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GOOGLE TRANSLATE PERFORMANCE IN TRANSLATING ENGLISH PASSIVE VOICE INTO INDONESIAN

[1]Nadia Khumairo Ma'shumah*
[1]Universitas Gadjah Mada, Indonesia
[1]nadia.khumairo@mail.ugm.ac.id

[2]Isra F. Sianipar
[2]Universitas Gadjah Mada, Indonesia
[2]israframithasianipar96@mail.ugm.ac.id

[3]Cynthia Yanda Salsabila
[3]Universitas Gadjah Mada, Indonesia
[3]cynthiayanda@mail.ugm.ac.id

*Corresponding author: nadia.khumairo@mail.ugm.ac.id

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Abstract: A scant number of *Google Translate* users and researchers continue to be skeptical of the current *Google Translate*'s performance as a machine translation tool. As English passive voice translation often brings problems, especially when translated into Indonesian which rich of affixes, this study works to analyze the way *Google Translate* (MT) translates English passive voice into Indonesian and to investigate whether *Google Translate* (MT) can do modulation. The data in this research were in the form of clauses and sentences with passive voice taken from corpus data. It included 497 news articles from the online news platform 'GlobalVoices,' which were processed with AntConc 3.5.8 software. The data in this research were analyzed quantitatively and qualitatively to achieve broad objectives, depth of understanding, and the corroboration. Meanwhile, the comparative methods were used to analyze both source and target texts. Through the cautious process of collecting and analyzing the data, the results showed that (1) GT (via NMT) was able to translate the English passive voice by distinguishing morphological changes in Indonesian passive voice (2) GT was able to modulate English passive voice into Indonesian base verbs and Indonesian active voice.

Keywords: *english passive voices, google translate (gt), indonesian passive voice, modulation, neural machine translation (nmt)*

INTRODUCTION

As translation, both commercial and literary, is one of several activities that have been expanding in today's globalized world (Hatim & Munday, 2004), recently, humans are not the only ones who can be trusted to translate texts. Just as technology is constantly

being developed, altered, and improved; machine translation (MT) arose and became one of the options for translating text. One of the most popular machine translations is *Google Translate* which was developed by *Google* Inc. By using *Google Statistical Machine Translation* (GSMT) in 2006, it is possible for everyone to translate a huge amount of data by just a single click away (Garcia, 2009). Unfortunately, SMT raised various problems in translation. Specific errors on translating Source Text (ST) to Target Text (TT) are hard to predict and fix by users. Consequently, machine translation was judged to be less acceptable and inaccurate in its early days (Komeili et al., 2011). Nevertheless, In late 2016, *Google Translate* then adopted *Neural Machine Translation* (NMT) which is called as *Google Neural Machine Translation* (GNMT). Compared with SMT, GNMT is capable of fixing translation difficulties and threats by providing a more fluent and legible translation by handling morphology and syntax five times better than SMT systems (Ramesh et al., 2021). Thus, GNMT translations were claimed to be more precise and fluent compared to translations of SMT systems. In addition, Bahdanau et al., (2014) stated that:

> *"Unlike the traditional phrase-based translation system which consists of many small sub-components that are tuned separately, neural machine translation attempts to build and train a single, large neural network that reads a sentence and outputs a correct translation."*

Google Translate, then, has a number of flaws by supporting approximately 109 languages at various levels as of April 2021. Because of its development, *Google Translate* has been used by over 500 million people around the world with 100 billion words translated every day in 103 languages, when human translators were judged to be more expensive and took a lot of time (Aiken, 2019). Since most people begin to use *Google Translate* frequently, a scant number of scholars then became skeptical and conducted additional research focusing on *Google Translate* (Sun, 2014) to test its performance and accuracy. Amar (2017), for example, investigated the accuracy level of *Google Translate* especially in translating English text into Indonesian based on language error analysis and the use of equivalence strategy. He concluded that *Google Translate* can only translate English source text into Indonesian correctly if the appropriate equivalence translation strategy is just literal or transposition. In the same manner, Sutrisno (2020) examines the accuracy as well as the shortcomings of *Google Translate* in the context of English to Indonesian translations in order to critically engage the

