THE IMPLEMENTATION OF SuTI (SUBTITLE untuk TUNARUNGU INDONESIA) ON ENGLISH MOVIE FOR DEAF VIEWERS

THESIS

Submitted as A Partial Requirements

For the degree of *Sarjana* in English Letters

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Assalamu'alaikum Wr. Wb.

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Thank you for the attention

Wassalamu'alaikum Wr. Wb.

Surakarta, October 15th 2019

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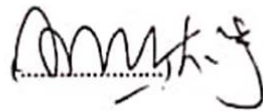NIP. 197510051998032002

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RATIFICATION

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DEDICATION

This thesis is dedicated to:

1. My beloved family
2. My beloved parents, Ahmad Nor and Imro'atun M D, S. Ag
3. My beloved friends, The English Letters of '15 in IAIN Surakarta
4. My Advisors in IAIN Surakarta
5. My almamater, IAIN Surakarta
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7. My beloved friends, Bidikmisi 2015, IPNU IPPNU SKH.

MOTTO

"Never think hard, because everything is easy by following the rules"

-    Luth   -

PRONOUNCEMENT

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I hereby sincerely stated that thesis entitled "The Implementation of SuTI (Subtitle for Tunarungu Indonesia) on English Movie for deaf viewers" is real my masterpiece. The things out of my masterpiece in this are signed by citation and referred in the bibliography.

If after proven that my thesis has discrepancies, I am willing to take the academic sanctions in the form of repeating my thesis and academic degree.

Surakarta, 4 November, 2019

Stated by

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The researcher is sure that this thesis would not be completed without the helps, supports, and suggestions from several sides. Thus, the research would like to express her deepest thanks to all of those who had helped, supported, and suggested her during the process of writing this thesis. This goes to:

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The researcher realizes that this thesis is still far from being perfect. The researcher hopes that this thesis is useful for the researcher in particular and readers in general.

Surakarta, November 04 2019

The Researcher

Luthfiyah

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ABSTRACT

Luthfiyah. 2019. *The Implementation of SuTI (Subtitle untuk Tunarungu Indonesia) on English Movie for the deaf Viewers*. Thesis. English Letters Study Program, Cultures and Languages Faculty.

Advisor: Dr. Hj. Lilik Untari, S. Pd., M. Hum.

Key words: SDH, SuTI, strengths, weaknesses

SuTI is a standard of subtitle *tunarungu* Indonesia. It made by Purnomo, Purnama and Untari on their observation (2017).This research examines the implementation of SuTI on English movie for the deaf viewers, which applied on *Angry Birds* movie. This research aims to describe the strengths and the weaknesses of SuTI.

This research uses structured interviews as the field of the study to find out the data that is analyzed by using the standard of SDH by Neves (2005) and *Pengembangan Literasi Audiovisual bagi Siswa Tunarungu melalui Penerapan Teknologi SuTI (Subtitle Tunarungu Indonesia)* by Purnomo, Purnama and Untari (2017). This research uses descriptive qualitative research. The source data is the result of interview from the subjects (deaf viewers) based on *Angry Birds* movie which applied SuTI on Purnomo, Purnama, and Untari observation on (2017). The researcher analyzed this research at SMK N 9 Surakarta. The subjects of this research are the deaf students 2016 at SMK N 9 Surakarta. Techniques of analyzing data in this research are data reduction, data display, and drawing conclusion. This research uses data triangulation for data validation.

