MAKING THE STANDARD OF AUDIOVISUAL TEXT FOR THE DEAF AND HEARING IMPAIRED
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ABSTRACT
The development of television and film industry in a global context requires film and television industry to be able to present the shows that can be enjoyed by the general public without any restrictions. This phenomenon essentially underlies the emergence of community needs for audiovisual translation (layman terms: the subtitle). The industrialized world utilize audiovisual translation in order to visualize verbal messages in other languages so that it can be understood. However, any progress in the field of audiovisual is not coupled with accessibility for all individuals. Providers of text or audio in existing programs, so far, have not fully considered deaf people or those with hearing impaired (deaf or hearing impaired/DH). In line with that, a set of standard is required to meet the needs of the DH. Referring to the high demand for audiovisual translation and the view on the audiovisual translation which has not yet met the needs of the DH. This research is fundamentally directed to create audiovisual translation standards which is appropriate for all audiences specifically for the DH. In line with that, a set of standard is required to meet the needs of the DH. This study is a qualitative study using library research approach. Therefore, the analysis is directed at the analysis of the current product and its shortcomings. To be able to meet the demand for audiovisual translation standards, researchers will undertake a number of steps that includes product analysis research and product development. This study is expected to be the basis for making an audiovisual translation quality products which can be enjoyed by all audiences.

Keywords: Audiovisual translation, deaf or hearing impaired, research and development

INTRODUCTION
Along with the rapid development of technology, the need for translation of audiovisual (Audiovisual Translation or AVT), or in layman term known as subtitle, also increased. One of the most demanding industry of audiovisual translators are television and film industry. Related to the Indonesian Government Regulation No. 50 Year 2005 on the Implementation of the Private Broadcasting Institution which requires television stations to broadcast local programming at least 60 percent of the total broadcast schedule, meaning, approximately forty (40) percent of the programs are broadcast on television comes from outside Indonesia (imported). In other contexts, this rule does not apply to the subscription TV providers, whereas 100 percent of program broadcast entirely an other language.
In addition, the rapid development of Internet technology, there are also increases of the number of programs that need to be translated. Development of Internet technology is characterized by the increasing number of parties or the person who uploaded their videos to the Internet. Uploading is sometimes done not only by the individual alone but also by the industry or specific organization. Along with the high effectiveness of the use of social media (in particular), and Internet (in general), more and more multinational industrial companies advertise their products via the internet. All this indicates that the audiovisual media has been a mainstay in the deployment process of communication and culture, both in the global and national scale.

However, any progress in the audiovisual field in Indonesia, is not accompanied by the accessibility for all individuals. Provision of text or audio in the program is not yet fully spread to be enjoyed by deaf people or hearing impaired (DH). The DH, until now, has not received proper attention in terms of accessibility to the audiovisual media.

Some experts argue that the presence of a sign language interpreter, or even the Indonesian language text is enough to serve the needs of the DH. However, this is not entirely true. Some programs are not given subtitles in Bahasa Indonesia, but is dubbed. With the voiceover technique, not all DH can understand the messages conveyed. This is because the voiceover is often applied in a television program in Indonesia is interlingual voiceover (Neves, 2009). Such kind of voiceover is very difficult for the DH because although they can read the lips, what is visible on the screen is the lip movements in the source language.

In addition, for the DH, they not only need information that is both verbal (word, language, and sentences); they also require non-verbal information (such as background noise, the atmosphere, and even noise). Audiovisual text must also be able to visualize aspects of non-verbal, so they can be understood holistically by the listeners, in particular by the DH.

Based on the problems mentioned above, the author intends to create a standardized audiovisual text for the DH which are expected to be applied evenly in all TV stations in Jakarta. The data collection was centered in Jakarta and Depok because Jakarta is the center of national broadcasting and film, as well as Depok is where the center of the development program of sign-language abilities in Indonesia. In both places, there are several nonprofit organizations that specifically deal with the DH. Although the location of the centralized research is in Jakarta, it did not rule out the possibility that the application can be done in all audiovisual media broadcasting in Indonesia.

