Navigating Nuances: Google Translate vs. ChatGPT in Translating Disney's Mulan with Skopos Theory

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Abstract: *In a modern society where cross-cultural communication has become a daily occurrence, the emphasis on accurate conveyance of messages is getting heavier. As such, A.I. translators have been the bridge to connect people from different linguistic backgrounds as they are conveniently available and adeptly effective. With that, people who do not understand languages outside their own may opt rely on them to gauge the meanings of content in foreign languages. Throughout the years, the emergence of automated translation tools such as Google Translate and ChatGPT have made the process of cross-cultural communication smoother than ever. Despite their proven usefulness, the users of these tools may be unaware that these tools might not always generate fully accurate and suitable translations. The users may often compromise on less accurate translations for the sake of convenience. This study compares the accuracy of translations of subtitles generated by Google Translate and ChatGPT from selected scenes of Disney's 1998 film Mulan. Through the lens of Skopos Theory, generated translations will be compared to determine the accuracy and suitability with the original mandarin subtitles. This means that Mandarin subtitles generated by Disney will be translated into English using Google Translate and ChatGPT, with the translated results compared to the original English subtitles to determine whether the two tools can generate meanings that are sufficiently close to the originals. This is deemed crucial as Mandarin speakers often rely on Mandarin subtitles to understand the characters. The findings show that both AI translators are competent in their own ways, with ChatGPT better capturing nuances based on cultural differences and sensitivity, as per Skopos Theory.*

Keywords: Google Translate, ChatGPT, Skopos Theory, Mulan, Comparative analysis

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1. Introduction

Language is important for humans to communicate with one another, it is a tool used to express various emotions and achieve various types of communicative goals. With the invention of television and the ability to convey messages across the globe, humans are exposed to films created by languages and cultures that they are not familiar with. It is through the help of translators that such foreign movies can be understood by people from different cultures. As technology advances, more translation tools have been introduced, such as the machine translation tools, which can then be further split into statistical machine translation and neural translation tools. House (2015) noted that translation is a much-needed skill in today's advanced society and as long as there is a need to disseminate information in a quick pace, translation is always regarded as an essential element across various domains ranging from the

Internet to the fast-paced world of live television. Statistical machine translation is operated by building statistical relationships between two words of different languages. The result of the translations can be expected to be consistent as a relationship between the source word and translated word will most likely not change.

Neural machine translation, on the other hand, produces translations through the use of an artificial neural network, also known as artificial intelligence. Neural machine translations are given positive or negative reinforcements through upvoting the results of translation to make the results more accurate overtime. People in the past have been relying on translation technology to understand what was being said in a language they are not familiar with, this may lead to them only having limited understanding of the intended message from the source text, as they are not able to fully appreciate the text after being translated. However, the accuracy of translation tools is improving due to them being capable of receiving reinforcements to either keep the translation results or make suitable changes. Nowadays, machine translation like Google Translate has been used a lot because of its ease of access whenever someone needed to translate their own languages to another language in order to communicate with another person with a different spoken language. Machine translations may be accurate to some degree, but are the translations they offer well-received for its intended purposes? Although machine translation tools benefit human society by allowing them to understand the meaning of foreign words and communicate interculturally, the accuracy of the tools may not be entirely accurate, some of the intended meaning from the original speaker or text may have been lost in translation due to them being translated too literally, causing the translations to be challenging to understand without proper context. However, as observed by Henisz-Dostert et al. (2011), despite the controversies surrounding the idea of machine translation in relation to the accuracy and appropriateness of generated results, machine translations have been proven on many occasions, to be more accurate than human translations.

