

## COMPARISON OF INSTAGRAM TRANSLATE AND HUMAN TRANSLATION IN THE ENGLISH CAPTIONS OF JOKOWI'S INSTAGRAM ACCOUNT

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### ABSTRACT

*Translation technology has progressed so swiftly that it may soon replace human translation. When it comes to translation, artificial intelligence-based translation machines are increasingly resembling humans. Instagram Translate (IG Translate), for example, has shown a steady improvement in translating user-posted photo captions. Many studies have been conducted to investigate the performance of IG Translate in various language pairs. Instagram began offering a translation feature for its users in 2016 in order to translate the photo captions posted by users. There is a chance that the translations contain errors, which should be investigated in order to assess the translation performance of IG Translate. The purpose of this research is to look into Koponen's translation errors category as performed by IG Translate in translating the photo captions on Jokowi's official Instagram account. However, whether IG Translate outperforms a professional human translator remains to be seen. This study aims to assess the translation performance of IG Translate and human translators by identifying potential errors and analyzing the translation strategies used by the machine and the human. The translation error analysis is expected to determine whether the machine and the human use different or the same translation strategies. The photo captions used for the analysis were taken from Jokowi's official Instagram account between March and September of 2020. This range was chosen because it represents the start of the Covid-19 pandemic as well as the government's approach to overcoming the pandemic. The research is expected to provide a theoretical benefit by expanding the translation research repertoire, as well as a practical benefit for the IG Translate developer to improve its algorithm and for social media users to input their photo captions in a way that the machine can translate well.*

**Keywords:** Translation Performance, Koponen, IG Translate, Human Translation, Machine Translation

### INTRODUCTION

Language, as a mode of communication, is critical in conveying messages. Language is also an important tool for communication. Communication between humans would be difficult, if not impossible, without the use of language. Language is used in a variety of contexts, including religion, education, and technology. However, according to Anderson, as cited in (ethnologue.com), the world has over 6800 distinct languages. It is obvious that a few people can speak languages other than their mother tongues. This case leads to the development of technology that provides a variety of features to assist its users in sending and receiving messages.

In this modern era, the use of technology provides significant benefits to its users, including in the field of language. Nonetheless, the fact that technology is consumed by a large number of people makes it inextricably linked to the use of social media. Users can send and receive messages via their social media accounts thanks to technological advancements.

Social media have an important role to play in communicating. More than one account can be created and tracked in social media by people (users). This is why messages, official or non-official, can be found in many accounts. Many politicians, artists, educators, and economists have their own social media to share messages. Instagram is one of the most popular media. Instagram has one key feature, namely sharing images, besides videos, titles, likes, comments, Instagram Live and Instagram Story.

Since Instagram users are increasing rapidly and becoming more global across the globe, Instagram is expected to update the app to meet the user requirements. Dailymail informed that the new update to this application was announced in June 2016. Because users were not just from the U.S., Instagram added new features where users are able to translate the text in their own language, in terms of biographies and commentaries. Instagram tries to help people share it all and minimize language shortages.

Instagram is one of the world's social media. Right now, Instagram users are over 100 million people worldwide. It makes the Instagram Translate (IgT) translation feature very useful and can sometimes help users understand the language difference, but sometimes it results in the messy language that is unreadable. Of course, Indonesian language in one to be translated, among other languages worldwide.

This study examines an official account owned by Indonesia's President Joko Widodo or so-called Jokowi. With over 35 million followers, this account downloads posts containing his life and his

social and working life. Jokowi's Instagram is selected because he's President of Indonesia and he's currently in pandemic in Indonesia. We want Jokowi's efforts to overcome the Covid-19 pandemic in Indonesia, by the wording of his Instagram, in this document.

One of the captions in his posts on March 19, 2020 is, *Tapi sebelumnya, saya ingin menekankan beberapa hal yang penting* which is translated by IgT into “But before, I want to stress some important things.” From the translation, it is seen that the source text meaning undergoes change (ST) in target text (TT). In the word *menekankan* translated into *stress* which is word *stress* have a lot of meaning, while translated by Human Translation more readable “However, I would like to underscore some important matters.”