complaints made by *Google* users. Both the original sentences and their translated versions were analyzed using a sentence pair matrix to determine the machine's failings and areas for improvement. Through his research, he found that *Google Translate* has the capability to translate English to Indonesian sentences with an accuracy level reaching 60.37. Whereas Sianipar & Sajarwa (2021), by comparing the translation of passive voice in Indonesian research abstracts into English conducted by human translation vs. machine translation *(Google Translate)*, they concluded that human translation is better than machine translation in translating English passive voice into Indonesian. All three studies show that *Google Translate* still has some drawbacks when it comes to translating certain texts.

However, as *Google Translate* continues to develop, we continue to verify its performance by analyzing the way *Google Translate* translates English passive voice into Indonesian which were tested by using a news corpus data set. Meanwhile, since humans are very intensive to do modulation, this research also tends to investigate whether *Google Translate* can do the same thing to create natural translation. Thus, passive voice was used as the variable of this research since it was positioned as the most common structure used in the written discourse, especially in the news and scientific writings construction (Keenan, 1985). Moreover, every language has a unique and different characteristic. In contrast to English active voice which is easy to translate, English passive voice is often difficult to translate into Indonesian due to Indonesian having some different affixes to use in passive construction. Besides, the roles between actor and agent which are called subject positions in the generative grammar, also need to be considered in the sentence construction. By using this approach, this research will be beneficial in looking at technological developments from a translation point of view.

REVIEW OF LITERATURE

Google Translate: How Does It Work?

Google Translate is a well-known free online translation engine that can translate not only numerous words, but also phrases, text fragments, and entire web pages (Karami, 2014). Along with *Google Translate* prominent heights, it is expanding to over 100 languages today and is used by most internet users around the world for translating texts (Koehn, 2020). In 2016, *Google* Inc. expanded their quality and released a *Neural Machine Translation* (NMT) system, which has the potential to address many of the

shortcomings of traditional SMT. End-to-end *Neural Machine Translation* (NMT) has become the new standard method in actual machine translation systems in recent years (Tan et al., 2020). *Google* NMT can also solve the notoriously difficult language pair translation problem by taking the context of a word into account rather than simply translating each individual word. Its system can reduce translation errors compared to *Google* SMT's phrase-based translation. However, *Google* NMT can still make an amount of errors in languages with productive word creation, such as compounding and agglutination (Sennrich et al., 2015). This problem was used as the basis of our research and investigation on the translation of English into Indonesian using present *Google* NMT.

English Passive Voice

The use of passive voice is very common in English sentences and texts as one of the most fundamental elements of the English language. When the doer of an action is unknown or insignificant, or when the focus is "*on the experiment or process being described*", the passive voice is utilized (Hacker, 2003). In line with the definition, according to Apandi & Islami (2018), passive voice is used when the focus of the sentence is the outcome or the person affected by the action and it is not important or known who or what is performing the action. Furthermore, the passive voice is a grammatical form in which a head noun serving as the subject of a phrase, clause, or verb is impacted or acted upon by the verb's action (Scholastica, 2018). In passive voice, there are three markers: be, -ed, and by, each with its own meaning and significance. Passive with agent and passive without agent, or agentive passive and non-agentive passive, are the two most common types of passive. The agent will not appear in the agentive passive, but will be implied in the context. The rules and usage of the passive voice differ between languages. In English, the passive voice can be constructed in many different forms. The short dynamic be-passive pattern with '[be-verb+Past Participles (Verb 3)]' construction is the most fundamental passive pattern in English grammatical structure (Biber et al., 1999), *e.g.* "is stolen, was caught, were written", *etc.*). Nevertheless, sometimes English only used past participles to mark passive voices, e.g."*The book written by the lecturer is now in the well-known publisher*". In this case, the passive voice used in the sentence does not use the "be-verb" formula, but simply by using past participle verbs only used the .

Another feature of the passive in English is the use of "by phrases" at the end of the clause (for example: "*The book is written by my father*").

