



Translation Equivalence of Tourism Website Content: A Comparison Between Google Translate and DeepL Translate

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Abstract:

Translation serves as a bridge to overcome language barriers. This research compares the types of equivalence produced by Google Translate (GT) and DeepL Translate (DT) using Koller's equivalence framework. Employing a qualitative approach, the study follows data condensation, data presentation, and conclusion verification procedures. The translations generated by GT and DT were analyzed in the context of Kampung Kopi Camp, a tourism website being developed as a bilingual platform. The findings reveal two key classifications: (1) the same type of equivalence, where both GT and DT produce denotative, pragmatic, and text-normative equivalence for certain data, and (2) different types of equivalence, where the two tools generate varying results for the same data. Additionally, GT demonstrates a broader application of equivalence types, with a higher occurrence of pragmatic and connotative equivalence, making its translations more engaging. In contrast, DT adopts a more formal approach. These differences suggest that GT may be more effective in capturing contextual and expressive nuances, while DT maintains a stricter adherence to formal structures. By identifying the characteristics of these translation tools, this study provides insights into their effectiveness in producing equivalent translations, particularly in the tourism field. Understanding these variations can guide users in selecting the most suitable machine translation tool based on their specific needs, whether for formal communication or more engaging, context-driven translation. Ultimately, this research highlights the strengths and limitations of GT and DT, contributing to a broader understanding of machine translation in cross-linguistic communication.

Keywords: DeepL Translate, Google Translate, Translation Equivalence, Tourism Website

1. INTRODUCTION

In an increasingly globally connected world, the internet facilitates accessible international communication, but language differences can lead to misunderstandings. This fact highlights the importance of translation applied in many aspects of human life (Jayantini, 2016; Margono, 2002; Jayantini et al., 2021). This includes the information used to promote interesting places in tourist areas. The demand for translation services is increasing due to the need to promote bilingualism for the sake of global businesses (Budiharjo et al., 2022; Rahmawati, 2021). Digital marketing in tourism has become a trend in recent years because through digital marketing, information about tourist destinations can be accessed by potential tourists throughout the world more easily (Afren, 2024). In every country, marketing plays a significant role in establishing a strong tourism industry and attracting more tourists to come (Setiawan, 2017; Urooj, 2023). In the Indonesian context, a tourism website needs to be made in Indonesia for the domestic market and in English for foreign visitors (Aw et al., 2023). To help stakeholders prepare bilingual websites, machine translation is one tool that can be utilized as an alternative to speed up the process of presenting content on websites.

Machine translation is a branch of computational linguistics focusing on computerized systems to translate text between languages (Septarina et al., 2019). Of many tools available, DeepL Translate and Google Translate stand out for their sophisticated algorithms and extensive language support. Google Translate (GT), which was launched in 2006, according to Pham et al. (2022:80), can store over 200 billion words and provides a wide range of words and phrases. In addition to its accessibility, this tool is popular among learners. DeepL Translate (DT), introduced in 2017, utilizes a deep learning-based approach. It is claimed to produce more accurate and natural-sounding translations (Karabayeva & Kalizhanova, 2024).

With regard to the focus of this study, website content translation is not only used to convert words, phrases, clauses and sentences from one language to another but also to maintain the intent and clarity of the original message. A careful observation of the equivalence is needed for different types of text (Ali et al., 2023; Budiningtyas et al., 2020; Panou, 2013). It is because, without translation equivalence, the translated content may not fit accurately and may lead to misunderstanding and the dissemination of irrelevant or incorrect information. An inappropriate translation that does not equal the message conveyed in the source language can share far-reaching consequences, especially for businesses and organizations that depend on their website information and content to interact with a global audience (Latief et al., 2022; Budiharjo et al., 2022).

The Kampung Kopi Camp website, providing data for the main focus of this research, depicts a fascinating coffee-themed agritourism destination located in Bali, Indonesia. As part of the rich Pupuan sub-district cultivating Robusta coffee at the feet of Mt. Batukaru in Bali, Kampung Kopi Camp is an interesting place in the rural area that combines the beauty of the nature, fresh area, glamping and agritourism. The site offers a wide range of services, including accommodation, culinary experiences, cultural activities, and local attractions. The website was chosen as an example of creating a website for a small industry that is rich in potential to be promoted for agritourism. By translating its website into English, Kampung Kopi Camp aims to increase accessibility and attract more visitors. Numerous studies in the field of translation have examined the outputs of machine translation, with widely used applications such as Google Translate (Ardianto, 2021; Aulia, 2022; Azer & Aghayi, 2015; Fitria, 2021; Ismailia, 2023; Nasution,

2022; Putri & Dewi, 2021) and DeepL Translate (Agung et al, 2023; Ismailia, 2023; Kamaluddin et al., 2024; Telaumbanua et al., 2024; Karabayeva & Kalizhanova, 2024) being among the most frequently analyzed. While the previous studies have explored many aspects of machine translation, none have specifically focused on a comparative analysis of the equivalence produced by these translation machines. Addressing this unexplored area, the present research aims to contribute to the field of machine translation studies by examining the variations, diversity, and strategies employed by Google Translate and DeepL Translate in generating appropriate equivalence. By systematically mapping the translation outputs of both machines using website translation data, this study seeks to provide a detailed analysis of the types of equivalence produced by machine translation and to compare the results of the two engines from the perspective of translation equivalence. In light of this research gap, the study is guided by the following research questions:

1. What types of translation equivalence are produced by Google Translate and DeepL Translate when translating website content for tourism promotion?
2. How do the translation results by the two machine translations compare in translating website content for tourism promotion?