This paper compares the effectiveness of machine translation tools, specifically Google Translate and ChatGPT in terms of their achievements of communicative goals and culture appropriateness. The Disney movie with Chinese Subtitles, "*Mulan*" is chosen as the research materials. The reason for choosing Chinese subtitles is because both the English and Chinese languages are widely spoken around the world. Besides that, the story of Mulan that is revolves around the controversial topic of a young female disguising as a man to take her father's place in the military means that it is rich with communication settings for analysis. Weaver (2024) noted that Mulan is a strong character that is relevant to both the Western and Eastern cultures as it if often seen as a universal symbol for women rights and gender equality. With Mulan's influence extending beyond the sphere of literature, Mulan is thus a film appropriate for examining cultural nuances with regard to Mandarin to English translations. The selected scenes of the movie are based on three predetermined interpersonal communicative settings to determine the translations' cultural appropriateness and the achievement of communicative goals. The three communicative settings are: Quarrels and Arguments, Bargaining and Negotiation and Persuasion. The Skopos theory will also be used as the framework for the research. The Skopos Theory is a theory developed by German linguist Hans Vemeer in the late 1970s. The theory suggests that translations should be made in consideration of its intended purpose in the target culture, not maintaining the literal meaning of the source language (Reiss et al., 2014).

This research will prove to be significant because it sheds light on how machine translation tool contributes to achieving communicative goals that require cultural accuracy, while also maintaining the meaning of the original language. Users of the translation tools will also be

more aware that machine translation is still a work in progress, and that the results they yield may be inaccurate in different contexts such as when people are quarreling, giving praise, or cracking jokes. Even if they are not inaccurate, the degree of impact from the translation may be different from what the original speaker implied. As globalization is at its peak in this century, it is important for the people to understand accurately what is being spoken or written in a different language in order to get the full picture of the intended meaning from the original speaker or text, this may help to significantly reduce the risk of misunderstanding and sparking controversies.

2. Problem Statement

Even though the understanding a text has been viewed as the most important goal of a translation, there has not been enough mention of the importance of cultural accuracy to make a translated text more presentable and acceptable. There is also another problem of the majority of users of the machine translation tools not questioning the accuracy and appropriateness of the results provided. Even though the English and Chinese language are two of the most influential languages in the world, there is a limited amount of research done from a scholarly perspective on the translation of literary works between the two languages. This suggests that the cultural and contextual aspects of the translation process are not studied enough as they are important in the preservation of meaning and intent of the texts. As the literature review section will point out, the languages researched mainly consisted of pairs of languages that are not specifically English and Chinese.

Moreover, despite the rapid improvement of translation tools nowadays, people have been holding the belief that the tools are good enough. With the ability to instantaneously produce translation results that are accurate at first glance, users of these tools have been using them without being critical of the results' accuracy and preservation of intent. This blind reliance on the tools calls for actual scholarly study to determine the actual accuracy of the translation results produced by the machine translation tools, from a critical standpoint.

3. Literature Review

3.1 Skopos Theory
The article "A Study of the Translation of Chinese Tourist Attraction Names from the Perspective of Skopos Theory" by Kuang and Yu (2023) explores the translation of Chinese tourist attraction names. It highlights the challenges in translating these names due to cultural differences, linguistic challenges, and marketing considerations. The study uses Skopos Theory to analyze translation strategies, emphasizing the importance of purpose in translation. It suggests approaches to balance cultural significance, historical context, and marketing, aiming for accurate and meaningful translations that enhance cross-cultural communication.

Another publication by Houston (2023) explores the concept of "loyalty" in functionalist Bible translation using the Hebrew term *ḥesed*. It begins with an overview of Skopos theory and the concept of loyalty as developed by Christiane Nord, aiming to address concerns that Skopos theory might lead to radical translations. The discussion then expands to the use of *ḥesed* in the Bible, emphasizing its role in reinforcing loyalty to both the source text (God) and the target audience. This approach seeks to mitigate fears of extreme deviations from the original text by framing loyalty within the relational and moral context provided by *ḥesed*. The article argues that integrating *ḥesed* into Skopos theory helps balance the translation's purpose with fidelity

to the source text, thereby safeguarding against translations that may disregard the original author's intentions or the audience's needs.