Indonesian Passive Voice

In addition, Indonesians regularly utilize passive voice as well. According to Alwi et al. (2003), there are several ways to construct passive voice in Indonesia, those are: 1) by adding prefix *di-* into the base verb; 2) by adding prefix *ter-* into the base verb; and 3) by using the verb base itself. The first and most common method of forming passive constructions in Indonesian is to use a base verb combined with the prefix di- with applying formula [prefix *di-*+base verb], e.g., *dimakan* (is eaten), ditulis (is written), *dijemput* (is picked up), etc. Then, [Prefix *di-*+base verb+suffix *–i, -kan, nya*] *e.g., dinikahi* (is married), *diucapkan* (is said), *disuruhnya* (is asked). This construction is commonly used if the subject/agent is a noun or noun phrase. Furthermore, if the action is unintended, the prefix *ter-* is used instead of *di-*. The construction is [prefix *ter-*+verb base], e.g *termakan, tertabrak,* etc, and [prefix *ter-* + base verb + suffix *–i, nya, kan]*, e.g *tertuliskan* (is written), *terbawanya* (is bought), *terwakili* (is represented), such as in the sentence "The girl was hit by a car"; the translation became *" Gadis itu tertabrak mobil*". Based on the example, it means that the car accidentally hits someone.

Modulation: An Overview

Translating a text is not only a matter of finding the relevant words in the target language and applying the correct target language grammar when translating a text (Putranti, 2018), it is also a matter of generating the most natural translation of the source language message into the target language (Pinchuck in Machali, 2009; Nida & Taber, 1982). Nevertheless, creating the closest natural equivalent was not easy to handle. One of translation techniques which can be applied by translators is known as modulation (Catford, 1965; Newmark, 1988; Vinay & Darbelnet, 1955). In our research, we focused our investigation on passive voice which caused modulation.

METHOD

In this research, mixed methods were used to obtain breadth and depth of understanding, as well as corroboration. According to Nassaji (2015), qualitative data can also be analyzed quantitatively. This occurs when the researcher examines qualitative

data to identify relevant themes and ideas before converting them to numerical data for further comparison and evaluation. The quantitative method by using descriptive statistics in this research was used to reveal (1) the frequency as well as the number of passive voice in the news corpus; (2) the number of affixations in the target texts (Indonesian); and (3) the number of modulations. Meanwhile, descriptive deals with qualitative method was used to describe the patterns of the translation of English passive voice into Indonesian, as well as modulation techniques conducted by *Google Translate*.

The data in this research were in the form of clauses and sentences containing passive voice structure taken from news corpus data which were downloaded from Parallel Global Voices (http://nlp.ilsp.gr/pgv/). The corpus data for this research was accessed in April 12th, 2021 containing 497 news articles with a total 17,069 sentences, 665,664-word tokens; and 36,763-word types. All the data, then, were manually entered into *Google Translate* to serve output data in Indonesian language.

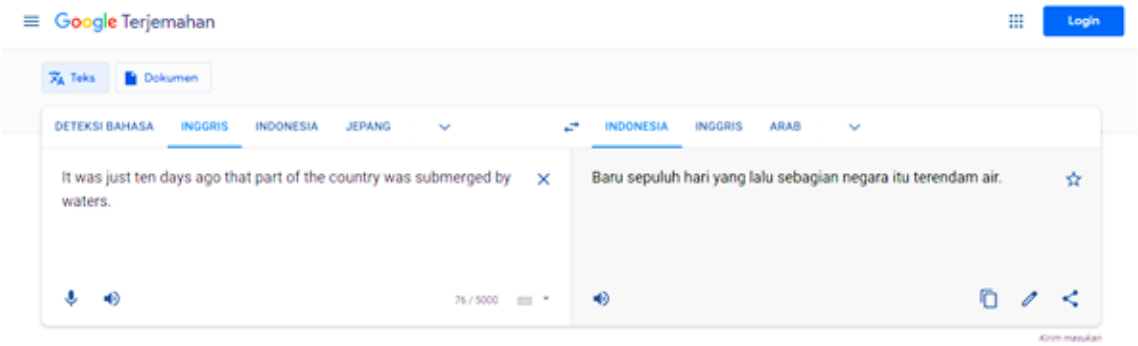

Figure 1. The translation of the sentence "*It was just ten days ago that part of the country was submerged by waters*" using *Google Translate*