In line with the above explanation, it can be concluded that this research is directed to
1. Analyze the quality of audiovisual translation in accordance with the needs of the DH,
2. Finding the visual elements that need to be emphasized in the manufacturing of audiovisual text for the DH.

**THEORETICAL FRAMEWORK**

**Audiovisual Translation**

Before discussing the creation of standards of audiovisual translation for the DH, the authors felt the need to give an idea and concept of AVT. In general, AVT can be divided into three major branches; dubbing, subtitling, and voice over (Diaz-Cintas & Anderman: 2009).

According to the Encyclopedia Britannica (2016) Dubbing is a form of AVT in which speech or audio from Source Language (SL) is dubbed into English Target Language (TL). Dubbing is usually used for films. In dubbing, the synchronicity between speech and lip movement is emphasized, but it's not much use for the DH because the spoken language is SL. If the SL is English, it may not be too difficult for people to follow. However, if the program is not dubbed in English, it will be difficult or almost impossible for the DH to understand the program.

In addition, there are several factors to consider when using dubbing. In the case of 'educating' the audience, a survey has been conducted, and the result is, the population of countries that use dubbing in its programs, a lower level of understanding through hearing capabilities is visible if compared to countries that use subtitling (Tveit: 1987). Another factor is the cost and time efficiencies. Dubbing requires greater costs; Tveit (2009)
declares that the dubbing usage fees can reach 5 to 10 times higher than the cost of making subtitling. In addition, in terms of production, dubbing production took a longer time. Let us take the example in making cartoons. For dubbing, the first thing to do is to hire an actor or actress to fill out the sound. Then, the text had to be translated in advance. After that, there is still the process of lip synchronization with voice and other time-consuming process. Conversely, for subtitling, filling text can even be done in just a few minutes before the program begins, as in the example of news programs. Based on the above, it can be concluded that the dubbing is not an appropriate choice for DH viewers.

As in dubbing, voice-over technique also centered on audio production. But the closest thing to distinguish between the two is, in voice-over, visualization is not a major factor because the visuals on-screen exist solely to clarify what was spoken by the voice. This means people whose voices are transferred do not appear on the screen. So, the voice and lip synchronization is not important. This technique is widely used in documentary programs. This technique is more ‘hostile’ than dubbing for the DH. In dubbing, at least, they could still see a situation where the conversation occurred.

Orero (2009) defines voice-over into two categories; Voice-over for TV and radio programs, and voice-over production phase. One thing that distinguishes the voice-over to dubbing is the existence of sound. In the program that uses voice-over, usually the SL could still be heard behind the TL dominant voice. In special cases, voice-over can be made up of three sounds, for example, the news program broadcast by the Arabic sources, such as the case of Osama Bin Laden. This sort of thing is called as a pivot voice-over (Grigaraviciute and Gottlieb, 1999: 46, as quoted in Orero: 2009). Voice-over is usually done after the production process (Luyken, et.al. 1991 as cited in Orero: 2009). However, there are some voice-over done in the production phase. Such type of voice-over is often found in news programs. Due to the need for speed in the news program, sometimes there are some topics that will be missed. Therefore, before the news was broadcast, at times, the voice-over must be done during the production period. This kind of voice-over by Orero (2009) is referred to as a translation for production.

Aside from the explanation of Orero, there are no other articles that discuss the use of voice-over for people with special needs. From the above explanation, it can be concluded that the voice-over is also not a form of AVT for the DH.

**Subtitling**

If compared with two types of AVT described previously, namely dubbing and voice-over, subtitling AVT is a technique most popular and the most likely to provide access for viewers with special needs.

