ANALYSIS OF MACHINE TRANSLATION IN CULTURAL TRANSLATION OF JAVANESE FOLK SONGS

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Abstract

This research analyzes the lyrics of Javanese folk songs, "Rek Ayo Rek" and "Lir Ilir" translated by Machine Translation, namely Google Translate. The folk songs convey cultural messages that require contextual understanding. This study evaluates the equivalence and accuracy of the translations produced, and identifies the errors that occur in the translation process.This study uses Eugene Nida's Dynamic Equivalence theory which aims to evaluate the extent to which Machine Translation can maintain the original meaning of Javanese culture. The analysis shows that the translations are structurally correct, but often miss important idioms and cultural nuances. The analysis showed that 83% of the translations in "Rek Ayo Rek" lyrics and 100% in "Lir Ilir" lyrics lost symbolism and cultural meaning due to literal translation. The findings show incomplete translations, word misinterpretation, and loss of cultural nuances, indicating the limitations of Machine Translation in translating cultural aspects. This study contributes to the development of more effective folk song translation strategies, especially in translating texts that contain cultural context.
Keywords : Folk Songs, Google Translate, Lyrics, Machine Translations.

INTRODUCTION

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Java is famous for its rich and diverse cultural heritage. Javanese cultural heritage includes various aspects such as language, traditions, and customs used by Javanese people. One of the cultural heritages originating from Java is folk songs. Folk songs are one of the diverse forms of cultural expression. Folks songs can reflect the values, traditions, and identity of the community. It is a cultural heritage that needs to be preserved and introduced widely (Waterman & Nida, 1966)(Setiowati, 2020). The lyrics of folk songs often tell stories about daily life and also the perspective of Javanese society. However, in today's modern era, folk songs are less well known. In addition, the use of language in folk songs is often a barrier for those who are not skilled in Javanese, making the meaning of folk songs difficult to understand. The use of language in song lyrics often contains idioms that make the meaning of the lyrics difficult to understand. Javanese folk songs play an important role in preserving the values, traditions and identity of Javanese society.

This study uses folk songs such as "Rek Ayo Rek" and "Lir Ilir" as case studies. This research uses the YouTube application as a source of data for this research. Both songs have high cultural value and are often sung in various traditional events. "Rek Ayo Rek" is sung by Mus Mulyadi, this song is about spirit and unity, while "Lir Ilir" is sung by Cak Nun, this song contains deep moral and spiritual messages. Through the lyrics, these two songs not only function as entertainment, but also as a means to convey moral messages and life values contained in Javanese culture. To understand the meaning of folk songs, Machine Translations can help to translate folk song lyrics from the source language to the target language so that songs can be widely understood.

Translation is the process of changing meaning in writing or orally from the source language to the target language, which must preserve the message, meaning and function of the original text (Arba et al., 2023). With today's technological advancements, people can access Javanese cultural information more easily through translation that not only focuses on words, but also on the appropriate cultural context and traditions. In recent years, Machine Translation (MT) technology has developed rapidly and become an effective alternative to reduce cost and time in translation, as shown by the popularity of Google Translate as a free translation tool from Google Inc. (Arba et al., 2023). Although Google Translate can parse and translate various types of content, including song lyrics, the utilization of MT in the context of Javanese local wisdom is still very limited. Therefore, further research is needed to understand the challenges and opportunities in developing effectiveness of MT, with comprehensive data and ongoing research so that the translations produced are accurate and appropriate to Javanese culture.

In translation studies, Nida's dynamic equivalence theory is used to translate folk song lyrics. According to Nida and Taber in the book *The Theory and Practice of Translation,"* this theory is used to ensure that the translation is in accordance with the meaning of the source language can be understood by the audiences of the target language (Nida & Taber, 1969). As folk songs often contain idioms and symbols typical of the region, the use of dynamic equivalence theory assists translators in translating song lyrics by maintaining the original meaning and nuances even if the language structure is changed. By applying this theory, this study will analyze how Google Translate translates the lyrics of the songs "Rek Ayo Rek" and "Lir Ilir" and to what extent the translations are able to convey the original Javanese meaning and cultural values.