2. LITERATURE REVIEW

In the translation process, equivalence is an important aspect of achieving accuracy, acceptability, and readability (Fadhillah & Sinaga, 2015; Panou, 2013; Septarani, 2022). To compare the equivalence produced by two machine translations, the identification of equivalence in the translation of the Kampung Kopi Camp website by Google Translate (GT) and DeepL Translate (DT) was based on Koller's translation equivalence (1979) with its five types. This section presents two related discussions regarding the topic, namely equivalence in translation and the previous studies related to the focus of this study.

2.1 Equivalence in Translation

The idea of equivalence is very important in the study of translation. However, it has caused a lot of arguments among translators about what it really means and how it can be used (Panou, 2013). This study adopted Koller's equivalence by taking into account that it is multi-layered. Koller's framework for equivalence clarifies the different aspects that translators need to consider when creating a text. A good translation not only conveys information but also recreates an experience similar to that of the original audience since no language has perfect equivalents for every word or phrase, translators often employ techniques such as synonyms, borrowing, or paraphrasing to ensure accuracy and contextual appropriateness (Hisasmaria, 2022; Anzani et al., 2021; Xu, 2016). Equivalence in translation serves as a guide for translators in determining the most appropriate linguistic choices based on the communication objectives and the needs of the target audience (Melliana et al., 2021). Koller (2019) classifies equivalence in translation into five main categories: denotative equivalence, connotative equivalence, formal equivalence, text-normative equivalence, and pragmatic equivalence.

2.1.1. Denotative Equivalence

Denotative equivalence refers to equivalence in translation that involves the extralinguistic content of a text (Panou, 2013). This means an effort to ensure that the literal or direct meaning (denotative) of a text in the source language remains equivalent when translated into the target language, taking into account elements beyond the language itself, such as cultural context,

situations, or tangible objects referenced in the text. This is essential to maintain the accuracy of the message and ensure it aligns with the reality intended in the original text.

2.1.2. Connotative Equivalence

Connotative equivalence or stylistic equivalence deals with lexical choices that are almost synonymous. This means that in translation, the translator should choose words that have almost the same meaning and can be felt equal as in the source language. This equivalence considers the additional meanings, emotions and cultural associations attached to the words. Thus, the message, style, and emotional effect of the original text can be preserved in the translated text. Connotative meaning covers the associations or nuances that arise from a word, not just its dictionary meaning. The translation of connotative meaning involves the transfer of a language unit by considering its connotation and function in addition to its denotation (Julian, 2023a). This means that the translator must understand and convey not only the literal meaning of the word but also all the additional meanings, emotions, or cultural associations associated with the word in the source language so that the complete message can be correctly understood in the target language.

2.1.3. Formal Equivalence

Koller's theory suggests that formal equivalence, or expressive equivalence, aims to preserve the form, aesthetics and language style of the source text by faithfully translating word-for-word. This means that the translator strives to reproduce the structure and word choice of the original text in the target language so that the translation reflects the same style and form as the original text. Formal equivalence focuses on maintaining the linguistic and aesthetic integrity of the source text, ensuring that elements such as rhythm, rhyme and writing style are preserved in the translation. Formal equivalence refers to using as many equivalent items as possible in translation. This is done mainly when the translation aims to achieve formal equivalence rather than dynamic equivalence. As such, formal equivalence seeks to faithfully reproduce the structure, style and word choice of the original text in the target language (Julian, 2023; Panou, 2013). However, in practice, formal equivalence can sometimes change the grammatical and stylistic patterns of the recipient language because when translators focus too much on formal equivalence, there is a risk that the translation needs to follow the rules of grammar or writing style typical in the target language, which may obscure the intended message or cause misunderstanding by the intended reader or listener.

2.1.4. Text-normative Equivalence

Text-normative equivalence refers to the compatibility of a translation with a particular type of text. Koller's theory also explains that text-normative equivalence is the process of selecting appropriate words or phrases based on a particular text type, such as description or analysis (Al Saeed & Abdul Wahab, 2023). In translation, text-normative equivalence is essential to ensure that word choice, sentence structure, and language style conform to the norms or conventions that apply to the original text type. For example, descriptive texts will use more descriptive and detailed language, while analysis texts tend to use more technical and analytical language. By considering text-normative equivalence, the translator can maintain the consistency of the style and feel of the original text in translation so that the message conveyed remains appropriate and effective in the target language.

