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Framing Takarir Application: A Need Analysis

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ABSTRACT
The COVID-19 pandemic has driven the use of online mode idea delivery or seminar, the so-called 'webinar.' Some of those events involve people around the world who speak different languages. In this way, the use of subtitles or takarir'subtitles'will enhance the audience's understanding of the process of getting the idea by translation. The current study aims to document the factors that influence the design and use of takarir computer application, and the concepts of mode work in the translating process in the application. This study aims to develop captions in online visual presentation, especially for Indonesian language presentation with takarir in English or vice versa, especially during the Covid-19 pandemic. In this case, the documentation method is used with descriptive and comparative techniques (translation). In terms of the application system, the caption application developed uses pre-existing digital data processing techniques, namely converting the voice into text adjusted to the language and accent of the speaker. The text is sent to the caption machine, and then the results are displayed on the video camera screen. The results showed that in the early stages, the application of the takarir that was developed was enjoyable even though it still needed some improvements. Besides, the result reveals that takarir does not deal with the one-to-one relationship, but to many-to-many in terms of semiotics concepts modes. It requires transposition, modulation, cultural equity, or an additional phrase.

Keywords: *Takarir, Translation, Webinar*

1. INTRODUCTION

The Covid-19 pandemic has forced all groups to use online or online models, both in terms of daily needs and learning. The COVID-19 pandemic as an epidemic in Wuhan China is contained in an article by Cristie Columbus, Karen B. Brust, and Alejandro C. Arroliga [1] entitled 2019 Novel Coronavirus: An Emerging Global Threat (December 8, 2019). The World Health Organization (WHO), on February 11, 2020, named the so-called "severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)" as "Covid-19", and exactly one month after WHO declared Covid-19 a pandemic outbreak. global [2].

During the COVID-19 pandemic, online learning models with an LMS (learning management system) or those through online groups with or without face to face have become frequently used. Seminars or workshops, which are popularly known as webinars, are also often held with visual impressions by video conferencing or video conference. In this regard, not many webinars held in Indonesia use captions or subtitles in other languages. Even though captions or online subtitles when someone speaks in a language, visually, in a webinar that is connected live streaming to the YouTube channel, is essential, especially to accommodate audiences with different language backgrounds. Sometimes even subtitles in the same language are needed, especially if the speech and writing are other.

In language, subtitles fall within the scope of translation. The translation is now very advanced because it is supported by several tools that are available in several browsers. Sometimes translation cannot be done literally, especially if it is an abbreviation [3]. In 2013, the abbreviation PD (assistant dean), translated by machine translator, was translated as world war "world

war" (apart from the assistant dean, PD in Indonesian stands for world war). Therefore, translation often requires transposition, modulation, description, cultural equivalents, or word additions [4][5]. Usually, the better a person's language, the better the online translation (machine-based translation) will be.

In terms of the application system, the captioning application developed uses pre-existing digital data processing techniques, namely converting the voice into text that is adjusted to the language and accent of the speaker. The text is sent to a reliable captioning machine, and then the results are displayed on the camera video screen. It has not been done much for webinars with video conferences (including those using zoom) for Indonesian language shows with English subtitles or vice versa. Thus, the use of subtitles or captions will improve audience understanding in the process of getting ideas through translation.

More specifically, this study aims to develop captions in online visual presentations, especially for presenting Indonesian with subtitles in English or vice versa, especially during the Covid-19 pandemic.

Captions or subtitles are translations of the dialogue on the film (impressions), which are usually at the bottom of the show or display. There is also an image caption or caption, which generally consists of one or several sentences that describe the content and purpose of the image.

In the last decade, the development of the captioning machine has experienced very rapid growth. The most popular is a machine developed by the Ge company, which is widely known as Google Translate. It's just that, of the many caption engines, most of them are text-based in use. So, to use the machine, a user must enter a word/sentence and select the desired language, press a new button, and the translation result will come out. Very few machines are specifically designed to take sound as input and then translate that sound into a different language. And of those few, none have been made for multimedia/video or video conferencing applications.

The captioning application developed uses pre-existing digital data processing techniques, namely converting the voice into text adjusted to the speaker's language and accent. The text is sent to a reliable captioning machine, and then the results are displayed on the video camera screen.

The Subtitle Translation Engine was even patented by Kang Wan and ZhiJie Lu in 2004. This engine is used to translate subtitle content from video sources into other languages. The machine consists of a subtitle extractor for extracting the subtitle content in the first language from the video source, and a translation module to translate words from removed subtitle content in the first language to the second language with the same meaning by performing a search on the language dictionary.

2. METHOD

This research is a type of research and development or Research and Development (R&D). The research and development method (Research and Development) is a research method to produce specific products and test the effectiveness of these products [6]. The research design uses the 4D (four-D) development model from Thiagarajan, which consists of four stages, namely, define, design, develop, and disseminate. In this case, the development results are validated and tested on a limited basis. [7].

Several things were done in defining, namely: viewers liked and were helped by captions. At the design and development stage, in terms of the application system, the caption application was developed using pre-existing digital data processing techniques, namely converting the voice into text adapted to the speaker's language and accent. The text is sent to the caption machine, and then the results are displayed on the video camera screen. The socialization stage is limited to two webinars that have been held using captions and participants' opinions about the subtitles presented. Two webinars were presented on Saturday, May 30, 202,0, and Saturday, June 13, 2020.