The use of MT in the context of Javanese culture needs more attention because it has unique cultural and linguistic elements, so that MT can provide better results in improving the efficiency and accuracy of translation. This study looks at the effectiveness of Google Translate in translating two Javanese folk songs, namely "Rek Ayo Rek" and "Lir Ilir". This study assures the accuracy, precision, and compatibility of Google Translate's translation results with the original meanings of the songs, and evaluates its advantages and disadvantages in the context of translating songs that are full of cultural meanings. Therefore, the translation of Javanese folk songs should be done with great care to ensure the preservation of the original meaning and the associated cultural context. This research is expected to make a significant contribution to the understanding of Javanese local wisdom, and is expected to make a significant contribution to the understanding of culture in Java using Machine Translation technology.

METHOD

This research uses a descriptive qualitative approach to analyze the translation of folk songs. According to Munday, this approach allows researchers to deeply analyze aspects of equivalence and

translation in the target language (No, 2001). This approach also helps in finding errors in the translation of lyrics produced by Google Translate in translating song lyrics, as well as ascertaining the extent to which Google Translate is able to capture the cultural context that exists in the lyrics of folk songs.

In analyzing the translation of the songs "Rek Ayo Rek" and "Lir Ilir" using Google Translate, the first step is to find videos containing the songs "Rek Ayo Rek" and "Lir Ilir" on the YouTube platform. Then the researcher recorded the lyrics of the two songs in full along with the correct way of writing in the local language. After the lyrics were collected, the translation process began by entering the lyrics into Google Translate per line in stages, this way is done to avoid translation errors that might occur if translating all the lyrics at once. Each translation result obtained was compared with the original lyrics to see if the translation was in accordance with the contextual meaning. After the translation results were obtained, an in-depth data analysis was conducted to see the extent to which Google Translate was able to capture the original meaning and cultural nuances of the original lyrics.

After the translation process using Google Translate is complete, the next step is to analyze the translation results by paying attention to the original meaning and cultural context contained in the two songs. In this process, it is important to understand that Google Translate does not always translate perfectly, especially for idiomatic words that have special meanings or specific cultural expressions. The translation errors produced by Google Translate will be analyzed in accordance with the dynamic equivalence theory by Eugene Nida, such as meaning errors, incomplete translation results, and inappropriate word selection that can affect the understanding of the lyrics in the cultural context. The analysis process also involves double-checking the translation to ensure that the original meaning and message of the songs can be understood.

FINDINGS AND DISCUSSIONS
1. Findings

This study presents the findings of the lyrics of Javanese folk songs, "Rek Ayo Rek" and "Lir Ilir" translated using Machine Translation (MT), Google Translate. This analysis focuses on the extent to which MT can maintain the original meaning of the translated Javanese folk song lyrics, it is in accordance with Nida's Dynamic Equivalence theory. Nida's theory is used to find the translation results have the accuracy of word and sentence structure so that the basic meaning can be conveyed directly. However, there are translation errors produced by Google Translation, especially symbolic or idiomatic phrases that have cultural and spiritual elements, the translation errors found, as follows:

Table 3.1 Result of lyrics translation

No.	Source Language	Google Translate	Error	Analysis
1.	Rek ayo rek, mlaku-mlaku nang Tunjungan	Saya ingin jalan-jalan di Tunjungan	"Saya ingin" and "di"	The translation loses the nuances of informal greetings and invitations that are typical of the Javanese language.
2.	Rek ayo rek, rame-rame bebarengan	Ayo pergi bersama	-	The translation is incomplete and loses the nuances of informal Javanese greetings.
3.	Cak ayo cak, sopo gelem melu aku	Ayo abang, siapa yang mau gabung dengan saya?	"Gabung"	Misinterpreting the nickname and the meaning of informal invitations in Javanese culture.
4.	Cak ayo cak, golek kenalan cah ayu	Bro, ayo kita cari gadis cantik untuk ditemui	"Bro" and "ditemui"	Translation errors and cultural context mismatches
5.	Ngalor ngidul liwat toko ngumbah moto	Utara ke selatan melalui bengkel cuci moto	"Utara ke selatan" and "cuci moto"	Failure to translate idioms and expressions in cultural context.