From this case, it is interesting to closely examine how IgT works, and what errors might be found. According to (Shivali, 2016) IgT started showing its translation tool in June 2016, therefore its relative novelty as a machine translation (MT) compared to other established MTs, such as Google Translate and Bing Translator, is worthy of analysis related to what extent this new MT is able to render the ST into TT successfully.

This study focuses on the translation results obtained by IgT. In other words, translation is the process of converting source text to target text by substituting the desired language without changing the intended messages. The researcher would like to compare IgT to manual translation, which is done by humans, in order to analyze the translation result. A professional and certified translator from JLTC, Yogyakarta performs the manual translation. This researcher focuses on both the translation result and the categorization of translation mistakes or errors, as well as the translation strategies.

As for the researcher's decision to conduct this research, it is expected that this paper will assist readers in comparing the performance of human translators and Instagram Translate in delivering messages from Indonesian to English captions. The researcher also expects Instagram Translate and human translators to improve their translations based on the errors discovered by the researcher.

## METHODOLOGY

This study takes the translation of Instagram Translate and professional translator. It focuses on the texts which are captions translated by Instagram Translate and human who is a professional translator. The researcher aims to find out the mistakes or errors in translating the captions, by finding the errors, the researcher is able to compare the performance of IgT and HT. therefore, the focus was on the target text which was English. The data collected as the object of the study were captions. They consisted of words, phrases, and sentences taken from an official and certified account of @jokowi captions on Instagram. The data were then translated by Instagram Translate and a professional translator.

The instruments of data collection were the caption of the Instagram in source language, human translation version, and machine translation version. The data collection procedures were as follow:

1. Choosing the caption which is used formal language and target language.
2. Translating by using human translation and machine translation.
3. Comparing between the source language and two target language versions.

The data analysis techniques handed in several steps. The first step was choosing the caption of Instagram using formal language and non-formal language. The second step was conducting the translation by students of the fourth semester. The third step was rewriting the translation which is resulted from the machine translation of Instagram. The last step was comparing the source language and target language.

This researcher paper was conducting a simple procedure. The procedure was choosing the caption of Instagram, translating by human translation and human translation, comparing the source language and target language, analyzing the result of comparing, finding the quality of the two translation version, and making the research conclusion.

## FINDINGS AND DISCUSSION

Translation tool provided by Instagram helps people to understand the caption in Instagram even they used a different language. The translation tool can translate the language in the caption which used a different language into the language which is installed in the cellphone. When people open the Instagram application, the translation tool is set to translate from any different language into English.

Table 1. Analysis Results

No. of Data	Source Text	No. of Data	Target Text IG Translate	No. of Data	Target Text Human Translate	Types of Errors
11/ST/23 0320	Pemerintah memiliki persediaan tiga juta obat Chloroquine yang diproduksi oleh BUMN dalam negeri.	11/TTIGT /230320	The government has three million Chloroquine medicine <u>in stock</u> produced by the domestic state.	11/TTHT/ 230320	Currently the government is in possession of three million doses of Chloroquine produced by state-owned enterprises.	IG: Added Concept HT: -
	Perlu saya sampaikan bahwa Chloroquine ini bukanlah obat first line, tapi obat second line		I need to say that this Chloroquine is not a first line medicine, but a second line medicine.		It is to note, however, that Chloroquine is not a first-line treatment, but a second-line one.	IG: - HT: -
	Obat COVID-19 ini belum ada, dan juga belum ada antivirusnya.		This COVID-19 medicine is not available yet, and it has not been antivirus.		At the moment, <u>there is no cure for COVID-19</u> , nor an antiviral for it.	IG: - HT: Added Concept
	Akan tetapi, beberapa negara telah menggunakannya untuk pasien COVID-19 dan banyak pasien yang sembuh atau membaik.		However, some countries have used it for COVID-19 patients and many are recovered or improved.		However, many countries have utilized <u>the drug to treat COVID-19</u> , and many patients got better or recovered.	IG: - HT: Added Concept
	Obat ini bukanlah obat bebas.		This medicine is not <u>free medicine</u> .		The drug is not an <u>over-the-counter medication</u> .	IG: Mistranslated Concept HT: Added Concept
	Penggunaannya harus melalui resep dokter.		<u>The use should go through a doctor's</u> .		It requires a medical prescription.	IG: Mistranslated Concept HT: -
	Jadi untuk hanya diberikan kepada pasien COVID-19 di rumah sakit apabila dokter yang merawat meresepkannya.		So to only be given to COVID-19 patients at the hospital <u>if the doctor care prescribes it</u> .		It will only be given to hospitalized <u>COVID-19 patients under a doctor's prescription</u> .	IG: Mistranslated Concept HT: Substituted Concept