2.1.5. Pragmatic Equivalence

Koller's theory explains that pragmatic equivalence, or communicative equivalence, emphasizes the same communicative outcome between the source and target languages. This means that the translation should produce similar or at least equivalent communicative effects in the target language as it does in the original language. In this context, the translator is not only concerned with the literal or word-for-word meaning of the source text but also pays attention to how the message or information conveyed can be understood, received and interpreted effectively by the reader or listener in the target language (Budiningtyas et al., 2020). As such, pragmatic equivalence ensures that the communicative purpose of the original text is Maintained in the translation process, allowing the message conveyed to have the same or equivalent impact in the cultural and linguistic context of the target language.

2.2 Previous Studies

Several previous studies have assessed translation equivalence and machine translation, mainly focusing on Google Translate and DeepL Translate. The following presentation of the previous studies includes a discussion on translation equivalence, quality of machine translation, and translation assessment.

2.2.1 Translation Equivalence

Translation equivalence is a pivotal aspect of any translation process. In terms of translation, it is crucial to be concerned with the distorted meaning and double meaning so that the translation reaches the communicative level (Basriana et al., 2022; Septarani, 2022). Translation equivalence can be achieved through applicable strategies and techniques (Budiningtyas et al., 2020c). Thus, achieving equivalence in translation involves applying appropriate techniques and strategies and adjusting to the appropriate cultural and linguistic context.

Translation equivalence is not achieved if the translation does not translate the meaning of the source language to the target language inappropriately (Basriana et al., 2022; Rizqi, 2019). The direct application of English grammar rules results in the translated text being less meaningful and unnatural (Ummami, 2019). This study analyzed the translation test to see the equivalence of English-Indonesian text translation. As seen in Ummami's (2019) research findings, grammar is the main problems in translation equivalence. This is in line with the findings of Basriana et al. (2022) that the translation of the source language text to the target source is not acceptable or non-commutative if it does not concern the meaning of distorted meaning and double meaning.

2.2.2 Quality of Machine Translation

The quality of machine translation is still relevant to a current research topic. Several researchers envisioned that successful improvements in machine translation quality could have the potential to be used to make MT more user-friendly (Moorkens et al., 2018). To be specific with Google Translate and DeepL Translate, Agung et al. (2023) conducted a study and found that these two machine translations still face challenges in translating specific or culturally nuanced terms, thus affecting the quality of machine translation. Agung et al. (2023) analyzed the Google Translate and DeepL translation systems in translating Indonesian short stories. Meanwhile, (Aulia, 2022) in analyzing the translation of 32 texts about health from the Jakarta Post, concluded that the use of machine translation, especially Google Translate can be an alternative to help readers to understand texts in English.

2.2.3 Translation Assessment

Measuring translation quality and evaluating the quality of translated works are the general definitions of translation assessment. Translation quality is very important because a good translation should be able to convey the same ideas and information from the source language to the target language. By adopting Nababan's classification of translation assessment, Putri et al. (2022) analyzed the translation quality of Medan City tourism web pages. In this analysis, the study involved professional translators as raters who helped assess the translation quality. The assessment results showed that the Medan City tourism webpage was accurate, acceptable, and easy to read. This is in line with the findings of Ningsih et al. (2020), who also applied the same translation assessment classification to assess the translation quality of the novel "Bound". Ningsih's research found that the translation quality of the novel "Bound" was in a good category. Although there are some parts that are less accurate with an average score, overall, the translation is still acceptable to readers in the target language. This study highlights the importance of carefully evaluating the quality of translation to ensure that the message and information in the original text can be well conveyed to readers in the target language.

3. RESEARCH METHODOLOGY

In line with the aim of providing an in-depth insight into how equivalence is applied in the translation of Kampung Kopi Camp website content by evaluating the equivalence produced by Google Translate (GT) and DeepL Translate (DL), this research applied a qualitative method (Miles et al., 2013). This research collected data from the Kampung Kopi Camp website in 2024, focusing on four main sections: homepage, profile, tour packages, and Pupuan sub-district exploration. The website offers content in Indonesian and English to meet the needs of both local and international audiences. In the context of this study, translation equivalence of website content is worth discussing because, without equivalence, the translation results in miscommunicated content in the form of irrelevant information. When the results of machine translation are used without editing and considering the equivalence, the message and description of the tourist attraction are not as factual as the source language information that is written in Indonesian. This can degrade business quality. Audiences may feel the poorly translated content is unprofessional or untrustworthy. Hence, the equivalence of translation made by the two machine translations is worth investigating.

The data collection process involved systematically observing and reading website content, followed by organizing the translated text for further examination. Several key activities were undertaken. First, the source text was reviewed to identify important information on the website. Next, the translations produced by two machine translation tools (GT and DT) were observed and analyzed. The process continued by categorizing differences in linguistic units and marking key variations. Finally, the translations were compared side by side with the source text to assess equivalence.

In analyzing data, several steps like data condensation, data presentation, drawing and verifying conclusions were applied. The analysis was done after the collected data found on the Kampung Kopi Camp website <https://kampungkopicamp.com/> was classified in accordance with Koller's equivalence. The following steps describe the details of the data analysis process.