Based on Neves (2005) there are duration, text presentation, verbal and non-verbal components in standard of SDH. The result from this research shows there are strengths and weaknesses in the standards of SuTI. The strengths are about the text presentation and verbal component in SuTI. Meanwhile, the weaknesses are about the duration aspect and non-verbal component in SuTI. In the text presentation, SuTI was followed the standard of SDH by Joselia Neves. SuTI can help deaf viewers read the subtitle through the element of font type, colour, and layout in the text presentation aspect. Also, in the verbal component, SuTI was success to make the deaf viewers feel the nuance of the movie by adding punctuation and giving the information about activity of the speakers in Angry Birds movie. Meanwhile, on the duration aspect, the researcher still found the weaknesses of SuTI. The standard of minimum and maximum duration, especially in fight scene does not appropriate with deaf viewers' reading ability. Another problem is in non-verbal components, when SuTI applied on *Angry Birds* movie in fight scenes, the deaf viewers mentioned that when the dialogue between the speakers is tight and the duration on the movie is fast they only read the speakers' name, they cannot read contain of the dialogue. Although, adding the speakers' name in non-verbal element on SuTI helps the deaf viewers to understand the speakers who speak on the screen and help the deaf viewers to differentiate the speakers on *Angry Birds* movie.

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CHAPTER I

INTRODUCTION

A. Background of the Research

Nowadays, subtitle becomes a device to help someone to get the meaning of the video, movie and etc. Almost in every movie which plays in Cinemas, TV, or social media use subtitle. It means that the subtitler has to produce the subtitle by the process of making a subtitle, namely subtitling. Subtitling is the process of putting down the written text in soundtrack, video, and etc by following the speaker said. Cintaz and Ramael (2007) mentioned that subtitling is a part of translation practice which available on a written text, generally on the lower part of the screen, it shows the dialogue of the speakers and it converts on the image (letters, inserts, graffiti, inscription, placards, and the like), also it is about songs, voices off on a soundtrack. It means that all subtitled programmers are made up of three main components: the spoken word, the image and the subtitles. The interaction of these three components, along with the viewer's ability to read both the images and the written text at a particular speed, and the actual size of the screen, determine the basic characteristics of the audiovisual medium.

Typologies of subtitles can be established depending on the criteria that are used at the onset. Cintaz and Ramael (2007) mentioned that the types of subtitles according to the following five criteria: linguistic, time available for preparation, technical, methods of projection, and distribution format.

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Linguistic parameters divided into three types; intralingual subtitles, interlingual subtitles, and bilingual subtitles. In intralingual subtitles, there are subtitle for the deaf and the hard of hearing (SDH), subtitle for language learning purposes, subtitle for karaoke effects, subtitle for dialect of the same language, subtitle for notice and announcements.

This research talked about the subtitle for the deaf and Hard of Hearing (SDH). Deafness means loss of hearing and it may be partial or total (Varshney: 2016). A deaf person is so isolated from family and friends and greeted by unsympathetic attitude he/she is often depressed and needs psychological counseling. As the WHO definition of "deafness" refers to the complete loss of hearing ability in one or two ears. It means that the category will be in those hearing loss more than 90 dB in better ear (profound impairment) or total loss of hearing in both the ears. WHO described "hearing impairment" refers to both complete and partial loss of ability to hear. It shows that they cannot get any sounds. It makes they are too hard to studying, working, and etc, including enjoy the videos or movie. They automatically need the solution to help them enjoy the video or movie. To help them get the message from a video or movie, they need SDH (Subtitle for the deaf and Hard of Hearing).

SDH assumes that the viewer cannot hear the audio. First, we have to know the differences between captioning and subtitling to learn more about SDH. "Close captions" are intended for viewers who are d/Deaf or Hard of Hearing, and provide text for any audible information in the film or video. On

the other hand, 'Subtitles' are intended for audiences that don't speak a show or video's language, and translate linguistic content. It concludes that SDH combines all the information (audible and linguistic). Neves (2008) mentioned that 'Captioning' is taken to address hearing impaired viewers, it includes speech and provide information about sound effects and music, whilst 'Subtitling' is considered to be for hearers. It means that the subtitler of SDH has to focus on the deaf viewers as the target. Moreover, the subtitlers need to have a profound knowledge of the profile and the needs of their specific addressees and audiences (the d/Deaf and he hard-of hearing); a good knowledge of filmic composition, particularly in respect to the place and meaning of sound (in all its forms) in the compositional whole; a clear understanding of redundancy, relevance, adequacy, cohesion, and coherence, so as to guarantee truly meaningful reading material; and the ability to draw both upon sense and sensibility when difficult choices need to be made to produce truly useful accessibility service, (Neves: 2008). It shows that SDH not only has the strengths, but also it has the weaknesses side.

