina* in Indonesian has historically carried discriminatory connotations, leading to its replacement with the more neutral term *Tiongkok* following official government regulations. Such considerations require translators to exercise cultural sensitivity and ethical judgment, further intensifying the cognitive demands of the translation process.

Despite the growing body of research on translation process and technology-assisted translation, studies focusing specifically on Mandarin–Indonesian culinary translation remain limited. Most existing research has concentrated on European language pairs or general translation tasks, leaving a gap in our understanding of how translators working with Asian languages and culturally loaded texts navigate cognitive challenges. Furthermore, few studies have combined keystroke logging data with screen recording data to examine both internal processing indicators (such as pauses and revisions) and external resource use in an integrated manner.

To address this gap, the present study investigates the cognitive processes involved in translating Mandarin food menu items into Indonesian, with particular attention to pauses, self-corrections, and the use of online reading materials. By employing Translog II to record keystroke activity and pauses, and VLC Media Player to capture screen-based resource consultation, this study aims to provide a comprehensive account of the translator's cognitive behavior during the translation process. Through qualitative analysis of these data, the study seeks to uncover how linguistic, cultural, and technological factors interact in shaping translation decisions.

Specifically, this research addresses the following objectives: (1) to identify patterns of pauses as indicators of cognitive effort in Mandarin–Indonesian culinary translation; (2) to classify and analyze types of self-corrections employed by the translator; and (3) to examine the role of online reading materials and machine translation tools in supporting or constraining the translation process. By focusing on a real translation task performed by a qualified translator, the study offers empirical insights into the dynamic and multifaceted nature of translation as a cognitive activity.

Beyond its contribution to translation process research, this study also offers important implications for translator education. Understanding how translators experience cognitive challenges, negotiate meaning, and utilize external resources during translation can provide valuable insights for developing more effective pedagogical practices in translation classrooms. Rather than viewing translation as a product-oriented activity that only evaluates the accuracy of final texts, translation education needs to emphasize the underlying processes through which students analyze, interpret, revise, and justify their translation decisions. The findings on pauses, self-corrections, and online resource consultation demonstrate that translation competence involves not only bilingual proficiency but also strategic competence, cultural awareness, and critical use of technology. Therefore, this study contributes to the field of education by highlighting the importance of process-based approaches in translator training, where students are encouraged to reflect on their cognitive activities and develop problem-solving strategies. Furthermore, the integration of tools such as keystroke logging and screen recording suggests potential applications for technology-enhanced translation pedagogy, enabling educators to better understand students' difficulties and provide targeted instructional support. In this way, the study expands the discussion of translation education by connecting

cognitive translation processes with the development of reflective, culturally sensitive, and technologically competent translators.

Literature Review

Cognitive Process in Translation

Translation is increasingly understood as a complex cognitive activity involving a series of mental operations, including comprehension, interpretation, problem-solving, decision-making, and revision. Unlike a purely linguistic transfer process, translation requires translators to continuously construct meaning by negotiating relationships between source-text information, target-language norms, and cultural contexts. Within Translation Process Research (TPR), cognitive approaches aim to investigate the invisible mental activities underlying translators' observable behaviors during the translation process.

Jääskeläinen (1999) emphasizes that cognitive effort in translation varies depending on task complexity, translator expertise, text characteristics, and situational factors. This cognitive effort becomes observable through behavioral indicators such as pauses, revisions, and self-corrections. These indicators provide valuable insights into how translators identify problems, evaluate alternatives, and make decisions during translation. From an educational perspective, understanding cognitive processes is essential because translation competence cannot be developed only through product evaluation; learners need awareness of the strategies and reasoning involved in producing effective translations. Therefore, investigating translators' cognitive processes can inform translator education by supporting process-oriented teaching approaches, reflective learning practices, and the development of strategic competence in future translators.

Method

This study utilized a qualitative method related to data in the form of words, rather than numbers. Data collection used several instruments, namely Translog II as a tool to observe keyboard activity during the translation process, and VLC as a tool to record activities such as the translator's search for online reading materials. The researcher used source triangulation to obtain validity for the translated data sources. In this case, the researcher used data from a Mandarin-language food menu that was to be translated by the translator into Indonesian. The food menu consists of 15 sentences comprising 85 words.