6.	Masio mung nyenggal-nyenggol ati lego	Masio baru saja mencubit hati Lego	"Masio," "mencubit," and "hati lego"	Misinterpretation of idiomatic phrases that lose the original meaning.
7.	Sopo ngerti nasib awak lagi mujur	Sopo tahu takdirmu lurus	"Sopo," "takdirmu," and "lurus"	Misinterpreting words and contexts of the original meaning.
8.	Jok dipikir kon podo gak duwe sangu	Pikirkanlah jika Anda tidak memiliki uang saku	"Pikirkanlah"	Errors in interpreting phrases.
9.	Jok dipikir angger podho gelem mlaku	Pikirkanlah selama Anda bersedia berjalan	"Pikirkanlah"	Errors in interpreting phrases.
10.	Mangan tahu jok dicampur nganggo timun	Makanlah tahu yang dicampur mentimun	"Yang"	Incomplete word translation.

Table 3.2 Result of Lyrics Translation

No.	Source Language	Google Translate	Error	Analysis
1.	Lir ilir lir ilir tandure wong sumilir tak ijo royo royo	Ibarat aliran tanaman rakyat yang tidak hijau	"Lir ilir" and "tidak hijau"	Misinterpretation of spiritual meaning.
2.	Tak sengguh panganten anyar	Saya tidak peduli dengan pengantin baru	"Saya tidak peduli"	Word translation errors and misinterpretation of actual word symbols.
3.	Cah angon cah angon penekna blimbing kuwi	Anak gembala adalah anak gembala	"Adalah anak gembala"	Incomplete translations.
4.	Lunyu lunyu penekna kanggo mbasuh dodotira	Sandal licin untuk mencuci dodotira	"Sandal licin" and "dodotira"	Errors in translating symbolic meanings.
5.	Dodotira dodotira kumintir bedah ing pinggir	Dodotira dodotira kumintir operasi di bagian samping	"Operasi di bagian samping"	Errors in translating phrases with literal meanings.
6.	Dondomana jrumatana kanggo seba mengko sore	Dondomana jrumatana untuk seba nanti malam	"Dondomana," "Jrumatana," dan "seba."	Translation errors and loss of spiritual context.
7.	Mumpung padang rembulane mumpung jembar kalangane	Asalkan bidang bulannya luas	"Asalkan" dan "bidang"	Incomplete translation and symbolic meaning loss.
8.	Sun suraka surak hiyo	Saya mendukung hal itu	"Saya mendukung hal itu"	Mistranslation of symbolic and meanings.

The following table shows the number of lines of lyrics analyzed and the number of lines with translation errors in both songs, "Rek Ayo Rek" and "Lir Ilir". This data shows the percentage of errors in the translation produced by Google Translate for each song, as follows:

Table 3.3 Total Findings and Percentage of Translation Errors

Songs	Types of Errors	Number of Errors
Rek Ayo Rek	Loss of cultural nuances	6
	Idiom mistranslation	2
	Incomplete translation	2
Lir Ilir	Spiritual misunderstanding	2
	Loss of symbolic meanings	4
	Incomplete translations	2

2. Discussions

Based on the findings above, the Google Translate translation results show many translation errors. The translation results show that Google Translate is less effective in translating idiomatic expressions of Javanese cultural messages in song lyrics. The findings are analyzed by describing the differences according to the translation results with the original meaning of the song lyrics, as follows:

2.1 Analysis of "Rek Ayo Rek" Lyrics

1. Saya ingin jalan-jalan di Tunjungan

The phrase "rek ayo rek" is not translated, which removes the impression of a familiar invitation between friends. This literal translation does not convey the sense of intimacy that is present in the invitation.

2.   Ayo pergi bersama

The phrase "rek ayo rek" is not translated, so the translation is incomplete, thus eliminating the nuances of Javanese informal greetings.

3.   Ayo abang, siapa yang mau gabung dengan saya

Google Translate's translation is incorrect, as it uses the word "abang," the meaning of the word cak which changes the familiar context to a more formal one. The word "cak" in this context is an informal.

4.   Bro, ayo kita cari gadis cantik untuk ditemui

The translation is inaccurate, the word "bro," which is a modern nickname, is not appropriate for the traditional Javanese context. The word "ditemui" is also inaccurate, as the lyrics "nggolek kenalan" should mean "mencari kenalan." The original meaning of the invitation and the Javanese nuances are also lost in this translation.

5.   Utara ke selatan melalui bengkel cuci moto

This translation fails to understand the idiomatic phrase "ngalor ngidul" which means "Berkeliling" but is translated as "Utara ke Selatan," which is literal and changes the meaning. Another mistranslation was "ngumbah moto" which idiomatically means "cuci mata" or "melihat-lihat," not "bengkel cuci moto."