Meanwhile, research by Gong (2020) discusses the evolution and application of translation theories in the context of globalization, focusing on literary translation. It highlights Sven Birkerts's "The Strange Days" as a case study for translation, using the Skopos Theory as the theoretical framework. Skopos Theory emphasizes the purpose of translation, requiring translators to consider the aim of both the source and target texts. The theory's development is traced through four phases, with key contributions from scholars like Katharina Reiss, Hans J. Vermeer, Justa Holz Manttari, and Christiane Nord. Three main principles of Skopos Theory—Skopos rule, coherence rule, and fidelity rule—are discussed. The article outlines how these principles guide…

3.2 Artificial Intelligence as Tools of Translation

A study by Al-Kaabi et al (2024) explores the translation of cultural elements in Naguib Mahfouz's *Zuqāq al-Midaqq* from Arabic to English, comparing the effectiveness of human translation with that of machine translations from Google Translate and ChatGPT. Through qualitative content analysis, the researchers discovered that human translation was notably more accurate and natural in conveying cultural connotations. While machine translations had difficulties with rhetorical devices, idioms, and cultural nuances, ChatGPT outperformed Google Translate in capturing these elements. The study emphasizes the crucial role of human expertise in literary translation for maintaining cultural significance. These results are relevant for translator training and the advancement of AI-enhanced translation tools for literary works, highlighting the challenges of translating culture-specific terms and the necessity of a profound understanding of both linguistic and cultural contexts in the translation process.

Research was conducted by Omar and Salih (2024) on English and Arabic machine translation post editing by analyzing 60 studies conducted from the 21st century. The study reveals that while most research has concentrated on evaluating and enhancing machine translation software, there has been insufficient attention to developing translators' skills and competencies. Despite the growing use of AI-powered machine translation tools in translation, there is a notable lack of emphasis on integrating machine translation skills into English and Arabic translation education programs. The study highlights the need for post editing as a vital digital literacy skill for Arabic translation students and points out a significant gap in both research and teaching related to machine translation education. The authors advocate for addressing this gap to better equip translation students for the evolving demands of AI-assisted translation practice.

Finally, study by Valencia et al. (2024) evaluated ChatGPT's ability to translate kidney transplant FAQs from English to Spanish, addressing the information gap for Hispanic populations. Using GPT-3.5 and GPT-4.0, 54 FAQs from various health organizations were translated and assessed by two Spanish-speaking nephrologists for linguistic accuracy and cultural sensitivity. Both AI versions demonstrated high performance, with GPT-3.5 scoring 4.89 ± 0.31 and GPT-4.0 scoring 4.94 ± 0.23 for linguistic accuracy, while both versions scored 4.96 ± 0.19 for cultural sensitivity. The translations were consistently accurate across different sources, including OPTN, NHS, and NKF. These results suggest that ChatGPT could effectively improve access to crucial kidney transplant information for Spanish-speaking Hispanic patients, potentially promoting health equity.

3.3 Comparison of Translation Works

A paper published by Li (2024) explores an indirect translation of Yu Jiaoli, a Chinese classic novel into English from French in the early nineteenth century. The author criticizes earlier work by pointing out that the prior work directly translates the English version to Chinese without paying attention to the existence of the French translation as a mediator. The French translation focused on the Academic Sinology and its translation kept as close to the original text as possible in terms of style. On the other hand, the English translator had to balance between translating from a standard French translation prepared by Abel-Rémusat and purposely translating wrongly, shortening, and even erasing words and phrases for commercial, political, and cultural reasons. However, due to the English translator's inability to understand Chinese, there were more extra-accidental misunderstandings to the Chinese text, which made the English version even more detached from the French translated version in addition to the Chinese original. By acknowledging the challenges and implications of indirect translation, this research contributes to the understanding of how culture and language shape the reception of Chinese literary classics in Europe.

In the similar veins, Zagood et al. (2023) examines the challenges in translating socio-cultural expressions from Arabic to English, focusing on Ibrahim al-Koni's novel "Nazi:f al-Hajar" and its English translation "The Bleeding of the Stone". The researchers employed House's (1997) model for translation quality assessment to analyze the techniques used and evaluate the translation quality. The study reveals that translators faced difficulties in rendering certain Arabic socio-cultural expressions into English due to cultural differences between the two languages. These challenges arose from the unfamiliarity or non-existence of some source language expressions in the target culture. The authors also noted that certain translation techniques were not utilized effectively, contributing to the translation problems. The findings highlight the complexities involved in literary translation, particularly when dealing with culturally-specific elements, and underscore the importance of appropriate translation strategies to bridge linguistic and cultural gaps. Translation decisions and methods, such as literal translation, free translation, and adaptation. The conclusion emphasizes the importance of understanding the original text, mastering the target language, learning from other translations, and thorough proofreading.