The translator was selected through a qualification process, namely translators who passed HSK 5, which was held by the official Confucius Institute in collaboration with the Chinese government in Medan, with a minimum score of 180 and a maximum score of 300. They also passed the UKBI (Indonesian Language Proficiency Test) with a minimum score of 578. The selection process resulted in one student being deemed suitable to translate the text. The student is male, 21 years old, resides in Lampung, has studied and passed a course in translation theory with a B+ grade, and has taken

courses in Mandarin-Indonesian and Indonesian-Mandarin translation with an A grade. In the typing speed test, the student was able to type 7-8 Mandarin words in 10 seconds, while in Indonesian typing, he was able to type 6 words in 10 seconds. In 1 minute, the student can type 42-56 words, while in Indonesian, he can produce 60 words. Furthermore, in the internet test, the internet speed reached 5-7 Mbps. There were 42 types of sentences in Mandarin in the food menu, and in this test, the Zoom application was used to monitor the translation activities, and VLC Media Player was used to record the students' digital traces when searching for reading materials.

Result And Discussion

Result

This section reports the findings on the translation process involved in rendering Mandarin food menu items into Indonesian. Data were collected using Translog II and VLC Media Player to capture the translator's typing activity, pauses, and consultation of online reading materials. Particular attention is given to three aspects of the process—pauses, self-corrections, and online resource use—which provide insights into the translator's cognitive effort and decision-making. The findings are presented through tables and illustrative examples and interpreted in relation to relevant theories of translation process research. This analysis sheds light on how the translator negotiates linguistic and cultural meaning while developing the target-text equivalents. The result of the analysis is presented in the following table 1.

Table 1. The Result of the Analysis

No	Data			Pause	Self-Correction	Reading Materials Translation
	Mandarin	Indonesia				
		Initial Draft	Final Draft			
1	中国菜谱大全	Kumpulan Resep Makanan China Lengkap (Complete Collection of Chinese Food Recipes)	Daftar Makanan Khas Tiongkok (List of Typical Chinese Foods)	00:41	Grammar correction, dan deletion	Google translate, youdao

2	老外最爱的炸春卷	Lumpia goreng favorit orang asing (Foreigners' favorite fried spring rolls)	Lumpia Goreng (fried spring rolls)	00:53	Deletion	Youdao Dictionary, Google Translate
3	中国味道的烤土豆	Kentang Panggang Cina (Chinese Roasted Potatoes)	Kentang Panggang khas Tiongkok (Tiongkok Roasted Potatoes)	0:50	Meaning correction dan word addition	Youdao Dictionary, Google Search
4	中国式炒荷兰豆	Kacang Polong Goreng gaya Cina (Chinese-Style Fried Peas)	Tumis Kapri ala Tiongkok (Tiongkok Style Stir Fried Snow Peas)	00:45	word substitution, grammar correction dan meaning correction	Youdao Dictionary, Google Translate, Google Search
5	羊肉抓饭	Pilaf Daging Domba (Lamb Pilaf)	Nasi pilaf Daging Kambing (Goat Rice Pilaf)	01:14	word addition dan meaning correction	Youdao Dictionary, Google Translate, Google Search
6	锦脆汉堡 (中国风味)	Burger renyah gaya Cina (Chinese-Style Crispy Burger)	Burger krispi ala Tiongkok (Chinese-Style Crispy Burger)	01:00	word substitution dan meaning correction	Google translate, youdao, wikipedia,
7	豆腐衣包饭	Nasi Bungkus Tahu (Tofu Wrapped Rice)	Nasi Gulung Kulit Tahu (Tofu Skin Rice Rolls)	01.05	meaning correction dan word addition	Google translate, youdao, baidu baike, wikipedia

8	香煎洋芋擦擦	Kentang Gosok Goreng (Potatoes Fried Rubs)	Kentang Parut Goreng (Fried Grated Potatoes)	00:50	meaning correction	Google translate, cookpad, google search
9	蚝烙	Merk Tiram (Oyster Brand)	Telur dadar tiram (Oyster Omelet)	00:51	Meaning correction	Google translate, google search
10	泰式菠萝炒饭	Nasi Goreng Nanas Thailand (Thai Pineapple Fried Rice)	Nasi Goreng Nanas ala Thailand (Thai Style Pineapple Fried Rice)	00:50	word addition dan Capitalization	Google translate
11	中国式汉堡	Burger gaya Cina (Chinese-Style Burger)	Burger ala Tiongkok (Tiongkok Style Burger)	00:34	word substitution dan meaning correction	Youdao Dictionary, Google Translate
12	黄油蜂蜜	Mentega Sayang (Honey Butter)	Mentega Madu (Honey Butter)	00:35	meaning correction	Google translate
13	芒果心形冻	Jelly mangga berbentuk hati (Heart-Shaped Mango Jelly)	Jeli Mangga (Mango Jelly)	00:30	word substitution dan deletion	Google translate, youdao
14	蟹肉秋葵浓汤	Kepiting Gumbo Sup (Crab Gumbo Soup)	Sup Gumbo Kepiting (Crab Gumbo Soup)	00:55	grammar correction	Google translate,