Data condensation, it was the initial step in selecting, focusing, and simplifying data. In this research, data condensation was realized by selecting the same and different equivalence created

by GT and DT. The focus and simplifying of data were done by picking the details of the different types of equivalence and finding the reasons why they are different.

Data Presentation, this stage was realized by organizing, combining and concluding which information was significantly relevant. The classification results were double-checked by displaying the representative data in the table, which made the process of selecting relevant and significant data easier.

Drawing and verifying conclusions, this step was carried out after finalizing the mapping of equivalence. The conclusions drawn here were specifically carried out to provide a clear interpretation on the same equivalence and different equivalence created by GT and DT.

4. RESULTS

This study found two major classifications regarding the translation equivalence produced by GT and DT in translating the website content of Kampung Kopi Camp. These two classifications include (1) the same type of equivalence and (2) different types of equivalence. The same type of equivalence was found in 11 data showing the application of denotative equivalence, pragmatic equivalence and text normative equivalence. Different types of equivalence were produced by the two machine translations of 22 data. They demonstrate variations in the application of Koller's equivalence. The findings with brief interpretation are formally presented in Table 1 and Table 2.

Table 1: Occurrences of Same Type of Equivalence

Types of Equivalence	Occurrence	GT	DT	Brief Interpretation
Same Type	6	Denotative	Denotative	In both translations, the cultural context of the source language is maintained in a more literal form.
	4	Pragmatic	Pragmatic	Both GT and DT translate the meaning of the source language to the target language, which results in pragmatic equivalence.
	1	Text-normative	Text-normative	The translation of GT and DT maintains the same text type.
Total	11			

Table 1 demonstrates the category of translation equivalence, namely denotative equivalence, with 6 occurrences, 4 occurrences for pragmatic equivalence, and 1 occurrence for text-normative equivalence. A total number of 11 data showing the same type of equivalence was found with their interpretation discussing a brief reasoning and conclusion verification. This identification means there is the possibility that both GT and DT translations will have the same results in creating equivalence. In line with the characteristics of text and its structure, GT and DT do not translate the source language text to the target language by adding words or phrases in the translation. This application is in accordance with the concept of text-normative equivalence.

Table 2: Occurrences of Different Types of Equivalence

Types of Equivalence	Occurrence	GT	DT	Brief Interpretation
Different Types	7	Formal	Denotative	This highest occurrence showed the tendency of GT to maintain the linguistic and aesthetic integrity of the source text, while DT applies a translation of word-for-word that does not consider much on the style and aesthetic feature of the source text.
	4	Denotative	Formal	When compared to GT, DT creates more data on the application of formal equivalence, while GT produces variation in the equivalence for the translation of website content.
	4	Connotative	Formal	Compared to GT, DT creates more data on the application of formal equivalence, while GT produces variation in the equivalence for the translation of website content.
	3	Pragmatic	Formal	When compared to GT, DT creates more data on the application of formal equivalence while GT produces variation in the equivalence for the translation of website content.
	2	Text Normative	Formal	When compared to GT, DT creates more data on the application of formal equivalence while GT produces variation in the equivalence for the translation of website content.
	1	Denotative	Text normative	This is the case of different diction and styles that influence the naturalness and readability created by GT and DT.
	2	Formal	Text normative	This is the case of different diction and styles that influence the naturalness and readability created by GT and DT.
Total	23			

Table 2 presents the different types of equivalence in the translations performed by GT and DT. Of the different types of equivalence, denotative-formal equivalence is the most dominant with 5 data, followed by other combinations of GT and DT equivalence. The total number of occurrences is 23 data. In addition to 7 data for formal-denotative equivalence for GT and DT, the other 16 data are classified as 4 data of denotative-formal for GT and DT, 4 data of connotative-formal for GT and DT, 3 data for pragmatic-formal for GT and DT, 2 data for text normative-formal for Gt and DT, 1 data denotative – text normative for GT and DT, 2 data for formal-text normative for GT and DT. This data classification illustrates how Google Translate (GT) and DeepL Translate (DT) sometimes translate the source text to the target text with different results. GT and DT can also produce different translation results; some translate according to the cultural context, and some translate only literally, both of which translate the same source text.

4.1 Same Types of Equivalence

GT and DT are both strong tools for translating text, but each of them has its own strengths. The quality of their translations can change based on the languages and type of texts being translated. Both tools have their advantages. The interpretation of the same type of equivalence produced by GT and DT is discussed by presenting the following five representative data.