In the realm of translation studies, the call to provide access for people with special needs has been done since the 60s by Nida (1964). In the 1990s and 2000s, Kovacic (1995) and the Gambier (2003) adds that the aspects that influence text comprehension AVT such as socio-cultural aspects, attitudes, perceptions, and psychologically also applies in the realm of AVT for the DH. This shows that in terms of AVT text reception, the DH have things in common with the general audience.

In English-speaking countries, such as Britain or America, the kind of subtitles that are adopted for the DH is the intralingual subtitle. But in a country where English is not a primary language, a concept called interlingual has become popular. This concept, in the realm of AVT, has the meaning of subtitles in SL (Neves: 2009). This concept is a new concept, and until 2009, the concept is still unfamiliar to even in European countries such as Portugal. In Indonesia, the concept intralingual for the DH is still not implemented, let alone the concept of interlingual. Nevertheless, in this study, the concept of interlingual serves as an initial basis for the creation of standard AVT text AVT for the DH.

To design a product, the designer must know beforehand what is desired by the client. In the manufacture of interlingual text, it is also true (Neves: 2009). To understand the desire of the DH, we must first know the difference between the deaf and people with hearing deficiency (Deaf or Hearing-impaired). In this study, deafness is defined as the severe hearing loss in which the sufferer can not receive the information by just by listening. The deaf never have the opportunity to interact with sound, so they do not have the memory of a voice, or a voice
pronunciations. Conversely, people who have a hearing deficiency are those who were once able to hear but gradually lost their hearing. Sometimes, they were also able to hear vaguely. The hearing-impaireds has a memory of the sound, so they can still say sounds that they may not hear anymore. The difference in this definition is very influential later in the design or manufacture of custom text for the DH.

**RESEARCH METHODOLOGY**

Conceptually, the research methodology provides a holistic overview of the design of the underlying implementation of a study. Therefore, research should consider matters relating to the implementation of systematic research that includes the location of research, the subject of research, data, time and duration of implementation, data collection techniques, research procedures, as well as the data analysis process.

In this section, the author will reveal in depth about methodological fundamentals underlying the implementation of this study.

**Research Design**

Fundamentally, this is a qualitative study using library research approach. Therefore, the analysis is directed at the analysis of current product and its shortcomings, as well as the development of the product. The product which becomes the outcomes of this research is an audiovisual translation standard for the DH.

In the context of its use, a standard created as an operational basis. Similarly, the standard of audiovisual text for the DH is made with the purpose to be used for audiovisual audience. Therefore, the creation of standards must consider aspects such as:

1. The need for product development,
2. The efficiency of the product for users, as well as
3. The practical and theoretical suitability

Related to this, it can be concluded that the need for a translation of audiovisual products is absolutely in line with the low quality of audiovisual translation in Indonesia. Just the same with the description above, there should also be a development of appropriate products with theoretical and practical suitability.

Referring to the three aspects above and the view on the practical purposes of this study (to create and develop standards audiovisual translation), this study is carried out by relying on technical measures as follows:

**Need Analysis**

The analysis needs to be done to address the needs of users of the products that will be developed. Therefore, the needs analysis is directed to answer whatever is needed in the development of a product. Related to this study, a needs analysis is directed to find aspects that must be considered and developed in making audiovisual translation text. This process can be viewed according to user requirements (the DH). In addition, the researchers first has to consider current and on-going experts’ opinion associated with the translation of audiovisual and translation of audiovisual products.

In line with the description above, need analysis process is done by looking at articles on current AV translation products and the DH’s opinion on it.

**Product Development**

Through the process of need analysis information about deficiencies in current audiovisual translation text in Indonesia. Based on this knowledge, researchers are going to develop a translation product.