15	火腿夹	Roti Sandwich (Sandwich)	Roti Lapis Daging (Meat Sandwich)	00:25	word substitution	Google translate, cookpad
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Pauses provide insight into the translator's cognitive activity, particularly when searching for appropriate equivalents or consulting source materials to support translation decisions (Jääskeläinen, 1999; Ortiz-Martinez, 2016). Over the course of the translation task, the translator spent 17 minutes and 14 seconds in total, of which 11 minutes and 59 seconds were recorded as pauses. The duration of these pauses varied across the translation units. For example, the translation of 羊肉抓饭 (Yáng ròu zhuā fàn) involved a pause of 1 minute and 14 seconds. During this interval, the translator consulted several online sources, including Wikipedia and Baidu Baike, to identify an appropriate Indonesian equivalent.

Self-correction constitutes another important aspect of the translation process, particularly when an initial lexical choice does not adequately convey the meaning or information expressed in the source text (Malkiel, 2009; Koponen, 2019; Koponen et al., 2020). The self-corrections identified in the present study illustrate how the translator continuously evaluated and modified initial translation choices. The relevant data are presented below.

DATA 1

Source Language = 中国菜谱大全

Pinyin = Zhōngguó cài pǔ dàquán

Initial Draft = Kumpulan Resep Makanan China Lengkap (Complete Collection of Chinese Food Recipes)

Final Draft = Daftar Makanan Khas Tiongkok (List of Typical Chinese Foods)

Data 1 shows that the translator used two types of self-correction in translating the data, namely grammar correction and deletion. Grammar correction was used in self-correction to improve the grammatical structure of the target language, namely Indonesian, while deletion was used for the word 大全 (dàquán), which means 'whole'. Deletion was applied by the translator because the word 菜谱 (càipǔ) means 'menu list', so that word already encompasses all the food names on the list.

Data 2

Source Language = 老外最爱的炸春卷

Pinyin = Lǎowài zuì ài de zhà chūnjuǎn

Draf Awal = Lumpia goreng favorit orang asing (Foreigners' favorite fried spring rolls)

Final Draft = Lumpia goreng (fried spring rolls)

The data 2 shows that the translator used the type of self-correction known as word deletion. The initial draft of the sentence 老外最爱的炸春卷 (Lǎowài zuì ài de zhà chūnjuǎn) means 'foreigners' favourite fried spring rolls,' explaining that this food is liked and ordered by foreigners, so in the final draft, the word deletion applied by the translator does not affect the information in the source language. The reason why the phrase 老外最爱 (Lǎowài zuì ài) was omitted is that it is clear that 炸春卷 (zhà chūnjuǎn) already describes the name of the food.

Data 3

Source Language = 中国味道的烤土豆

Pinyin = Zhōngguó wèidào de kǎo tǔdòu

Initial Draft = kentang panggang Cina (Chinese Roasted Potatoes)

Final Draft = Kentang panggang Khas Tiongkok (Tiongkok Roasted Potatoes)

In data 3, it shows that the translator used meaning correction and word addition types of self-correction. Meaning correction was applied to the initial draft of the word 中国 (Zhōngguó), which had the word 'Cina' changed to 'Tiongkok'. This is because the term 'Cina' has psychosocial-discriminatory connotations in the social relations experienced by Indonesian citizens of Chinese descent, so the term 'Tiongkok' is used to avoid this (DECISION OF THE PRESIDENT OF THE REPUBLIC OF INDONESIA, number 12 of 2014). In addition to meaning correction, word addition was applied to the word 'khas' (typical). The application of self-correction word addition was used to explain that the name of the food, 中国味道的烤土豆 (Zhōngguó wèidào de kǎo tǔdòu), is typical of China.