A content analysis method was used to select the data from the corpus since the data were in the form of texts. Meanwhile, purposive sampling was applied focusing on the emergence of passive voice in the SL's data sets. Then, the data were input into *Google Translate* from April to May 2021 and were classified based on their morphological changes and the probability of modulation. To collect the data, AntConc 3.5.8 was used as the data instrument which was downloaded from https://www.laurenceanthony.net/software/antconc/. It was frequently utilized by researchers all around the world for corpus-based research tools since it was freely accessible to scholars. The overall distribution of the research items was displayed under "Concordance Plot" during the inputting process, and the particular contexts of each retrieved word were shown via "File Views". However, we discovered that AntConc 3.5.8

processed and counted some words or phrases that have the same formula as the Indonesian passive structure (such as possessive, *i.g,* dirinya (himself). To facilitate the analysis, the corpus data were reduced and eliminated by selecting and focusing only on sentences containing English passive voices, as well as data that were indicated to contain modulation. Using AntConc 3.5.8, the data were reduced into 1,098 data of passive sentences with 1,550 passive verbs.

As the basis in conducting this research, we stand on the theory that Indonesian is similar to English in terms of structure (S-V-O). Nevertheless, as stated by Sutrisno (2020), there are certain rules in both languages that may cause interference, such as: (1) Indonesian does not have tenses; (2) Indonesian is rich with prefixes, confixes, and infixes, including the prefix '*di-'*(for general passive voice) and *'me-'* (for general active voice); (3) unlike English, Indonesian does not have the gerund or participle tense; (4) Indonesian does not have subjunctive verbs. Focusing on Indonesian affixations as passive verbs markers, we input [\b…[a-z]+? …\b] formulas in AntConc for Indonesian passive voice's identification. The "search" box was filled according to the prefix or suffix or circumfix (e.g. to find the number of [prefix *di-* + root verb+ suffix *–nya*], the formula [\bdi [a-z]+?nya\b] was inputted to identify the frequency of the English passive verbs which were translated into Indonesian passive voice with the prefix *di-*. The formula was then used by check-listing "Regex" in the concordance. AntConc will display words containing the prefix [*di-*+root verb suffix *-nya*]. We then classified the data in this study to determine the regularities.

During the analyzing process, the entire data set was analyzed and evaluated using Sudaryanto's (1993) comparative methods. Any differences and similarity in the source texts and the target texts were fully observed. As the results, two strands of research (both quantitative and qualitative) were served at the interpretation stage or discussion. Both quantitative and qualitative tend to complement each other and receive equal emphasis in the findings. Investigator triangulation by repeatedly checking the data, theoretical triangulation by linking back to some relevant theories, and methodological triangulation by using appropriate methods were employed in order to achieve credibility, dependability, transferability and conformability (Moleong, 2001). Triangulation in this research was used since subjectivity becomes one of problems during collecting and analyzing the data in the form of language, social and humanities approaches.

FINDINGS AND DISCUSSION

Findings

Through the cautious process of collecting and analyzing the data, we focused our results and discussions on the morphological changes as the impact of translation activities from English into Indonesia. Interestingly, we found that *Google Translate* can distinguish the use of affixes when used to translate English passive voice into Indonesian passive voice. Based on 1,098 sentences containing of 1,550 passive verbs which were detected by AntConc 3.5.8 (since each sentence can consist of more than one passive verb when it possessed as complex clause (e.g., |||*It was Gies who saved Anne Frank's diary* [1]| *when their secret hiding place was betrayed* [2]| *and the family was deported to concentration camps* [3]|||), we have counted (1) 1,297 verbs of English passive voice were translated into Indonesian passive voice marked by prefix *di-* (2) 211 verbs of English passive voice were translated into Indonesian passive voice marked by prefix *ter-* (3) 19 verbs of English passive voice were translated into Indonesian root verb (infinitive), and (4) 23 verbs of English passive voice were translated into Indonesian active voice. We determined the changes of passive voice into active voices and point of view's changes by using root verbs in TT passive voice as part of modulation technique (Baker, 2018).