3.4 Movie Translation

In a recent study by Alsuhaim (2024), the author looks at the dubbing of English children cartoons to Modern Standard Arabic; this study specifically targets negative face speech acts in "The Loud House" that airs on Shahid and Netflix. It examines politeness strategies and pragmatic translation of speech acts and the changes that occur due to receiving culture and the dynamics of power relationship between the two cultures. The study reveals that there are several politeness strategies that translators use to create culture appropriateness and also to keep the relations of family members in check. There is a contrast in the study showing how Shahid and Netflix perform a translation of negative face-threatening acts; while Netflix tends to adapt such acts, Shahid maintains the appropriateness of the face threats as they were. Social distance, power relations, and relative imposition all matter in translating because Arabic cultures are constituted in various structures of social differentiation.

Meanwhile, Abu-Rayyash et al. (2023) focused on the translation strategies employed in the translation of English swear words into Arabic subtitles on Netflix and the study adopted a corpus-assisted approach. It is a parallel corpus consisting of the English and Arabic text transcripts of 40 movies that span different genres and has a total of 699,229 words. Three main translation strategies were identified: There are three types of transmutation: omission,

softening, and swear-to-non-swear. The most reported self-censorship type was omission and it was practiced more in drama (66%) and action (61%) categories. The swear-to-non-swear technique was reported to be practiced least, whereby sci-fi had the highest usage at 21 percent. The second most common strategy was softening, which was used in sci-fi (39 percent) and biography (32 percent) most often. It is worth mentioning that exclusion or masking of obscene language might change the depiction of meaning and persons because they have referential properties.

The literature review above has provided insight on the trend of research done for the past 5 years. Past results have shown that the Skopos Theory can be applied in various contexts as long as translation is involved. Although AI translation and Skopos Theory was used as the topic of research, most of the research done on the topic of translation is heavily focused on the Arabic language, and applied to industries besides entertainment such as medical and law. As past research done on the machine translation tools, the accuracy of the translation produced by the tools are not perfect, meaning their accuracy when applied to movie translation still remains to be seen. It can be concluded that there is a lack of study done on the Entertainment industry, the animated cartoon movies to be specific. Translating movies requires a high level of expertise of the translators as they are not as straightforward as translating a sentence with an isolated context. This research addresses a gap in previous studies by applying the Skopos Theory to the analysis of Disney animated movies, an approach not previously explored, and by evaluating the effectiveness and accuracy of translation tools in subtitle translation, contrasting with traditional human translation methods, which captures the intent and accuracy in their translations.

4. Methodology

This research analyses the Mandarin subtitles of Disney's Mulan which is a film that draws inspiration from ancient Chinese culture. Then, relevant data is collected, three scenes containing the communicative settings: "Quarrels and Arguments", "Bargaining and Negotiation", and "Persuasion", from the film will be extracted and analyzed. The aforementioned scenes are chosen because they enable a more comprehensive and specific analysis on the translation results from the selected machine translation tools. The scenes are also commonly seen in Disney's productions as they offer a balance of conflict and joyous scenes in a lot of their works. The Chinese subtitles in the selected scenes will be back translated into English using Google Translate and ChatGPT. Due to the language of the study being conducted in the English language, it is necessary to back-translate the Chinese subtitles into English. Using the qualitative method of analysis, the difference in translation results will then be analyzed in terms of the severity of language used and the suitability of the word choice in the target culture, which is the Chinese culture. The Skopos Theory will be used as the analytical framework due to its emphasis on translating according to the target scopus instead of being completely faithful to the source material, as long as the intended message reaches the audience with accuracy. Although the gist of the intended message from the movies' original language can be transferred using the machine translation tools, the accuracy and the nuances of the messages translated may not be a hundred percent accurate. Finally, a breakdown of the translation tools' strengths and weaknesses will be done.