Data 4

Source Language = 中国式炒荷兰豆

Pinyin = Zhōngguó shì chǎo hélándòu

Initial Draft = Kacang polong goreng khas Cina (Chinese-Style Fried Peas)

Final Draft = Tumis Kapri khas Tiongkok (Tiongkok Style Stir Fried Snow Peas)

The translator applied word substitution, grammar correction, and meaning correction to data 4. In word substitution, the initial draft was changed from the phrase 'Kacang polong' to the word 'Kapri'. The application of self-correction did not affect the meaning of the source language, namely 荷兰豆 (hélándòu), which is 'green beans' or also known as 'kapri'. Meanwhile, meaning correction was applied to the word 炒 (chǎo), which is "fry", and was changed to the word 'stir-fry'. According to

Cao et al. (2002:162), Modern Chinese Dictionary, the word 炒 (chǎo) means to cook using a small amount of oil, while the word 炸 (zhà) means to cook using a large amount of oil. Similarly, in Indonesian, the word 'goreng' tends to use much oil, while 'tumis' uses a little oil (Aziz et al., 2022, online Indonesian dictionary). In addition, meaning correction was also applied to the initial draft of the word 'Cina', which had a psychosocial-discriminatory meaning, and was changed to the word 'Tiongkok'. Furthermore, grammar correction was used by the translator because the initial draft still followed the grammar of the source language, Mandarin, while the target language in the translation process was Indonesian. Automatically, grammar correction was applied to follow the target language

DATA 5

Bahasa Sumber = 羊肉抓饭

Pinyin = Yáng ròu zhuā fàn

Initial Draft = Pilaf daging domba (Lamb Pilaf)

Final Draft = Nasi pilaf daging kambing (Goat Rice Pilaf)

The translator applied self-correction, namely word addition and meaning correction, to the sentence 羊肉抓饭 (Yáng ròu zhuā fàn) in data 5. Word addition was used for the word 'rice' placed at the beginning of the sentence. This addition was made because the sentence 羊肉抓饭 (Yáng ròu zhuā fàn) contains the word 饭 (fàn), which means 'rice' (Cao et al., 2002:381). Self-correction was applied to the word "sheep" in the initial draft, changing it to 'goat' in the final draft. This change was made because the word 'sheep' has a different meaning from 'goat'. The word 羊 (yáng) actually means "goat", while 'sheep' is 绵羊 (miányáng) (Cao et al., 2002).

DATA 6

Source Language = 什锦脆汉堡 (中国风味)

Pinyin = Shíjīn cuì hàn bǎo (zhōngguó fēngwèi)

Initial Draft = Burger renyah gaya Cina (Chinese-Style Crispy Burger)

Final Draft = Burger krispi ala Tiongkok (Tiongkok Style Crispy Burger)

The data 6 shows that the translator applied word substitution and meaning correction types of self-correction. Word substitution was applied to the sentence 什锦脆汉堡 (中国风味) Shíjīn cuì hàn bǎo (zhōngguó fēngwèi) in the initial draft, namely the words 'renyah' and 'gaya' became "krispi" and 'ala' in the final draft. The word renyah has the same meaning as krispi, just as the word 'gaya' has the same meaning as 'ala', so the application of word substitution does not reduce the meaning of the source language sentence (Mossop 2001; Konttinen et al., 2020).

DATA 7

Source Language = 豆腐衣包饭

Pinyin = Dòufu yī bāofàn

Initial Draft = Nasi bungkus Tahu (Tofu Wrapped Rice)

Final Draft = Nasi gulung kulit tahu (Tofu Skin Rice Rolls)

The data 7 indicates that the translator used self-correction, meaning correction and word addition to the sentence 豆腐衣包饭 (Dòufu yī bāofàn). In the initial draft, the word 'gulung' was changed to "roll" in the final draft. This change was made because the word 衣包 (yī bāo) means an object that is folded into a ball, while the word 'bungkus' cannot reflect the meaning of 衣包 (yī bāo). Meanwhile, in the final draft, the addition of the word kulit (skin) aims to explain that the sentence 豆腐衣包饭 (Dòufu yī bāofàn) refers to food wrapped in tofu skin.

DATA 8

Source Language = 香煎洋芋擦擦

Pinyin = Xiāngjiān yángyù cā cā

Initial Draft = Kentang gosok goreng (Potatoes Fried Rubs)

Final Draft = Kentang parut goreng (Fried Grated Potatoes)

In data 8, the translator used self-correction, meaning correction in the initial draft of the sentence 香煎洋芋擦擦 (Xiāngjiān yángyù cā cā), changing the word 'rub' to 'fry' in the final draft. This change was influenced by the meaning of 擦擦 (cā cā), which means 'rub' when applied to objects such as glass, floors, or other inanimate objects (Cao et al., 2002:122). However, the meaning of the word 擦擦 (cā cā) is not only 'rub', but can also be interpreted as 'grate' when applied to objects such as vegetables or fruit (Cao et al., 2002:122-123). In addition, meaning correction was also applied to the initial draft of the word 'panggang' (to bake), which became 'goreng' (to fry) in the final draft. According to Cao et al. (2002:664), the word 煎 (jiān) refers to something that is cooked using a lot of butter or oil in a frying pan.