Datum 1

Table 3: Denotative Equivalence

Source Text	TT (DeepL)	Type of Equivalence (Deep L)	TT GT	Type of Equivalence (GT)
Semua ini melengkapi konsep “ mendekatkan diri ke alam ” dengan beberapa kegiatan, seperti fourwheel jeep tour, ATV, trekking, fishing, hiking, cycling dan team building.	<i>All this</i> complements the concept of “ <i>getting closer to nature</i> ” with several activities, such as four-wheel jeep tour, ATV, trekking, fishing, hiking, cycling and team building.	Denotative	<i>All of this</i> complements the concept of “ <i>getting closer to nature</i> ” with several activities, such as four-wheel jeep tour, ATV, trekking, fishing, hiking, cycling and team building.	Denotative

Datum 1 shows that both DT and GT are included in the denotative concept even though there is a difference in the beginning part of the sentence between DT and GT's translation of the phrase "semua ini" into "all this" by DT and "all of this" by GT. Both "all this" and "all of this" are grammatically correct, but their meanings can differ slightly based on the context. "All of this" often refers to a specific thing or group of things currently being discussed or present, as in, "All this food tastes delicious." Meanwhile, "all of this" typically refers to something previously mentioned or being discussed in more detail, such as, "All of this work must be finalized by tomorrow." Here, “the work” must be previously mentioned or can refer to something that has been understood by its context. Generally, "all of this" is more informal, while "all of this" is more formal. So, in this context, the word "all of this" is more indicative to fit the intention of explaining the potentials of Kampung Kopi Camp.

In addition, the concept of denotative equivalence applied by both translation machines can be seen in the translation of the phrase "getting closer to nature" from its source text, which is "mendekatkan diri ke alam". The phrase "getting closer to nature" has the same meaning as "mendekatkan diri ke alam" in Indonesian, where "getting closer to nature" means spending more time outdoors and interacting with the natural environment to improve well-being and feel a close relationship with nature. Therefore, these two translations achieve equivalence with the denotative concept, which is more concerned with the denotative meaning element.

Datum 2

Table 4: Denotative Equivalence

Source Text	TT (DeepL)	Type of Equivalence (Deep L)	TT GT	Type of Equivalence (GT)
Paket Tour 2 Kampung Durian. Tim KKC akan mengajak Anda pergi ke Desa Mundeh Kangin yang merupakan penghasil durian yang sangat terkenal di Pupuan.	Tour Package 2 Durian Village. KKC team will take you to Mundeh Kangin Village which is a very famous durian producer in Pupuan	Denotative	Tour Package 2 Durian Villages. The KKC team will take you to Mundeh Kangin Village, which is a very famous durian producer in Pupuan.	Denotative

Datum 2 shows that both translations, from GT and DT, have successfully applied the concept of equivalence. Equivalence in translation refers to the translation process applied when two texts have the same situational context but use entirely different stylistic and structural approaches. In other words, equivalence occurs when the translation is able to maintain the meaning and function of the original text despite significant differences in form and style between the two texts.

In this translation context, GT and DT have achieved denotative equivalence. Denotative equivalence is a form of equivalence that focuses on conveying basic information and literal meaning from the source text to the target text. In denotative equivalence, what matters is that the information conveyed and the context are accurate and well-received by the readers of the target text. As seen in Datum 2, literal translation with all its denotative meaning can be appropriately applied.

Datum 3

Table 5: Denotative Equivalence

Source Text	TT (DeepL)	Type of Equivalence (Deep L)	TT GT	Type of Equivalence (GT)
Pengunjung diperkenankan untuk mandi di air terjun ini, jadi Anda dapat menyiapkan pakaian renang ketika Anda berkunjung ke air terjun ini.	Visitors are allowed to bathe in this waterfall, so you can prepare a swimsuit when you visit this waterfall.	Denotative	Visitors are allowed to bathe in this waterfall, so you can prepare swimwear when you visit this waterfall.	Denotative

Datum 3 shows that both translations, achieve denotative equivalence. The conveyance of information and cultural context is successful. This denotative equivalence means that both translations are able to transfer the basic meaning and information from the original text into the translated text accurately. One example is the translation of the word "diperkenankan" into "allowed." According to the Cambridge Dictionary (<https://dictionary.cambridge.org>) , "allowed" means to give permission or allow someone to do something. Therefore, both translations successfully convey the meaning of the text.

The translation of "swimsuit" by DT is more specific and refers only to swimwear. The term is usually used to refer to clothing specifically designed for swimming, such as a one-piece swimsuit, bikini, or swimming trunks. In comparison, GT's translation of "swimwear" has a broader scope. The word "swimwear" not only refers to swimwear but can also include various other swimming gear such as swim caps, goggles, and headgear. The term is more general and can cover different types of clothing and accessories used for swimming.

Datum 4

Table 6: Pragmatic Equivalence

Source Text	TT (DeepL)	Type of Equivalence (Deep L)	TT GT	Type of Equivalence (GT)
Nah, bonus lainnya adalah pengetahuan tentang budidaya kopi dan hasil alam lainnya di Pupuan	Well, another bonus is knowledge about coffee cultivation and other natural products in Pupuan.	Pragmatic	Well, another bonus is knowledge about coffee cultivation and other natural products in Pupuan	Pragmatic

According to Koller (1979), pragmatic equivalence refers to translation that not only focuses on the literal meaning but also takes into account the context, situation, and communicative purpose to ensure that the message remains effective and relevant for the reader or listener in the target language. Datum 4 achieves the concept of pragmatic equivalence. The translation of the word "Nah" achieves equivalence where DeepL and also Google Translate translate the word into "Well". Both the source and target texts of the words "Nah" and "Well" have the same meaning, which is an exclamation word. Cited from Kamus Besar Bahasa Indonesia (KBBI) (<https://kbbi.kemdikbud.go.id/>), the word "Nah" refers to an interjection used to initiate or change the direction of a conversation, give an explanation, or show emphasis. The word "well", according to the Oxford Dictionary, is also used to express surprise, anger or relief.