Discussion

We segregated the discussion into four sections which were dealing with (1) the translation of English passive voice into Indonesian passive voice, marked by prefix *di-* and by prefix *ter-;* (2) the translation of English passive voice into Indonesian base or infinitive verbs; and (3) the translation of English passive voice into Indonesian active voice (modulation).

The Translation of English Passive Voice into Indonesian Passive Voice

Through the investigation, there are roughly two basic forms of passive voice used in Indonesia presented by *Google Translate*. The first is distinguished by the prefix *di-*, while the second is distinguished by the prefix *ter-*. The results of inputting and translating English passive voice into Indonesian passive voice are described below.

The Translation of English Passive voice into Indonesian Passive Voice, marked by Prefix di-.

From the analyses of 1,297 data of passive verbs, we found that overall data were effectively translated from the English passive voice into the Indonesian passive voice marked by prefix *di-*. As our consideration, we found that each verb construction is most fully transferred and there is no specific change in terms of meanings. Nevertheless, we neglected the terms of accuracy in this research along with our research limitations. Furthermore, we also identified other Indonesian passive voices formed with the prefix [*di-*+root verb+suffix (*-i,-kan*)]. This following table showed the tendency of the translation of English passive voice into Indonesian passive voice, basically marked by prefix *di-*.

Table 1. English Passive Voice (SL) and Their Translation into Indonesia Passive Voice (TL) Using [prefix *di-*+root verb], and [prefix *di-*+root verb+suffix *-i, -kan*]

Affix(es)	**Source Language(s)**	**Target Language(s) (*Google Translate*)**
di-	1) [object]The Iranian authorities **have been accused** by [Agent]UN experts and the opposition of torturing jailed protesters of the June 12 presidential election results. **Passive Construction:** had + to be (been) + past participle (blessed)	[object]*Pihak berwenang Iran telah dituduh oleh* [Agent]*para ahli PBB dan oposisi menyiksa pengunjuk rasa yang dipenjara atas hasil pemilihan presiden 12 Juni.* **Passive Construction***: Telah* + prefix *di-* + root verb *(tuduh)*
di-i	2) My interrogation went on until 1 am., but [object]I **was not asked** any questions. **Passive construction:** To be **(w**as + not + past participle (asked)	*Interogasi saya berlangsung sampai jam 1 pagi, tetapi* [object]*saya **tidak ditanyai** apapun* **Passive Construction:** *Tidak* + prefix di-+ root verb *(tanya)* + suffix -i
di-kan	3) Across America, about 800,000 [object]children **are reported** missing each year, 33% of which are African-American. **Passive Construction:** to be (are) **+** past participle (reported)	*Di seluruh Amerika, sekitar 800.000 anak **dilaporkan** menghilang tiap tahunnya, 33% diantara mereka merupakan Afro-Amerika.* **Passive Construction :** prefix *di-* + verb (*lapor)* + suffix *-kan.*

Given that Indonesian does not have tenses, it can be observed that *Google Translate* is able to translate English passive into Indonesian passive constructions by distinguishing the use of appropriate affixes (i.e. prefix, confix and suffix) and adverbials of time (i.e. *telah* and *sudah*) as a lexical time marker. From the excerpt (1), we can see that the phrase "have been accused [have+been+V3]" is translated into "*telah dituduh* [*telah*+*di-*+root verb]". Because the doer in this sentence intends to perform the action, the prefix *di-* is more appropriate. Therefore, it would be better to translate it as "*dituduh*" instead of "tertuduh [*ter-*+ root verb]". Relating to aspect, the modal word "have" in the

source language is directly translated into the adverb "*telah*" in the target language. In line with what Alwi et al. (2003) said, adverbs in Indonesian can be used as markers of aspect, modality, quantity, and quality of the categories of verbs, adjectives, numerals, and other adverbs. Meanwhile, the adverb "*telah*" in excerpt (1) is a perfective aspect marker which indicates that the event has already started in the past and continues in the present. This translation process also proves that *Google Translate* has been using literal translation while translating passive voice with aspects.