DATA 9

Source Language = 蚝烙

Pinyin = Háo lào

Initial Draft = merk tiram (Oyster Brand)

Final Draft = Telur dadar tiram (Oyster Omelet)

In data 9, the translator used self-correction for the sentence 蚝烙 (Háo lào), which was translated in the initial draft as 'oyster brand' and changed to 'oyster omelette' in the final draft. Meaning correction was applied because the initial draft did not

refer to the food that the translator intended. This was due to the influence of online reading materials used by the translator in translating the meaning of the sentence 蚝烙 (Háo lào). In the translation process, the translator used the online reading material baidu.baiké.hk to find references for the meaning of the sentence. If the word 'brand' is used, it tends to refer to a label used on an object such as clothes, trousers, and so on (Aziz et al., 2022). Meanwhile, the phrase 蚝烙 (Háo lào) refers to a dish served with eggs and oysters.

DATA 10

Source Language = 泰式菠萝炒饭

Pinyin = Tàishì bōluó chǎofàn

Initial Draft = Nasi goreng nanas Thailand (Thai Pineapple Fried Rice)

Final Draft = Nasi goreng nanas ala Thailand (Thai Style Pineapple Fried Rice)

The data 10 shows that the translator used word addition and capitalisation in the sentence 泰式菠萝炒饭 (Tàishì bōluó chǎofàn), changing the initial draft of 'Thai pineapple fried rice' to 'Thai-style pineapple fried rice' in the final draft. The application of word addition, namely the word 'style' in the final draft, shows that in the sentence 泰式菠萝炒饭 (Tàishì bōluó chǎofàn), there is a word that was not translated by the online reading material used by the translator, namely 式 (shì), which has various meanings such as 'style', 'manner', "model", 'type', and so on. The addition of the word 'style' by the translator is intended to emphasise that the dish has characteristics that originate from Thailand. In addition, capitalisation is also applied to the word 'Thailand' in the final draft. Capitalisation is used because the name of the country begins with a capital letter.

DATA 11

Source Language = 中国式汉堡

Pinyin = Zhōngguó shì hànǎo

Initial Draft = Burger gaya Cina (Chinese Style Burger)

Final Draft = Burger ala Tiongkok (Tiongkok Style Burger)

The translator used word substitution and meaning correction for the 11 source languages. 中国式汉堡 (Zhōngguó shì hànǎo) in the initial draft was changed from 'Burger gaya Cina' to 'Burger ala Tiongkok'. The word 式 (shì) has various types and uses. For example, the word 式 (shì) becomes the word 'style' when referring to fashion, such as 中式服装 (Zhōngshì fú Zhuāng), while the word 'ala' tends to refer to food, such as 泰式炒面 (Tàishì chǎo miàn) (Cao et al. 2002:1245). In addition to word substitution, meaning correction is also used, namely in the word 'Cina' becoming the

word 'Tiongkok'. This change in words is marked by the meaning of "Cina" having negative connotations, so that the change is replaced with the word 'Tiongkok'.

DATA 12

Source Language	= 黄油蜂蜜
Pinyin	= Huángyóu fēngmì
Initial Draft	= Mentega Sayang (Honey Butter)
Final Draft	= Mentega madu (Honey Butter)

In data 12, the translator used meaning correction applied in the sentence 黄油蜂蜜 (Huángyóu fēngmì) with the initial draft being Mentega Sayang (Butter Honey) to Mentega Madu (Butter Honey) in the final draft. This application shows that the initial draft translation was inaccurate in the word 'Sayang'. The word 蜂蜜 (fēngmì) relates to the product of bees, namely honey, so changing the word 'sayang' to 'madu' in the final draft is appropriate in order to convey the correct information in the source language sentence.