From the table that is taken from the captions Instagram account of @jokowi there are some differences that are made in the both translated version in the machine translation and human translate. In the first sentence, the differences is in machine translation there is added concept in sentence “in stock”, while in human translate didn’t found the errors. The second sentence, the differences between machine translation and human translate is on sentence structure but both result translation is didn’t have errors. The differences on the third sentence is on human translate there is some added concept in sentence “there is no cure for COVID-19” while in machine translation is on the sentence structure and vocabulary but still readable.

The differences in next sentence is in human translated, added concept in “the drug to treat COVID-19”, while the machine translation in the structure sentence and vocabulary. The fifth sentence the differences is on machine translation there is mistranslated concept in sentence “free medicines” which is word *free* have a lot of meaning and in the ST is “obat bebas”. While in human translated has error in sentence “over-the-counter medication.” which categorized in added concept error. The differences of sixth sentence is in machine translation have mistranslated concept in grammar, while in human translation is did not found the errors. And for the last sentences is in machine translation is mistranslated concept found in sentence “if the doctor care prescribes it.” The word care in that sentence have different meaning while translated into Indonesia and have the different meaning in target text. While in human translation found substituted concept in sentence “COVID-19 patients under a doctor's prescription.” In human translation have meaning “pasien COVID-19 dibawah pengawasan dokter, while in target text “pasien COVID-19 di rumah sakit apabila dokter yang merawat meresepkannya.” But both target text and human translated still same the same meaning.

## CONCLUSIONS

The purpose of this paper is to investigate the differences between human and machine translation in captioning Instagram accounts. According to the findings, there are some differences between those translations. Human translation is superior to machine translation in terms of special terms translation and vocabulary and grammatical storage. It enables humans to translate difficult words in a more readable and grammatically correct manner than machine translation. However, if the source language contains common words and formal language, machine translation can outperform human translation because machine translation is capable of producing effective language.

Human translation produced translations with high levels of accuracy, acceptability, and readability in both formal and non-formal languages. Even though machine translation produces translations with low levels of accuracy, acceptability, and readability, they did not translate it in non-formal language. The exception occurs because machine translation can outperform human translation when the source language has good grammar and uses common vocabulary. It is due to the students' ability and knowledge in text translation. Grammatical and termbase input by the programmer in the application influence machine translation.

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## REFERENCES

- Arnold, Douglas, Lorna Balkan, Siety Meijer, R. Lee Humphreys and Louisa Sadler. *Machine Translation: an Introductory Guide*. Oxford: NCC Blackwell Ltd., 1994.
- Hutchins, John. *Commercial Systems: The State of the Art*. 2003. *Computers and Translation: a Translator's Guide*. ed. Somers, Harold. Philadelphia: John Benjamins Publishing Company, 2003: pp.161-174.
- Hutchins, John and Harold Somers. *An Introduction to Machine Translation*. London: Academic Press Limited, 1992.
- Koponen, Maarit. "Assessing Machine Translation Quality with Error Analysis" in *Electronic Proceedings of the KäTu Symposium on Translation and Interpreting Studies 4*. Helsinki: University of Helsinki, 2010.
- Kurnianto, Damianus D. "Google Translate Assessment with Error Analysis: An Attempt to Reduce Errors". Thesis. Yogyakarta: Universitas Sanata Dharma, 2012.
- Shivali. (2016). *Magnifique! Instagram will now automatically translate captions and comments into your chosen language*. <https://www.dailymail.co.uk/sciencetech/article-3656392/Magnifique-Instagram-automatically-translate-captions-comments-chosen-language.html>
- Turovsky, Barak. "Ten Years of Google Translate". *Google Official Blog*. 2016. ([www.blog.google.com](http://www.blog.google.com)). 22 Sep. 2016

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