Then, from the excerpt (2), the phrase "was not asked [to be (past)+not+V3]", (negative passive) is also found to be translated into Indonesian negative passive construction " *tidak ditanyai* [negation+*di*-+root verb+-*i*]". We detected that *Google Translate* has a tendency to translate "was not asked" into ditanyai instead of ditanya because Indonesian suffix -i can be used to change the form of a verb from intransitive to its transitive meaning. Then, in excerpt (3), the English passive verb "are reported [to be+V3]" is translated as "*dilaporkan* [*di*-+root verb+-*kan*]" using confix-affixes that function to form passive verbs. It has functioned to state the causative meaning of causing something to happen, and stating the meaning of an act done for someone else. So, in this case, "*dilaporkan*" means that the event is reported by other people to someone else.

At a glance, our findings show that *Google Translate*'s translation of passive voice has improved significantly since its inception. Because *Google Translate* is educated on hundreds of millions of pre-translated words, phrases, and even material from the internet, it will operate and give the more generic translation if one version of passive voice exists several times. As a result, *Google Translate*'s meaning is solely determined by the program's internal logic.

The Translation of English Passive Voice into Indonesian Passive Voice, Marked by Prefix ter-

When comparing Indonesian passive voice with prefix di- and prefi*x ter*-, it is clear that the use of prefix *ter*- implies such unintended factors. The use of prefix *ter*- implies that the action is done unintentionally. The passive voice that is translated into Indonesian with the prefix ter- are shown in Table 2.

Table 2. English passive voice (SL) and their translation into Indonesia passive voice (TL) using [prefix *ter*-+root verb], and [prefix ter-+root verb+suffix *-i, -kan, -nya*]

Affix(es)	Source Language(s)	Target Language(s) (*Google Translate*)
ter-	4) That way, [object]both persons **will be spared** from having to go through renewing or not renewing the expirable marriage license. **Passive Construction:** Modal Auxilary (will) + be + past participle (spared)	*Dengan begitu,* [object]*kedua belah pihak* ***akan terhindar*** *dari keharusan memperbarui atau tidak memperbarui surat nikah yang sudah habis masa berlakunya.* **Passive Construction:** *Akan* (will) + prefix *ter-* + root verb *(hindar)*
ter-i	5) According to L\xA2pez, the definition of a person's life merits a profound and sincere debate in which [object]all interests **are represented**. **Passive Construction:** to be (are) + past participle (represented)	*Menurut L\xA2pez, definisi kehidupan seseorang membutuhkan debat yang mendalam dan tulus di mana* [object]*semua kepentingan* ***terwakili,*** **Passive Construction:** Prefix *ter-* + root verb (*wakil*) + suffix -i
ter-kan	6) Even us, [object]we **are marginalized** in the army. **Passive Construction:** to be (are) + past participle (marginalized)	*Bahkan kami,* [object]*kami* ***terpinggirkan*** *di ketentaraan.* **Passive Construction:** Prefix ter- + root verb *(pinggir*) + suffix *-kan*
ter-nya	7) I'm certain [object] the good mayor **was just as surprised** about President Obama's White House Iftar. **Passive Construction:** to be (was) + past participle (surprised)	*Saya yakin* [object]*walikota yang baik* ***sama terkejutnya*** *dengan Iftar Gedung Putih Presiden Obama.* **Passive Construction:** Prefix *ter-* + root verb *(kejut)* + suffix *-nya*

The overall data showed that when the meaning of a passive voice verb in Indonesian includes an unintentional action, the prefix ter- is used instead of *di-*. As seen in the excerpt (4), GT has translated the phrase "will be spared [will+be+V3]" into *"akan terhindar* [modal *(akan)*+*ter-*+root verb]". It showed that since the action represented in the verb "spared" is done unintentionally, the use of the prefix *ter-* is more appropriate. In this case, the word "will" in the source language is translated into *"akan"* in the target language. The word *"akan"* in Indonesian is an adverb that can function as both an aspect and a modality marker. In Indonesian, the adverb *"akan"* was used as an aspect marker to indicate that the event would take place in the future.