DATA 13

Source Language	= 芒果心形冻
Pinyin	= Mángguǒ xīn xíng dòng
Initial Draft	= Jelly Mangga Berbentuk Hati (Heart-Shaped Mango Jelly)
Final Draft	= Jeli Mangga (Mango Jelly)

Data 13 shows that the translator applied word substitution and deletion in the translation of the sentence 芒果心形冻 (Mángguǒ xīn xíng dòng), changing the initial draft of 'Jelly Mangga Berbentuk Hati' to 'Jeli Mangga Bentuk Hati' in the final draft. The use of word substitution, namely the word 'Jelly' to 'Jeli', is because the word "Jelly" is still an English term, while the target language is Indonesian, so the translator changed the word to 'Jeli'. Deletion was applied to the word 'Berbentuk' (shaped) to become the word "Bentuk" (shape). Deletion was used to remove the prefix 'Ber-', so that the deletion did not affect the meaning of the source language sentence.

Discussion

The findings of this study offer several implications for translation teaching and curriculum development. The pauses observed during the translation process suggest that moments of hesitation should not necessarily be interpreted as signs of failure or insufficient competence (Fang, 2020; O'Brien, 2006; Rosa et al., 2018). Rather, these pauses can represent important cognitive spaces in which translators

analyze problems, search for alternatives, and evaluate potential solutions. This observation highlights the need for translation instructors to design learning activities that encourage students to recognize and reflect on their own problem-solving processes. In addition to evaluating the quality of the final translation product, translation courses could incorporate process-oriented assessment, enabling students to articulate and justify the reasoning underlying their translation decisions.

The frequent occurrence of self-corrections further highlights the importance of developing revision competence in translator education. Changes between initial and final drafts indicate that effective translation involves continuous evaluation of linguistic accuracy, cultural appropriateness, and contextual meaning (Adha et al., 2024; Antunović & Pavlović, 2011; Cao et al., 2023). Revision, therefore, should be treated as an integral component of translation training rather than as a final editing stage. Lecturers can provide students with opportunities to identify translation problems, compare alternative solutions, and justify their choices in relation to linguistic and cultural considerations. Regular engagement in such activities may strengthen students' metacognitive awareness and foster the development of more reflective and self-regulated translators.

The use of online resources also points to the importance of adopting a balanced approach to technology-assisted translation education. Although tools such as Google Translate and online dictionaries can facilitate comprehension and lexical searches, producing an appropriate translation still requires human judgment, particularly when cultural and contextual factors are involved. Digital tools should consequently be introduced as supportive resources rather than substitutes for translators. To use these resources effectively, students need to develop digital literacy skills that enable them to assess the reliability of online sources, identify inappropriate machine-generated equivalents, and adapt technological outputs to specific cultural contexts. Integrating these skills into translator education can help prepare students to become competent professionals who combine linguistic knowledge, cultural sensitivity, critical thinking, and responsible use of translation technology.

Conclusion And Suggestion

This study reveals that culinary translation constitutes a complex cognitive and cultural process in which translators engage in ongoing interpretation, decision-making, and revision. The occurrence of pauses suggests that hesitation can serve as an indicator of cognitive effort, particularly when translators deal with culturally specific expressions, unfamiliar terminology, and semantic difficulties. At the same time, self-correction contributes substantially to the refinement of translation quality, as translators reconsider their initial choices in light of linguistic accuracy, cultural appropriateness, and contextual meaning. Digital resources and machine translation tools likewise offer useful assistance throughout the translation process, although

their outputs cannot be adopted uncritically and continue to require human evaluation and cultural judgment.

Beyond its contribution to research on translation processes, the study has important implications for translator education. The findings support a shift from a predominantly product-oriented model of translation instruction toward an approach that gives greater attention to the translation process itself. Students should be encouraged to examine the reasoning behind their translation choices, identify challenges that emerge during the process, and develop effective strategies for revising their work. Classroom practices involving self-assessment, reflective translation activities, and discussions of problem-solving processes can foster learners' metacognitive awareness and strategic competence. At the same time, technology-assisted translation deserves a meaningful place in translation curricula, with an emphasis on developing students' ability to critically assess and appropriately employ digital resources rather than treating technological tools as automatic solutions.

Further research could broaden the scope of the present study by involving translators with varying levels of expertise, thereby providing greater insight into differences in cognitive processes and translation strategies. Future investigations could also examine the effectiveness of process-oriented translation pedagogy through the use of tools such as keystroke logging and screen recording as means of facilitating reflective learning. Establishing stronger connections between cognitive research and pedagogical practice may ultimately contribute to translator education that equips students with the cultural sensitivity, critical awareness, and technological competence required in contemporary translation practices.

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