The Skopos Theory emphasizes on the function on the translations rather than translating everything word by word on a literal level. As the intended meaning of the translation takes precedence over the literal translation from the source material, this allows the audience in the target language to understand the message that was intended in the source material, meaning

people using different tongues can have a similar understanding towards the same movie. Firstly, the five selected scenes from two movies each that are deemed appropriate will have their Chinese subtitles back translated into the English language, using the chosen translation tools. The word choices in the original audio and the back translated subtitles will then be compared and analyzed using the Skopos Theory. By comparing the results produced by the two translation tools, the tool that translates in a more culturally accepted manner will be identified. After that, the strengths and weaknesses of each tool will be highlighted as each tool is different. In the end, this research will be useful for scholars who wish to gain insight into the translation patterns of the machine translation tools, and get to know where and when is the more suitable context for a specific machine translation tool to be utilized. The readers will also be able to be more aware of the extent of accuracy and suitability each tool has to offer instead of blindly believing in their capabilities without being critical.

5. Data Analysis and Interpretation

5.1 Quarrel and Argument scene
Google Translate

Original Script: Chi Fu: You think your troops are ready to fight? Hah! They wouldn't last a minute against the Huns! Shang: They completed their training. Chi Fu: Those boys are no more fit to be soldiers than you are to be captain. Once the general reads my report, your troops will never see battle.
Google Translate: Chi Fu: Do you think your army can take the field? The Huns won't take a minute to defeat them! Shang: The course of their training has been completed. Chi Fu: Those little pawns fighting are as ridiculous as you being a captain. After the general sees my report, your army will never even think about going to the battlefield.

Starting from the translation results from Google Translate, there are some differences between the translated subtitles and the original spoken language in the movie.

In the first line by Chi Fu, which are: *"You think your troops are ready to fight? Hah! They wouldn't last a minute against the Huns!"* in the original script, and *"Do you think your army can take the field? The Huns won't take a minute to defeat them!"* by Google Translate. Although the overall meaning of the translated results matches what was said in the original script, by scrutinizing the details of each sentence, the difference between the two versions are much clearer. Firstly, the original script can be interpreted as Chi Fu mocking the captain's decision by asking a rhetorical question; whereas the result from Google Translate can be interpreted as Chi Fu asking a genuine question and asking the captain to assess the situation.

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While there are traces of sarcasm in the original line, the meaning of the translated line serves more as a precautionary advice out of concern.

Followed by the second sentence, *"Hah! They wouldn't last a minute against the Huns!"* which is translated by Google chat as *"The Huns won't take a minute to defeat them!"* Chi Fu focuses on the soldiers by stating the soldiers would not last a minute against the Huns; while the results from Google Translate shifts the focus onto the Huns as the main object of the sentence. This means that while the original sentence focuses on the weakness of the troops, the translated line focuses on the strength of the Huns. Although the difference is almost negligible, from the language point of view, the emphasis on the object that appears first in a sentence suggests that it is overpowering the others. Hence, the difference in the emphasis of the objects reveals how strength is perceived in the sentence.

After Shang's reply, Chi Fu in the original script said: *"Those boys are no more fit to be soldiers than you are to be captain. Once the general reads my report, your troops will never see battle."*, while in the google Translate version, he said: *"Those little pawns fighting are as ridiculous as you being a captain. After the general sees my report, your army will never even think about going to the battlefield."* Compared to the results from Google Translate, the original script did not mock the captain's rank as severely as the Google Translate results. The result from Google Translate can be interpreted as Chi Fu not holding back with his words to the point of him ridiculing the captain, while the original script portrayed him as a person capable of being civilized even while insulting someone. In the second sentence, the original script can be interpreted as Chi Fu plainly stating the outcome of him reporting to the general, while the Google Translate version can be interpreted as him adding a hint of hostility in his words, it is even possible to interpret it as him threatening the captain. Furthermore, the way Chi Fu referred to the soldiers as pawns in Google Translate adds an element of dehumanizing in his tone, making him view the soldiers as mere tools, and not lives that he wanted to avoid risking as portrayed in the original script.