The translation of the sentence "bonus lainnya adalah pengetahuan tentang budidaya kopi dan hasil alam lainnya di Pupuan" into "another bonus is knowledge about coffee cultivation and other natural products in Pupuan" does not experience any word addition or word subtraction, all words are translated word for word. The resulting translation of GT and DT is able to achieve translation equivalence by conveying the appropriate meaning, so this translation has applied Koller's concept of translation equivalence, which is equivalence refers to the state of being equal in value, function, or meaning.

Table 7: Pragmatic Equivalence

Source Text	TT (DeepL)	Type of Equivalence (Deep L)	TT GT	Type of Equivalence (GT)
Ayo, eksplorasi alam Pupuan dengan pesonanya yang alami.	Come on, explore Pupuan's nature with its natural charm.	Pragmatic	Come on, explore Pupuan nature with its natural charm.	Pragmatic

Datum 5 demonstrates that the context of the source language is effectively conveyed in the target language. Both translations have successfully applied the concept of pragmatic equivalence. In this context, pragmatic equivalence relates to how a communicative expression from the source language can be conveyed effectively into the target language. This is in accordance with the equivalence theory expressed by Koller (1979). An example that demonstrates the application of pragmatic equivalence is the translation of the word "ayo" into "come on" in both translations. The word "ayo" in Indonesian has the meaning of an invitation or encouragement to start something. The English Translation of "come on" also has a similar meaning of invitation or encouragement. Therefore, both translations successfully convey the meaning and function of the word "ayo" correctly in the target language.

4.2 Different Types of Equivalence

Table 8: Denotative Equivalence – Formal Equivalence

Source text	TT (DeepL)	Type of Equivalence (Deep L)	TT GT	Type of Equivalence (GT)
Kampung Kopi Camp (KKC) di Pupuan, Bali adalah tempat camping berkonsep kembali ke alam dan ekowisata yang bermuatan nilai edukasi	Kampung Kopi Camp (KKC) in Pupuan, Bali is a back-to-nature camping and ecotourism concept with educational value.	Denotative	Kampung Kopi Camp (KKC) in Pupuan, Bali is a camping site with a return to nature and ecotourism concept that contains educational value.	Formal

The source text explains the concept of camping in Kampung Kopi Camp. The translations produced by DeepL and Google Translate (GT) show different types of equivalence. The Translation of DeepL shows denotative equivalence, where the information from the source text is accurately reflected in the target text. In Online Cambridge Dictionary, the phrase "back-to-nature" used by DeepL means "to start living a simpler life, often in the countryside." In contrast, GT's Translation shows formal equivalence. As defined by Koller, formal equivalence is a word-

for-word translation that reflects the style and feel of the original text. Therefore, GT's Translation of the phrase "kembali ke alam" to "return to nature" shows formal equivalence as the translation is very literal and word-for-word. In addition, the phrase "return to nature" does not have an exact meaning in the dictionary or is not found.

Based on the analysis above, the application of the concept of denotative equivalence in DT can be seen with the word "with," where the source word is "yang bermuatan." The translation of DT emphasizes more on the language structure that involves cultural concepts of knowledge that can affect more natural understanding. Google Translate translates it into "that contains," which strongly applies the word-for-word concept without emphasizing the delivery of cultural concepts. From the two comparative analyses above, it can be concluded that the translation of DeepL reflects more of the cultural concept of the source text based on the concept of denotative equivalence. Here, Google translate's translation applies literal translation.

Datum 7

Table 9: Formal Equivalence - Connotative Equivalence

Source text	TT (DeepL)	Type of Equivalence (Deep L)	TT GT	Type of Equivalence (GT)
Warisan alam dan pengetahuan tentang pengolahan kopi yang khas harus dijaga sebagai bagian dari budaya dan kearifan lokal, khususnya yang lahir <i>dan menjadi bagian dari denyut kehidupan penduduk Pupuan</i>	Natural heritage and knowledge of typical coffee processing must be preserved as part of local culture and wisdom, especially those born and <i>become part of the pulse of Pupuan residents' lives.</i>	Formal	Natural heritage and knowledge about unique coffee processing must be maintained as part of local culture and wisdom, especially those that were born and <i>become part of the life of the Pupuan people.</i>	Connotative

Datum 7 above shows that the translations of both DT and GT are different. The translation results of DeepL are more likely to fall into the category of translation with the concept of formal equivalence. Compared to GT, this falls into the category of translation with the concept of connotative equivalence. These two differences are shown in the translation of the source text, namely "denyut kehidupan penduduk Pupuan." DeepL translates this sentence into "part of the pulse of Pupuan residents' lives." This translation in literal form looks correct, but the message and meaning to be conveyed becomes unnatural, so this translation belongs to the category of formal equivalence where the translation from the source language is translated literally or word for word and still maintains the form of the sentence. Meanwhile, Google Translate translates the sentence into "part of the life of Pupuan people". This translation is in a cultural context and connotative equivalence context, which is a translation that is similar in meaning from the source language to the target language.