3. RESULT AND DISCUSSION

In the two webinars that used captions, there were some suggestions from the common question, "How do you rate the subtitles presented?

Some of the inputs are classified into four groups, namely:

a) very poor

b) poor

c) fair

d) good

Also, some participants did not provide input.

The following is an explanation of the two webinars.

3.1. Webinar 1

In this webinar, I, the processing computer, must be in the same room as the speaker. A particular mic is used, which is then processed by the computer.

Table 1. Input of Takarir' Subtitle' in Webinar I

Category	Number	%
Very Poor	12	1.7
Poor	81	11.7
Fair	116	16.7
Good	117	45.6
No Input	169	24.3

Based on table 1, it appears that the highest percentage is in a good category, even though in this

activity, the subtitles display at the beginning was reversed. After some time, the show can return to normal.

Bringing a particular computer with a special mic turned out to be a bit of a hassle. Therefore an online model is planned, which will then be tested in the next webinar.

Some examples for each category in this webinar I as follows.

Very poor: In Indonesian territory, there is no need for captions

Poor: Some wrote upside down, and some were mistranslated, but it was cool.

Fair: Takarir is good enough, and I can understand

Good: Takarir is good. The appearance of the subtitles is good

What is interesting is that there is an opinion that the Indonesian territory does not require subtitles. Maybe it has not been realized that shows that are also connected live streaming to youTube can reach a wider area globally, exceeding national borders.

3.2. Webinar 2

In webinar 2, takarir has been presented online. The speaker is in a different place from the processing computer.

The following are categories of participants' answers to the presentation of the takarir.

Table 2. Input of Takarir' Subtitle' in Webinar II

Category	Number	%
Very Poor	4	0.3
Poor	20	1.6
Fair	110	8.7
Good	834	66.1
No Input	294	23.3

Table 2 shows that the highest percentage is still in the "good" category. However, in the process, there was a problem in the end because the subtitles could not be presented. It is not because the computer is not in the speaker's place, but in fact, it is related to the use of a translating machine that is still using the free model so that the translation is limited.

Some examples for each category in this webinar II are as follows.

Very poor: English subtitles are not recommended

Poor: The language in the captions, please ask for a more familiar one

Fair: There are some delay takarir

Good: It's OK, please continue

What is interesting is that there is an opinion that is in line with the previous webinar (webinar I), namely that there should be no subtitles in English. During the last webinars, there was also something similar, namely, "For Indonesian territory, subtitles are not required." Maybe it has not been realized that shows that are also connected live streaming to youTube can reach a wider area globally, exceeding national borders.

Also, the input that is in the current category, which says that "there are several subtitles that are delayed," needs to be considered for further improvement. There is a delay, but it needs to be done so that it doesn't take too long in seconds.

In the webinar caption, several writings need to be examined. For example, "We together asking to read aloud it is asking to read aloud …" Grammatically, this is interesting to become material for further analysis.

In terms of comparison, the categories for a webinar I and webinar II are as follows.

Table 3. Comparison of Percentage of Takarir Input in Webinar 1 and II

Category	% of Webinar 1	% of Webinar 2
Very Poor	1.7	0.3
Poor	11.7	1.6
Fair	16.7	8.7
Good	45.6	66.1
No Input	24.3	23.3

In graphical form, table 3 is as follows.

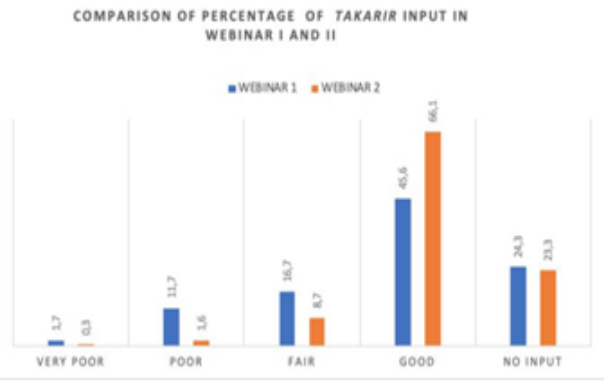

Figure 1 Graphical Form of Table 3

Based on table 3 and graphical form, it appears that there is a decrease in the percentage for the very poor category, namely from 1.7% down to 0.3%.

There was also a decrease in the percentage for the poor category, namely from 11.7% down 11.1% to 1.6%. The fair category also experienced a decline, from 16.7% down 8% to 8.7%. The only ones with an increase in the percentage were in the "good" category, namely from 45.6% up 20.5% to 66.1%. Even so, it turned out that quite a lot of participants did not provide input (because it was not required in the form), around 24%.

4. CONCLUSION

Based on the analysis carried out the captions being developed are still in an early stage that needs a lot of improvement. In the early stages, the computer accompanying the application still had to be near the presenter. Also, the caption presentation at the beginning was reversed. So that it did not read correctly, after that, it began to be read.

In stage II, presenters no longer have to be close to the computer that contains the caption application. Applications can be applied online. Even so, there are still several things that are lacking in connection with the time-bound system an inaccurate translations. In general, it can be concluded that at an early stage, the developed caption application can be enjoyed even though it still needs some improvement.

Also, it seems that apart from relying on computational linguistics, it is also necessary to involve cultural contexts, interpretations which for now cannot be represented by machines. The result reveals that takarir does not deal with the one-to-one relationship but to many-to-many in terms of concepts of semiotic modes. It requires transposition, modulation, cultural equity, or an additional phrase.

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