ChatGPT

Original Script:
Chi Fu: You think your troops are ready to fight? Hah! They wouldn't last a minute against the Huns!
Shang: They completed their training.
Chi Fu: Those boys are no more fit to be soldiers than you are to be captain. Once the general reads my report, your troops will never see battle.
ChatGPT:
Chi Fu: Do you think your army can take the field? The Xiongnu won't even need a minute to defeat them!
Shang: They have completed their training course.
Chi Fu: Those little soldiers fighting is as absurd as you being a captain. Once the general sees my report, your army can forget about ever going to the battlefield.

As for the translation results generated by ChatGPT, some notable differences can be found too.

The ChatGPT version of Chi Fu's first line is: ***"Do you think your army can take the field? The Xiongnu won't even need a minute to defeat them!"*** While this line has a similar structure to what was provided by Google Translate, a single additional word was included in this version that makes the line provide a different degree of certainty from the Google Translate version. The word "even" was added in ChatGPT's version of the script, which makes the defeat of Shang's troops against the Huns even more certain than the Google Translate version. The difference in naming is not taken into account as there could be only one thing they were referring to.

In the following dialogue by Chi Fu after Shang's reply, there is a more apparent difference. Chi Fu said: ***"Those little soldiers fighting is as absurd as you being a captain. Once the general sees my report, your army can forget about ever going to the battlefield."*** The key difference here is the usage of the word "once", rather than the word "after". The word "once" made it seem like the prospect of going to war will be eliminated as soon as the report has been sent, rather than just any time after the report is sent.

To summarize the whole analysis above for the Quarrel and Argument scene, Google Translate is able to catch the names more accurately, like how they identify the "Huns" as the Huns, instead of using a direct adaptation of the pinyin from the word "Xiongnu". ChatGPT on the other hand, is able to catch the nuance of word choices better, such as using little soldiers instead of pawns to focus on the prematurity of the soldiers rather than the expendability of them.

5.2 Persuasion scene
Google Translate

Original Script:
Mulan: The Huns are alive! They're in the city!
Shang: You don't belong here, Mulan. Go home.
Mulan: Shang, I saw them in the mountains! You have to believe me! Shang: Why should I?
Google Translate:
Mulan: The Huns are still alive and they have sneaked into the capital. Shang: You shouldn't be here, Mulan, go back
Mulan: Li Xiang, I saw them in the mountains, you must believe me
Shang: Can I still trust you?

In the first line by Mulan in the Google Translated script, she said: "*The Huns are still alive and they have sneaked into the capital.*" In the google translated version, but instead of ending the sentence after confirming the Huns' presence, it is continued with: "*and they have sneaked*

into the capital". The sentence structure is different compared to the original script but the meaning is still close enough. In this case, the Google Translate version provides more information on how the Huns got into the city, which is by "sneaking" into it.

Shang then says: "*You shouldn't be here, Mulan, go back.*", in the Google Translate version, Shang speaks in a less hostile tone here compared to the original script, instead of telling Mulan she does not belong here, he instead tells her she should not be here. Next, he told Mulan to "go back" instead of "go home". The former can mean anywhere Mulan has previously been to, but the latter, which is the original, is more specific.

Mulan then tells Shang this: "Li Xiang, I saw them in the mountains, you must believe me.", in the Google Translate version. Using the sentence "You must believe me" instead of "You have to believe me" shows that the Google Translate version uses a more commanding tone while the original script merely highlights the necessity to believe her, and leaves room for the listener to consider whether to believe in Mulan or not.

Shang then questions her credibility by saying "Why should I?" in the original script, and "*Can I still trust you?*" in Google Translate. The original script shows Shang in complete doubt of Mulan's words, while the Google translate version suggested Shang willing to give Mulan a chance and hear her out.