In addition, DeepL translates the word "khas" into "typical," while Google Translate translates it into "unique." Based on the Online Cambridge dictionary, the word "typical" refers to showing all the characteristics that you would usually expect from a particular group of things, and the word "unique" is the only existing one of its type or, more generally, unusual, or unique in some way."

From these two dictionary definitions, it can be seen that Google Translate conveys the meaning of the language in the source text.

Datum 8

Table 10: Formal Equivalence - Pragmatic Equivalence

Source text	TT (DeepL)	Type of Equivalence (Deep L)	TT GT	Type of Equivalence (GT)
Jadi, kapan ke KKC Pupuan? Untuk informasi selengkapnya silakan lihat pada info kontak.	<i>So, when to visit KKC Pupuan? For more information please see the contact info.</i>	Formal	<i>So, when are you going to KKC Pupuan? For more information please see contact info.</i>	Pragmatic

Datum 8 presents an interesting phenomenon. These two translations have different concepts of translation equivalence. The translation of DeepL is more inclined to the formal equivalence category because the translation from the source text to the target text is very literal or word-for-word. The sentence "Jadi, kapan ke KKC Pupuan?" is translated by DeepL into "So, when to visit KKC Pupuan?" while Google Translate translates it into "So, when are you going to KKC Pupuan?". GT's Translation refers more to the concept of pragmatic equivalence. According to Koller (1979), pragmatic equivalence emphasizes more on the same communicative outcome between the source and target languages. So, it can be seen that this GT's translation refers to pragmatic equivalence where the translation uses communicative language because of the addition of the word "you", which directly refers to the audience, and this affects the meaning conveyed or in the form of an invitation.

The translation of the sentence "Untuk informasi selengkapnya silakan lihat pada info kontak" into "For more information please see contact info." does not experience any word addition or word subtraction; all words are translated word for word. Both translations are able to achieve translation equivalence by conveying the appropriate meaning, so this translation has applied Koller's concept of translation equivalence, which is equivalence refers to the state of being equal in value, function, or meaning.

Datum 9

Table 11: Formal Equivalence - Pragmatic Equivalence

Source text	TT (DeepL)	Type of Equivalence (Deep L)	TT GT	Type of Equivalence (GT)
Untuk mengisi waktu selama bermalam di KKC, banyak kegiatan yang dilakukan sehingga liburan di KKC tidak akan membosankan	To fill the time during the overnight stay at KKC, there are many activities to do so that the vacation at KKC will not be boring	Formal	To fill <i>your</i> time while staying overnight at KKC, there are many activities to do so that <i>your</i> holiday at KKC will not be boring.	Pragmatic

Datum 9 shows that the differences in translation results also result in differences in the application of the concept of translation equivalence. In translating the source language text, DeepL produces a literal translation. The characteristics of literal translation show an attempt to strictly follow the structure of the source (Jayantini, 2016). It tends to translate word by word without much change to the original sentence structure.

In contrast, Google Translate translates the sentence with a more communicative approach. Google Translate not only follows the literal structure of the source language but also adds the word "your" to make the sentence more specific and directly refer to the reader. The addition of the word "your" makes the translation more evident and more relevant to the target language reader. This Translation by Google Translate successfully achieves the concept of pragmatic equivalence. Pragmatic equivalence, as explained in the previous data, is a translation that focuses on conveying the meaning and communicative function of the original text into the translated text. Pragmatic translation ensures that the message and situational context of the source text can be well received and understood by the target language readers.

Datum 10

Table 12: Formal Equivalence – Denotative Equivalence

Source text	TT (DeepL)	Type of Equivalence (Deep L)	TT GT	Type of Equivalence (GT)
Patung Buddha tersebut menunjukkan posisi sedang tidur dengan memangkuk kepala di satu tangannya.	The Buddha statue shows a sleeping position with his head in one hand.	Formal	The Buddha statue shows a sleeping position with its head cradled in one hand.	Denotative

Datum 10 shows that both translations apply different concepts of equivalence. DeepL uses the concept of formal equivalence, which means that the translation is done word by word or reflects the style of the source text. This concept has been described in the previous data as an approach that focuses on maintaining the original structure and form of the source language. For example, the translation of the sentence "its head cradled in one hand" by Google Translate into "its head cradled in one hand" shows that Google Translate tries to maintain the original meaning and style of the source text. This translation is more acceptable to readers as it reflects a clear and understandable action in the target language context.

On the other hand, DeepL produces a different translation for the same sentence, which is "his head in one hand." This translation appears more literal and pays less attention to the relevant context, which can make it difficult for target language readers to understand the true meaning of the text. The translation by DeepL shows a lack of emphasis on the context and communicative meaning of the source text.