Meanwhile, in excerpts (5) and (6), the English passive voice "are represented [to be + V3]" and "are marginalized [to be+V3]" are translated into Indonesian passive construction [*ter-*+root verb+-i] and [*ter-*+root verb+-*kan*] become *"terwakili"* and "terpinggirkan". It can be seen that *Google Translate* tends to translate the phrase "are represented" into the confix-affix form consisting of prefix *ter-* and suffix *-i*. Meanwhile, prefix *ter-* and suffix *-kan* in excerpt (6) is also one of the various confix-affixes functioning to form passive verbs. This Indonesian passive translation *"terwakili* and *terpinggirkan"* possessed as passive stative verb which expresses the stative condition

that something or someone is involved in a certain situation. Relying on the findings, the suffixes *-i* and *-kan* serve distinct functions based on the context of the sentences. Suffix *-kan* serves as a causal function, whilst suffix *-i* serves as a repetitious function.

The Translation of English Passive voice into Indonesian Base Verbs

Some English passive voice also were translated into Indonesian root verbs (without prefix *di-*, and *ter-*). Based on the analysis, we found that there is a tendency of omitting affixes in both Indonesian passive constructions. These phenomena are in line with what Alwi et al. (2003) has said that the sentences which use the root based in Indonesian are essentially as one way in expressing the passive voice in Indonesian. The examples of the data were presented in Table 3.

Table 3. English Passive Voice (SL) and Their Translation into Indonesia Passive Constructions (TL) Using Root Verbs (Infinitives)

Source Language(s)	**Target Language(s) (Google Translate)**
8) This time,[object] the book **is published** on the 60th anniversary of the founding of the People's Republic of China.	*Kali ini,* [object]*buku tersebut* ***terbit*** *pada peringatan 60 tahun berdirinya Republik Rakyat Cina.*
Passive Construction: to be (is) + past participle (published)	**Passive Construction:** root verb / bare infinitive, *terbit* (publish)
9) Earlier [object] incident was **leaked** in order to cover up the story of the [passage of the] National Referendum Law.	[object] *Kejadian sebelumnya,* ***bocor*** *untuk menutupi cerita [pengesahan] UU Referendum Nasional.*
Passive Construction: to be (was) + past participle (leaked)	**Passive Construction:** root verb / bare infinitive, *bocor* (leak)

Passive construction using root verb is commonly used in Indonesia when the verb (Prefix *me-/meN-*+root verb+suffix) in active voice is changed to passive by omitting its prefix and suffix, e.g Active sentence such as Saya sudah mencuci mobil [I have washed the car] change in to Passive sentence such as *Mobil sudah saya cuci* [The car has been washed by me]. There is a shift in perspective in this example because it is unusual to say "mobil sudah dicuci oleh saya" in Indonesia. As a result, to make the sentence construction sound natural, Indonesian use the passive construction without the prefix *di-* and *ter-*.

We discovered that *Google Translate* was able to recognize passive constructions as well by shifting point of view from ST to TT (Vinay & Darbelnet, 1955). Took a look back into the examples, excerpts (8) and (9) show that the phrase "is published [to be (present) +V3]" is translated into *"terbit* [root verb]" and "was leaked [to be (present)

+V3]" is translated into *"bocor* [root verb]". This kind of shifting was called a modulation technique.

The Translation of English Passive Voice into Indonesian Active Voice

According to the data, *Google Translate* intends to translate the English passive voice into Indonesian active voice. Newmark (1988) and Vinay & Darbelnet (1955) called the changes from passive form into active form as another kind of modulation. Here, Vinay & Darbelnet (1955) added modulation in order to produce the natural translation. Hence, the modulation technique is considered to be the best option to hold the original meaning in the source language. Because Indonesian has a specific word order, this issue frequently occurs in English to Indonesian translations which were shown in Table 4.