ChatGPT

Original Script:
Mulan: The Huns are alive! They're in the city! Shang: You don't belong here, Mulan. Go home.
Mulan: Shang, I saw them in the mountains! You have to believe me!
Shang: Why should I?
ChatGPT:
Mulan: The Xiongnu are still alive; they have infiltrated the capital. Shang: You shouldn't be here, Mulan. Go back.
Mulan: Li Xiang, I saw them in the mountains. You have to believe me.
Shang: Can I still trust you?

On the first line of the ChatGPT version of the script, Mulan said: "*The Xiongnu are still alive; they have infiltrated the capital.*" The difference in word choices have led to a different meaning for this sentence compared to the Google Translate version. The Google Translate used the word "sneaked", which emphasizes silent or unnoticed entry without further motive beyond that; while the word "infiltrated" emphasizes on unlawful entry for something. In the context of this scene, this version of the script would be a more suitable translation of the Chinese subtitles because it not only offered more information on the movement of the Huns, but a more accurate method of securing a route into the capital.For the rest of the lines, the analysis would be the same as the Google Translated version as they have identical sentences.

To summarize the analysis of this scene, Google Translate once again appears as the better tool when it comes to names, such as the "*Huns*". Although Shang's name is different from the original script, the character's Chinese name has the same pinyin as the name generated by both ChatGPT and Google Translate. Other than that, ChatGPT managed to retain more of the meaning intended in the original script than Google Translate.

5.3 Bargaining and Negotiation scene
Google Translate

Original Script: Granny Fa: Mulan is gone! Fa Zhou: What? It can't be. MULAN! No... Fa Li: You must go after her. She could be killed. Fa Zhou: If I reveal her, she will be.
Google Translate: Granny Fa: Mulan is gone Fa Zhou: What? How is that possible? Mulan! No. . . Fa Li: Go chase her back quickly, she will be beheaded Fa Zhou: As long as we don't tell her, she can survive

The first line does not need to be analyzed as it was identical to the original script.

Fa Zhou's line after Granny Fa's discovery: "*What? How is that possible? Mulan! No.*". The Google Translate script is almost the same as the original script. The only difference is Google Translate uses the question: "How can it be?" to express Fa Zhou's surprise. The usage of this question shows that the speaker is questioning the situation and wants an explanation, though they are not denying the possibility; while the original script Fa Zhou speaks as he was certain that Mulan running away was impossible.

Fa Li's line next in the Google Translate version was: "*Go chase her back quickly, she will be beheaded.*" This sentence has the same meaning overall compared to the original script. The difference between the two is that the Google Translate version urges Fa Zhou to chase Mulan quickly while the original script did not, but using an authoritative voice to tell Fa Zhou to go after Mulan nonetheless. After that, she adds that she could be killed in the original script, but was translated to beheaded in Google Translate's script. It is understandable that the word "*beheaded*" was used as treason is punishable by death in ancient China, and most executions are done in the form of beheading.

Fa Zhou then replied by saying: "*As long as we don't tell her, she can survive*" In this Google Translated version, it gave off a completely different meaning, saying that she will be safe as long as they do not tell her. The sentence itself may seem logical, but the context is already lost in translation.

ChatGPT

Original Script:
Granny Fa: Mulan is gone!
Fa Zhou: What? It can't be. MULAN! No...
Fa Li: You must go after her. She could be killed. Fa Zhou: If I reveal her, she will be.
ChatGPT:
Granny Fa: Mulan has left
Fa Zhou: What? How is that possible? Mulan! No...
Fa Li: Go quickly and bring her back, this could cost you your head Fa Zhou: As long as we don't speak, she will be able to survive.

In the ChatGPT version of the script, the first line by Granny Fa is: "Mulan has left". This sentence offers a different meaning as it suggests that Granny Fa knew that Mulan has left and not just gone as it is a most unusual matter. Fa Zhou's line is the exact same as the Google Translate version, so the explanation will be identical with the one in Google Translate.