This research shows the result of an observation and interview of deaf viewers in Indonesia by showing them SuTI (Subtitle Tunarungu Indonesia) that applied into an English movie. SuTI is a standard of subtitle *tunarungu* (deaf viewers) in Indonesia. It made by Purnomo, Purnama and Untari on their observation: *Pengembangan Literasi Audiovisual bagi Siswa Tunarungu melalui Penerapan Teknologi SuTI (Subtitle Tunarungu Indonesia)* on 2017. SuTI is design for the format of SDH/CC linguistic, the textual of SD/CC,

transferability sound effects and theme songs in national convention as same as SIBI *(Sistem Isyarat Bahasa Indonesia)* and BISINDO *(Bahasa Isyarat Indonesia)* and implementing it into audiovisual product, such as film, news, and feature.

This study is to analyze how the implementation of SuTI on English movies for deaf viewers. It is focus on the strengths and the weaknesses of SuTI. Based on the researcher's observation and interview, the deaf viewers still found the weaknesses from SuTI. The researcher used an *Angry Birds* movie for the research as the applied of SuTI in Untari, Purnama and Purnomo's finding. The results are the strengths and the weaknesses of SuTI. The strengths and the weaknesses here mean that based on this research, the researcher analyzed about the components or the standards on SuTI whether according to the standard or not. This research used Neves' theory on *Audiovisual Translation: Subtitle for the Deaf and Hard of Hearing* as the main standard of SDH. On her thesis, Neves said that to make SDH the subtitler has to consider about some elements, such as duration or time (synchrony and reading speed), text presentation (font, colour, and layout), verbal component (from speech to writing, and paralinguistic information), and non-verbal component (human voice, sound effects, and music).

This picture shows that SuTI explains the sound of "boom" in that movie. It belongs to the strength of SuTI. Meanwhile, in general subtitle there is no sound effects like "Suara Ledakan" as in SuTI.

Figure 1.1

Meanwhile, one of the weaknesses in SuTI is about the duration. When the subtitle appear on the screen while the dialogues between the speakers on *Angry Birds* movie is tight and fast, it is actually disturb the deaf viewers to read the SuTI alone. This picture shows the duration of SuTI is too short and the name of the characters in that movie, sometimes make the deaf viewers confuse. It depends on the duration of that scene, as the figure 1.2 shows below.

#	Start	End	Style	Text
17	0:00:38.50	0:00:39.67	Default	HAL:\N[berteriak takut]
18	0:00:39.67	0:00:42.60	Default	BOMB:\NDia hebat sekali!
19	0:00:42.77	0:00:44.47	Default	RED:\NTunggu! Kenapa dia balik ke sini?
20	0:00:44.62	0:00:45.22	Default	RED:\NAwas!
21	0:00:45.30	0:00:46.07	Default	HAL:\N[berteriak takut]
22	0:00:46.12	0:00:46.62	Default	RED:\N✳Awas!✳
23	0:00:46.62	0:00:47.47	Default	BURUNG-BURUNG:\N[berteriak kaget]
24	0:00:47.50	0:00:48.35	Default	HAL:\N[berteriak takut]
25	0:00:48.75	0:00:50.02	Default	CYRUS:\N[bersin]
26	0:00:50.02	0:00:51.70	Default	RED:\N[jijik]
27	0:00:51.77	0:00:53.00	Default	BOMB:\NMau tisu?