Table 4. English Passive Voice (SL) and Their Translation into Indonesia Active Voice (TL) Using [prefix *ber*-+root verb], [prefix *me*-+root verb+suffix -*nya*] and [prefix *meN*-+root Verb]

Affix(es)	Source Language(s)	Target Language(s) (Google Translate)
ber-	10) The harshest consequence for many **has been** politically **motivated** arrest of bloggers and online writers for their online and/or offline activities. **Passive Construction:** has + to be (been) + past participle (motivated)	*Konsekuensi terberat bagi banyak orang adalah penangkapan blogger dan penulis online yang **bermotif** politik karena aktivitas online dan / atau offline mereka.* **Active Construction :** prefix *ber*-+root verb (motif)
me-	11) And if you want to watch how it **is eaten**, there are a few videos online: like this one. **Passive Construction:** to be (is) + past participle (eaten)	*Dan jika Anda ingin menonton cara **memakannya,** ada beberapa video online: seperti ini.* **Active Construction :** prefix *me*-+root verb (makan) +suffix -*nya*
meN-	12) One-third of Gaza's total population, over 520,000 people, **have been displaced** of whom 279,389 were taking shelter in 83 UN-run schools. **Passive Construction:** has + to be (been) + past participle (displayed)	*Sepertiga dari total populasi Gaza, lebih dari 520.000 orang, **telah mengungsi** di antaranya 279.389 berlindung di 83 sekolah yang dikelola PBB.* **Active Construction : telah +** prefix *meN*-+ root verb *(ungsi)*

Based on our analysis, we found that the active voice is characterized with the verb preceded with the prefix *ber-*, *me-* and *meN-*. Here, the passive phrase "has been motivated [has+been+V3]" is translated into *"bermotif* [ber-+root verb]" which belongs to an active verb in Indonesian. The verb *"bermotif"* sounds more natural rather than "dimotifkan". The other example, the phrase "is eaten [to be (present)+V3]" also translated by *Google Translate* into "*memakannya"* [*me*-+root verb (active)+-*nya*]. This case showed that the role of context also influenced the choice of translation. It is more acceptable or natural to say *"bagaimana memakannya"* instead of "*bagaimana itu*

dimakan". Furthermore, the phrase "have been displaced [have+been+V3]" is translated into "telah *mengungsi [meN-/meng-+ ungsi*]" which belongs to the Indonesian conditional allomorph of *MeN-*. Overall, *Google Translate* tends to convert active translation into passive formulations because the action is carried out by the sentence's agent. The current study showed that *Google Translate* intends to use modulation to resolve some translation issues, particularly when producing natural translation.

CONCLUSIONS AND SUGGESTIONS

Conclusios

From the depth analysis, we conclude that *Google Translate* using Neural Machine Translation (NMT) was able to translate English passive voice into Indonesian by distinguishing morphological changes in Indonesian passive voice through the use of affixes (such as the use *di-, di-kan, di-i, ter-, ter-i, ter-kan, ter-nya*). Furthermore, we also evaluate that today, *Google Translate* by the performance of NMT was able to modulate or change English passive voice into Indonesian active voices appropriately given their context by using some kinds of affixes, such as b*er-, and me-, meN-* or by the change the point of view using root (base) verbs in Indonesia passive constructions. Thus, our findings then were used as a follow up from the parliamentary findings which concluded that a statistical machine translation (SMT) does not yet have the capability of modulation.

Suggestions

Along with the rapid development and improvement o*f Google Translate,* this means that the scope of this field of study is overly vague. Hence, this study provides an opportunity for future researchers to expand further research on the performance of *Google Translate* over time, for instance; seeing the accuracy level of passive voice translation conducted by *Google Translate* or by testing using other types of sentences. It is deemed essential to test *Google Translate's* accuracy in translating English passive voice into Indonesian using accuracy evaluation methods such as manual or automatic evaluation (e.g., BLEU (Bilingual Evaluation Understudy) scores (Aiken, 2019; Ramesh et al., 2021), CompareMT (Neubig et al., 2019), MTComparEval, Memsource criteria (see www.memsource.com), translation closeness metric, and *etc.*).

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