6.   Masio baru saja mencubit hati Lego

The phrase "ati lego" means "hati lega," but is translated as "hati Lego," which has no relevant meaning in this context. Translation error in understanding idiomatic phrases that cannot take the phrase literally.

7.   Sopo tahu takdirmu lurus

The translation is inaccurate, the word "lurus" should be "beruntung," because the word "mujur" means luck or success, which is not reflected in the translation which does not have the appropriate meaning in this context.

8.   Pikirkanlah jika Anda tidak memiliki uang saku

The translation is inaccurate, the phrase "jok dipikir" should mean "jangan dipikirkan," not "pikirkanlah."

9.   Pikirkanlah selama Anda bersedia berjalan

Similar to the previous lyric, "jok dipikir" is an invitation not to worry, while Google Translate changes the meaning to "pikirkanlah," which is contrary to the original intention.

10.   Makanlah tahu yang dicampur mentimun

The translation is incomplete because the word "jok" should mean "jangan," while the translation does not mention it.

2.2   **Analysis of "Lir Ilir" song lyrics**.

1.   Ibarat aliran tanaman rakyat yang tidak hijau

The translation of the phrase "ibarat aliran" is incorrect, the phrase "Lir ilir" is more appropriate if it means "bangunlah" which includes spiritual awareness. The phrase "tandure wong sumilir" is more appropriate if it means "tanamannya telah bersemi". The error in translation of the word "tak" does not mean "tidak," therefore the phrase "tak ijo royo-royo" should mean "hijau yang subur."

2.   Saya tidak peduli dengan pengantin baru

The phrase "tak sengguh" in the context of this song means "bagaikan," so the translation "tidak pedyli" is wrong because it contradicts the actual meaning.

3.   Anak gembala adalah anak gembala

The translation by Google Translate is incomplete. The phrase "adalah anak gembala" is wrong, the phrase "penekna blimbing kuwi" should mean "panjatlah pohon blimbing itu."

4.   Sandal licin untuk mencuci dodotira

The translation is not correct, there is no element of "sandal" in the lyrics. The phrase "lunyu-lunyu penekna" should mean "tetap panjat meskipun licin." In the context of this song, the word "dodotira" means "pakaian," which Google Translate does not translate.

5.   Dodotira dodotira kumintir operasi di bagian samping

The translation of this lyric line is wrong. Google Translate translates to "operasi di bagian samping," which has no relevant meaning in the context of this song. The phrase "kumintir bedah ing pinggir" means "rusak di bagian samping," because "Dodotira" means "pakaian," which Google Translate translates incompletely.

6.   Dondomana jrumatana untuk seba nanti malam

The translation is incomplete, the words "Dondomana," "jrumatana," and "seba" is not translated, the words "Dondomana" should mean 'sewing' and 'jrumatana' should mean "Jahitlah," and "seba" should mean "menghadap." The translation is also incorrect, the lyric "sore" is incorrectly replaced by "malam."

7.   Asalkan bidang bulannya luas

The mistranslation of the phrase "Mumpung padang rembulane" which should mean "selagi bulan bersinar terang." The translation is also incomplete, the phrase "mumpung jembar kalangane" which should mean "mumpung banyak waktu luang" is missing.

8.   Saya mendukung hal itu

The lyrics "Sun suraka surak hiyo" are translated by Google Translate with the sentence "Saya mendukung hal itu," the sentence is incorrect because the sentence means exclamation, the sentence "Ayo bersoraklah dengan sorakan hiya" is more appropriate.

CONCLUSION

The folk songs "Rek Ayo Rek" and "Lir Ilir" are culturally rich, containing nuances of friendship and spirituality. The meaning of the songs is often difficult to understand, especially for audiencs outside Java. With the advancement of Machine Translation technology such as Google Translate, people can use it to understand the lyrics easily and quickly. However, Google Translate tends to translate literally, so it often loses the meaning of idioms and important cultural contexts. This makes the message contained in the song often lost or changed in meaning. Therefore, this study was conducted to analyze the extent to which Machine Translation is able to maintain the original meaning in the lyrics of the songs "Rek Ayo Rek" and "Lir Ilir," and identify the errors that occur in these translations. With the limitations of Machine Translation, the research is expected to improve a more appropriate approach in translating cultural texts, as well as provide an understanding so that the original meaning in the lyric text can be conveyed appropriately.

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