Figure 1.2

B. The Problem Limitation of the Research

The limitation of this study is to determine the strengths and the weaknesses of SuTI (*Subtitle Tunarungu Indonesia*). The researcher wants to know what are the strengths and the weaknesses of SuTI by analyzing the standard of SuTI in the forms of durations (synchrony and reading speed), text presentation (font, colour, and layout), verbal components and non-verbal

components. In this research, the researcher used an English movie from *Angry Birds* as the main data of the research.

C. The Problem Statement

Based on the explanation above, the formulation of the problem in this research are:

1. What are the strengths of SuTI for the deaf viewers?

2. What are the weaknesses of SuTI for the deaf viewers?

D. The Objectives of the Research

1. To find out the strengths of SuTI for the deaf viewers.

2. To find out the weaknesses of SuTI for the deaf viewers.

E. The Benefit of the Research

This research is about the implementation of SuTI for the deaf viewers. The study is hopefully able to provide some benefits to the readers and the other researchers either theoretically and practically.

1. Theoretical Benefits

The result of this study is to improve the previous study about the standard of SuTI. It is also to improve readers' knowledge on the strengths and the weaknesses of SuTI. The researcher wants to give contributions to the reader about SuTI.

2. Practical Benefits

This study could be used as reflected for the other researchers who intend to analyze of SDH, especially for SuTI. Also, it can inspire the

other researchers to minimize the weaknesses on SuTI, to make SuTI is more better in a future.

F. Term Limits

To avoid differences between the writer and the reader in understanding terms used in this study, it is necessary to do the restriction term.

1. Implementation

Reeves and Bhattacharyya (2009) said that implementation research is the study of methods to promote the uptake of research findings into routine practice. Implementation research is directed toward producing generalizable knowledge.

2. SDH

Subtitle for the d/Deaf and Hard of Hearing (SDH) is the subtitle which has the specific standards or elements for deaf viewers in subtitling.

3. SuTI

Subtitle untuk Tunarungu Indonesia (SuTI) is SDH which has the specific standards or elements for deaf viewers or *Tunarungu* Indonesia. SuTI follows the standard of EYD (*Ejaan Yang Disempurnakan*) in Indonesia, because it helps the deaf viewers to increase their reading skills and makes SuTI more legibility on the screen. It also appropriates to SIBI (*Sistem Bahasa Isyarat*) and BISINDO (*Bahasa Isyarat Indonesia*) as Untari, Purnama and Purnomo's mentioned before.

4. **Angry Birds movie**

   Angry Birds movie is an English movie produced by Rovio Entertainment. This movie is applied to SuTI on Untari, Purnama, and Purnomo's project.

5. **d/Deaf and Hard of Hearing**

   According to CDC (Centers for Disease Control and Prevention), "deaf" people are unable to process language and speech by relying on their hearing as they cannot hear their own voice or any other voice. Whereas people with moderate or mild hearing loss or "hard of hearing" may process language and speech and also communicate with other individuals using their hearing capabilities because they can hear sounds but may not be able to distinguish the speech pattern to assist them in conversation.

CHAPTER II

THEORETICAL REVIEW

In this chapter researcher discusses about the theories that used to answer the problem statements on the thesis. The researcher categorized this chapter into definition about subtitle in general perspective, definition of deaf viewers, definition about SDH, definition about SuTI.

A. Theory Description

1. Definition of Subtitling

Subtitling is the rendering in a different language of verbal messages in filmic media, in the shape of one or more lines of written text presented on the screen in sync with the original written message. In short, subtitling is not only a process of inserting some texts into a video, movie only, but the main point is transferring the idea from verbal message into a written text form (Chiaro: 2009). In this case, subtitling divided into three parts; intralingual subtitles, interlingual subtitles, and bilingual subtitles. Kalantzi and Somers (2008:15) mentioned that subtitling may be defined as the process of providing synchronized, often condensed written translation/transcriptions of the original dialogue and soundtrack of films and television programmers, and more recently live opera productions, games and videos broadcast on the internet. According to Cintaz and Ramael (2007) that explained intralingual subtitles, there are subtitle for the deaf and the hard of

hearing (SDH), subtitle for language learning purposes, subtitle for Karaoke effect, subtitle for dialect of the same language, subtitle for notices and announcements. Moreover, we have subtitle for hearers and subtitle for the deaf and the hard of hearing also for interlingual subtitle. This research will talk about SDH. Before we learn about SDH, it may be good if we can distinguish between d/Deaf and Hard of Hearing.