5. DISCUSSION

This study expands on previous research recommending the use of machine translation in the tourism sector (Alhaj, 2024). While both Google Translate (GT) and DeepL (DT) provide relatively accurate translations, GT is better suited for translating promotional tourism texts, as its

output tends to be less formal than DT's. However, optimism about DeepL's potential emerges in literature reviews (Kamaluddin et al., 2024) where its user-friendly interface and prior studies suggest it can produce high-quality translations (Kamaluddin et al., 2024). Nevertheless, these conclusions were drawn without presenting specific translation data, highlighting the need for empirical testing and comparison with other machine translation applications. Several studies have also reported positive outcomes in machine translation, emphasizing its potential for specific text types. For instance, researchers have compared the translation accuracy of Google Translate and Bing Translate (Ardianto, 2021). Additionally, English language learners have expressed a favorable attitude toward machine translation, recognizing its role in enhancing their linguistic knowledge. This is particularly beneficial in writing classes, where students must develop both strong language skills and the ability to organize their ideas into well-structured compositions (Wang & Ke, 2022).

This study identifies several key findings, particularly the similarities and differences in equivalence between Google Translate (GT) and DeepL (DT). One notable similarity is that both tools produce comparable translations for promotional tourism websites. When translating tourism-related promotional texts, GT and DT both perform well in rendering denotative meanings, capturing pragmatic nuances, and providing equivalences appropriate to the text type. These findings align with those of Alhaj (2024), who reported positive expert feedback on the use of machine translation due to its high level of acceptability. Acceptability itself is assessed based on specific parameters. While this study focuses on equivalence, other research has explored different aspects, ultimately supporting the broader conclusion that machine translation has both strengths and limitations. Certain linguistic elements, such as grammatical structures, auxiliary verbs, and basic word formation, are generally well-translated. However, challenges remain in translating certain text types, particularly those that involve cultural terms, complex grammar structures—such as tenses, active/passive voice, and singular/plural forms—which are not yet fully handled with precision in informative texts. (Ismailia, 2023).

These findings further validate previous research showing that Google Translate produces more dynamic and communicative translations compared to DeepL, which tends to be more formal and, therefore, less effective in delivering promotional messages in an engaging manner. This study incorporates a comparative analysis similar to prior qualitative descriptive studies that examined six machine translation tools: Google Translate, Collins Translator, Bing Translator, Yandex Translator, Systran Translate, and IBM Translator (Fitria, 2021). Another study compared a different set of six translation tools: Google Translate, DeepL, Yandex, U Dictionary, Microsoft Translate, and iTranslate (Ismailia, 2023). Machine translation analysis has produced varying results depending on the research focus, with comparative data highlighting Google Translate's advantages (Ardianto, 2021; Azer & Aghayi, 2015). When assessed independently, Google Translate's readability falls into two categories: highly readable and less readable, particularly for website content (Nasution, 2022).

This study identifies two key findings consistent with previous research (Putri & Dewi, 2021): machine translation tends to be both literal and faithful to the source text. When translating website content, creative adaptation is essential to ensure the translation remains communicative and easy to read. While machine translation has advanced significantly, selecting the right tool and staying informed about translation trends remain crucial for users. Additionally, recognizing the limitations of machine translation can enhance comparative studies of Google Translate (GT) and DeepL (DT). Some common weaknesses of machine translation include literal (word-

for-word) translation, difficulty with scientific vocabulary, challenges in selecting appropriate synonyms, inability to recognize rhetorical devices, and limitations in spoken translation (Shaikhli, 2022). Given that different translation tools have unique strengths and weaknesses, this study offers a perspective that contrasts with previous research, which primarily focused on accuracy and concluded that DeepL is superior to GT (Telaumbanua et al., 2024). By analyzing website content in the tourism sector, this study found that both GT and DT produced fairly accurate translations. However, DT's more formal tone made it less communicative than GT. This suggests that variations in evaluation parameters lead to different conclusions regarding the effectiveness of these machine translation tools.

6. CONCLUSION

The findings revealed that both Google Translate and DeepL Translate provided translations with the most frequent occurrence of denotative equivalence. This equivalence effectively conveyed the referential content and factual details from Indonesian into English. In terms of connotative equivalence, both machine translations managed to preserve the implied meanings and nuances of the original text to a significant extent. Slight variations in word choice occasionally led to differences in interpreting connotations. While DeepL Translate might opt for a more direct translation, Google Translate might choose a slightly more communicative phrasing. These variations highlighted the importance of context in translation. Text-normative equivalence maintained well by both translation tools. The translations of GT and DT adhered to the syntactic and stylistic norms of English. This was evident through this research as a case study for the translations of website content as promotional text. Pragmatic equivalence, which focused on the practical use of the translation in a communicative context, was achieved to a satisfactory level. Both tools succeeded in preserving the intended message and the promotional purpose of the website content. In this study, GT occasionally captured pragmatic nuances slightly better by explicitly stating certain elements, enhancing the promotional impact. Meanwhile, formal equivalence refers to the structural and stylistic form of the original text, was well-preserved in both translations. The translations retained the formal nuance and function of the original sentences, ensuring that the structure and style were consistent with Indonesian as the source language. All in all, this study is expected to contribute to the understanding of machine translation quality and emphasizes the need for continuous improvement in translation technology to achieve higher levels of accuracy and equivalence across different types of texts.

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