**FINDINGS AND DISCUSSION**

On the context of catering textual aids for the DHs, one needs to depart from the concept of reception. Kovacic (1995) points out that there are four factors to be considered when dealing with reception: attitudinal, socio-cultural, psychological or cognitive, and perceptual. In addition, AVT is a polysemic realm. The combination of visual and audio aspects give an overall picture of a situation or about the storyline of a program or movie. For the DH, one aspect of it is missing. Therefore, it is a task for an AV translator to bring back the missing aspects. To do that, Neves states that an AV translator requires sufficient knowledge about what aspects are relevant and affective to an individual's understanding of a media (2009).
Furthermore, for the DH, maybe there are other aspects that affect their understanding, which might be different with the general audience. Neves provides some questions that may help understand how the DH receive a media, namely:

1. How do they read AVT texts?
2. How do they read the word?
3. How much information do they need to gain a thorough understanding?
4. How many numbers of word needs to be displayed so that it can meet their needs for information?

Neves also explained that in addition to the difference in reading, the DH also experienced problems in managing information in the form of implied reading. This is because they are already used to managing information visually.

One thing that becomes a major problem in the presentation of the AVT text is limited space. It should also be taken into account by the AVT text provider for the DH. If the DH requires a large number of readings, then the space limitations will be the main obstacle.

Another point of concern is in the manufacture of AVT text for the DH is paralinguistic aspects of existence. One strategy that is most often used to bring paralinguistic aspect is to make it explicit (Explicitation, Toury: 1980). Some paralinguistic aspects such as sound effects may be easily made explicit, but other aspects such as tonal and modal is not easy to be made explicit.

Another aspect which may be important to consider is the presence of music in the AV media. For the DH, by presenting the music in the text, it can stimulate their memories about the music they heard. For the born-deaf who could not hear, the music is also useful to stimulate their imagination.

Other problems that may arise in the manufacture of AVT text is technical problems. With so many aspects that should be included in an AVT text for the DH, software and hardware problems can be a big problem. For the consumption of DVD and Blu-ray, this problem may not be too significant; we had seen the use of certain symbols in text DVD and Blu-ray, although we still often find that they are intralingual. However, for the production for TV, researchers must conduct research in advance about the possible inclusion of certain symbols in their program.

Another technical aspect which needs to be considered is the position of the text and text design. In an article by Harry (2006), in Japan, it has been proven that layout plays an important part in improving understanding. Differentiating position of the speakers really helps the DH on knowing who utters the speech. It turns out that linear positioning of the text, makes it confusing for the DHs to identify the speakers. Apparently, knowing who speaks what is as important as the content of the speech.

Another method which have been used in improving accessibility is by modifying the text itself. One common method of text modification is simplification. This would mean that the text in original language is made simpler. Again, in Japan, this method has been used in art shows. Unfortunately, there is no mention whether this method is applicable in both SL and TL. Supporting this opinion is the research done by Koskinen et.al. (1986). In it they mention that the redundant use of captions has resulted in no significant improvement over the non captions.

Lewis (1999) looks at the problem of accessibility from different point-of-view. He focuses on reading fluency, vocabularies, and prior knowledge of the world. She mentions that the DHs have limited reading fluency and vocabulary knowledge. In addition, due to their limited social exposure, they also have limited prior knowledge. In relation to that, Conrad (1977) has conducted a research on the DH reading level. He found that the reading level of the DH is seven years younger than that of the hearing. This is contradicted, however, by Caldwell (1973) who found that long exposure to captions produce significant increase in reading level. He states that after a five-week period of captions, students’ reading level has increased significantly with no decrease in interest.

**CONCLUSION AND SUGGESTION**

To sum up, to create an audiovisual text which can be used to help the DH, we need to look at technical, linguistics, and psychological factors. In the factors of psychology, creator needs to pay attention to the receptor’s attitude, cognitive process, socio-cultural environment, and perceptions. The way the DHs read texts, words, or the
amount of the reading materials needed for them to gain complete understanding should also be considered.

All the above factors will consequently influence the technical aspects of creating subtitle for the DHs, especially in its relation to space limit. Other technical aspects which are important is in the design and the layout of the texts. In terms of linguistics, the reduction strategy which is often utilized must take considerations of the psychological factors and technical aspects.

BIBLIOGRAPHY