2. Definition of d/Deaf and Hard of Hearing

People usually consider that d/Deaf is the same as Hard of Hearing (HoH), but both are totally different. Neves, (2005) distinguished between d/Deaf and Hard of Hearing (HoH). Neves said that hearing loss can be classified according to three distinct parameters: (1) The location of the problem within the ear (Conductive hearing loss, Sensorineural hearing loss and Mixed hearing loss); (2) The onset of hearing loss in relation to language development (Prelingual or Postlingual); (3) The cause of the problem (Genetic or Non-genetic hearing loss). Different from hearing loss or hard of hearing, Neves (2005) mentioned that deafness may be defined in terms of audiological measurements, focusing on the causes and severity of the impairment, but it can also be seen in terms of social integration and language usage. He distinguished between "deaf" and "Deaf" (with a capital D). Basically, "deaf" simply refers to someone who cannot hear well enough to process aural information conveniently. Considering somebody "Deaf" means accepting the fact that that person belongs to the Deaf community that,

although if a minority, has rules and codes of conduct that differentiate it from all others.

Neves (2005) concluded that to belong to the Deaf community does not necessarily mean that someone's hearing capacity is severely impaired. As a matter of fact, hearing and Hard of Hearing (HoH) people can be part the Deaf community if they adhere to the Deaf culture, accepting its social, political and legal principles and, above all, to their mode of communication. A question remains to be answered; can anybody truly be part of two communities: the Deaf community and the hearing community? Indeed, that appears to be the case of most hearing impaired people, who have been taken through educational programmers that allow them to interact within different group.

Considering the differences between the d/Deaf and Hard of Hearing (HoH), it is effective to learn about the subtitle for the d/Deaf and HoH (SDH). SDH is one of the devices that can help the d/Deaf and HoH to understand the message from any audiovisual forms.

3. **Definition about SDH**

Subtitling for the d/Deaf and Hard of Hearing (SDH) is an invaluable service to millions of d/Deaf and HoH viewers providing them with access to audiovisual media broadcast on television and increasingly in cinemas, DVDs and on the internet (Kalantzi & Somers, 2008:11). SDH has the rule and standard of making the subtitle of its own, it makes SDH is different from usual subtitle. SDH has different aspects on

organizing the layout, duration, punctuation and alphabetical, and editing the target text (Neves, 2008; Karamitoglou, 2010; Untari & Purnomo, 2011, Untari & Purnama, 2015). According to Yu Kuo (2014), for make a good quality of subtitle, the subtitler has to consider about temporal dimension, spatial dimension and stylistic dimension. The subtitler has to manage the duration of subtitle and spotting for the temporal dimension. Then, the subtitler has to consider about the number of lines, line length and font type, save area and position on the screen, and font colour and background in spatial dimension.

4. **Definition about SuTI (Subtitle untuk Tunarungu Indonesia)**

As people known that subtitle for the deaf viewers has the standard to distinguish it from a usual subtitle. Indonesia has the standard to convey the meaning from the subtitle *tunarungu*. According to Untari (2017), *tunarungu* has the standard to read the subtitle, it has to use a simplify words in the subtitle. The standard of that subtitle named SuTI (Subtitle untuk Tunarungu Indonesia). SuTI has the standard to make the subtitle can be read to the deaf viewers in Indonesia. It means that SuTI follows the standard of EYD (*Ejaan Yang Disempurnakan*) in Indonesia helps the deaf viewers to increase their reading skills. This research will show the implementation of SuTI on English movie for the deaf viewers. It focuses on the strengths and the weakness of SuTI.