Fa Li's line in this version was: "*Go quickly and bring her back, this could cost you your head*." This sentence has some differences compared to the Google Translate version and original script. In this version, she urges Fa Zhou to quickly bring her back, instead of chasing her back, which means he can go bring Mulan back after she has become a soldier in his place instead of chasing her as soon as possible. Another difference in this line is she says: "This could cost you your head". This is an inaccurate translation as the original script intended to put Mulan as the subject of punishment, not Fa Zhou. To summarize this scene, Google Translate has managed to beat ChatGPT in terms of accuracy. While both managed to capture the form of punishment in the ancient Chinese culture, ChatGPT had mistaken the subject of punishment while Google Translate did not.

Based on the above compilation of results, it is evident that ChatGPT wields more suitable translation results compared to Google Translate. There is also a consistent pattern where Google Translate is more prone to translate words in the literal sense, whereas ChatGPT tends to provide more nuanced sentences that may or may not be faithful to the original script. This has caused the results of Google Translate to have rare instances where it emerged as the tool that provided more suitable translations, as the meaning of the original sentence is mono-dimensional and unambiguous. The selected scenes should be comprehensive enough as they covered various emotions including joy, sadness, anger and surprise. The selected scenes are not focused on a single emotion hence it is comprehensive and unbiased when it comes to the selection of scenes.

By looking deeper at the results, it is recommended that Google Translate be used in a casual and less formal setting where a few miscommunications would only bring the minimal amount of inconvenience; while ChatGPT can generally be used anytime and anywhere due to its overall better performance in terms of translations. ChatGPT is able to adhere to Skopos Theory

more than Google Translate due to its ability to produce nuanced sentences that are more culturally suitable and applicable to its audiences, while Google Translate is evidently incapable of producing such sentences. Although detailed, the research has yet to fully utilize the Skopos Theory as this research focuses on the cultural implementation of the theory rather than the whole theory itself. The other deciding factor is the ease of use for the tools, Google Translate is easier to operate than ChatGPT as the user only had to choose the base language and target language to produce a straightforward translation. ChatGPT on the other hand, requires more time to produce answers as the users have to input certain keywords as prompts to have ChatGPT produce answers.

Despite the in-depth analysis performed on the scenes, the limitation found on this research is the potential bias of the research due to it being performed by only one researcher. This limitation however, can be overcom by having additional points of view to solidify the analysis as a whole, which could be done by performing future research on the same or relevant topics. Another limitation found through the research is that while ChatGPT remains superior due to the ability to produce nuanced sentences, it may potentially alter the intended meaning of the original sentences.

6. Conclusion

The final verdict that has come up in this research is that ChatGPT performs better than Google Translate overall due to its ability to produce nuanced sentences, despite its ability potentially backfiring on the audiences. A surprising revelation found through the research is that while Google Translate was not able to match ChatGPT's translation capabilities, it did not fall too far behind as it was formerly infamous for its unreliable and inaccurate translations that were the sauce for a lot of jokes widespread in the internet. Google Translate has managed to improve a lot from it was first introduced and it is a positive development that will be appreciated by the users looking for an easily accessible and operable tool; ChatGPT on the other hand, would most expectedly continue to improve on its abilities and provide more accurate and reliable translations for users that wishes to accurately understand a text they do not understand. Due to the prevalence of artificial intelligence, there are still other AI tools that can be compared besides the two that have been compared in this research, such as Google Gemini, Perplexity etc. Further research comparing more AI tools will help to further improve on the AI tools' ability to provide higher quality translations and connect more people across the world.

This research will be able to contribute to the field of linguistics as it showcased the ability of the translation tools to not only provide accurate, but also nuanced translations most of the time. It has also helped to observe the evolution of translation tools such as Google Translate and the improvement on its quality of translations since their debut. Further research can also be done using different movies to broaden the scope of research, instead of solely focusing on Disney movies. Future scholars can also use this research as reference to strengthen the credibility of their research on the same or similar field, such as movie translation, or even book translations. It is with high hopes that this research can be of help to future research to understand more translation tools, and a stepping stone for future scholars to perform more research using the Skopos Theory to better understand the theory, due to its subjective approach to translations.

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