5. **The Standard of General Subtitles and SDH**

SDH has a different standard than the general subtitle, it shows by the target viewers of SDH is for the deaf. It means that in SDH the subtitler has to consider about the elements to help the deaf viewers enjoy the movie. In this part, the researcher shows the differences between the elements on SDH and a general subtitle.

According to Neves (2005) on her thesis *Audiovisual Translation: Subtitle for the Deaf and Hard of Hearing,* the elements of SDH are duration or time (synchrony and reading speed), text presentation (font, colour, and layout), verbal component (from speech to writing, and paralinguistic information), and non-verbal component (human voice, sound effects and music). Meanwhile, Kuo (2014) on his thesis *Quality in Subtitling: Theory and Professional Reality*, the factors that determine the quality of subtitles are temporal dimension (duration of subtitles and spotting), spatial dimension (safe area and position on the screen, number of lines, line length and font type, font colour and background), and stylistic dimension. The standard of SDH also mentioned on Paramatra (2010); Untari & Purnama (2015), they divided the media which support the subtitle; First, VAC (Verbal Auditory Channel), it includes dialog, and backsound. Second, NAC (Non-Verbal Auditory Channel), it includes sound effects and music. Third, VVC (Verbal Visual Channel), it includes letter, book, newspaper, graffiti and etc. Fourth, NVC (Non-Verbal Channel), it includes image, the position of

camera, motion, and editing to the film. In this case, the researcher used the theory of Neves (2005) for analyzing the data.

1. **Time Constraints: Synchrony and Reading Speed**

In this part, Neves (2005) divided into two parts; synchrony and reading speed. Synchrony and reading speed here means the subtitler has to consider about the time or duration of the subtitle and the reading speed of the viewer when the viewer is watching the movie. Reading speed is determined by the reading ability of the viewer itself. Meanwhile, the level of reading ability's someone to others are totally different, it causes by many factors; such as, background knowledge, audiovisual literacy, and perceptive capacity, the subtitle quality also become one of the factor which determined someone's reading ability. It means that the hearing people have more reading ability than the deaf people. The level of SDH is more complex than the general subtitle.

Meanwhile, According to Karamitroglou (1998:online), the reading speed for the viewer which around 14-65 years old is 150-180 English words per minute (wpm). It means that the full two lines subtitle containing between 14-16 English words which need duration around 5 ½ seconds. Meanwhile, in reality our brain needs around 1/4-1/2 of a second to process the subtitle itself. Total duration of two lines subtitle is around six seconds. It means that the subtitle should be allowed around 2-3 words per second. The

maximum duration time for 7-8 words would be around 3-3,5 seconds. It shows that the minimum duration of a single-word subtitle is at least 1,5 seconds to minimize the irritating viewers' eye. For the minimum and maximum duration of subtitle, based on *the Code of Good Subtitling Practice* that there is no subtitle which applied for less than one second and for the maximum duration of subtitle is around seven seconds. According to Karamitroglou (1998) the reason why the maximum duration is seven seconds is it may cause the viewer automatic rereading of the subtitle. The standard reading speed applied in the industry tends to rise from 150 wpm to 180 wpm in cases where the original dialogue is delivered at a high speed. Characters per second (cps) is another way of measuring reading speeds and in the industry 12 cps is considered rather slow; around 15 cps is normal/fast, and around 17 cps is rather fast (Díaz-Cintas, 2013a: 276). Karamitroglou (1998) mentioned that the subtitle should allow around 35-40 characters each line to increase the legibility of the viewers. If each line has more than 40 characters, it will decrease the viewers' focus on the image.

Also, in SDH we have "spotting area" to manage the SDH itself. Spotting area called as a time when the subtitles should appear or disappear on screen (Diaz-Cintas and Ramael, 2007: 88 on Kuo, 2014: 73). It means that the subtitle has to appear before

the speaker is starting to speak, and disappear after the speaker is stopping to speak. As the Untari, Purnomo, and Purnama (2017) mentioned that the subtitler in SDH should be applied the subtitle 0,5-0,75 seconds before the speakers said on the screen. The aim is to make the deaf viewers get the information of the speakers' dialogue by lip-reading, because the subtitle synchronizes with the speakers' mouth.

Kuo (2014:72) mentioned that there are some variety parameters to determine the reading speed and ability to read by the viewers, there are;(1)the complexity of language, (2)the density of the information contained in the dialogue, (3)the viewer's familiarity with the subject at hand, (4)the language ability of viewers (children vs adults), and (5)the genre and rhythm of the film and so on. It is also supports in SDH, the deaf viewers has the level on their complexity of language.

2. **Text Presentation**

Text presentation includes font type, colour, and layout on this part, (Neves: 2005). In this case, although text presentation is determined by technological features of the system of subtitling, it has a very important role in the quality of subtitles for. Meanwhile, in the part of text presentation, there are some elements which have a specific effect such as, resolution, letter contours and the viewing distance. When the movie has a high resolution, sharp, and clear

letter contours and the viewer follows the standard of viewing distance, it will be more increasing a high quality of subtitle.

a. Font Type

As mentioned above, one of the elements in text presentation part is about font. In font aspect, we have type space, size, letter spacing, style, and effects.

1) Typeface

In general subtitle, Karamitroglou (1998) mentioned that typefaces with no serifs are preferable to fonts with serif, Helvetica and Arial are recommended for subtitle. Meanwhile, Kuo (2014: 91) said that mostly *Sans-Serif typefaces* are better than *Serif* fonts on the screen. Neves (2008) mentioned that open and closed subtitles have a different system to determine the fonts. (Untari, Purnomo, Purnama: 2013) added O'Corel's statements that SDH belongs to intralingual subtitling, it means that SDH belongs to Closed Subtitling. Meanwhile, Open subtitles used *Serif typefaces* with an italic and bold for the special effects, usually it applied on song lyrics, sound of electronic devices or foreign languages. Then, caption box or block capitals applied to closed subtitles, even though there are some problems for using block capitals. When using a block capital, the subtitles are really difficult to read

by the deaf viewers. Black box behind the letters was generally said to improve legibility.

2) **Font Size**

Neves (2005: 187) claimed that font size become a problem when it meant that important features on screen were obscured by the caption boxes or less information was made available because of the bulkier fonts. Size also affects the viewers to focus on the screen (between image and subtitle), especially for deaf viewers. If the font in SDH is too big, it disturbs the deaf viewers and focus at the subtitle only. Meanwhile, if the font size is too small, it will more difficult to understand, because the deaf viewers have to pay attention to read the subtitle. Neves added that black box behind letters was generaly said to improve legibility.

3) **Letter Spacing**

Letter spacing has an important role to determine the quality of subtitles on Neves' observation, Portuguese Deaf claimed that spacing can interfere in subtitle reading process. Neves (2005) added Baker (1948: 8) statements that somehow the punctuation which following by the extra spaces will more effectiveness to be a clear subtitle if; (1) use of a single space before exclamation marks and question marks, (2) after commas, colons, semi-colons and

mid-subtitle full stop, on both sides of dashes (but not mid-word hyphens), before opening brackets and inverted commas, and after closing brackets and inverted commas. Meanwhile, Caption Media Program's (CMP 2001-9) on Neves thesis mentioned that in the case of giving space on the subtitle should be better if it applied before ending punctuation, after opening and before closing parentheses and brackets, also before and after double hyphens and dashes, or before, between, and after the periods of an ellipsis mark. SDH in Germany and Switzerland still used spacing before exclamation and question marks, (Neves: 2005). Mostly, the subtitlers follow Bake's recommendation for sometimes. Neves (2005:191) claimed that only the space before exclamation marks and question marks was introduced as specific to SDH. There are some channels which applied spacing before punctuation, we have RTL at Germany, TV5 Europe at Switzerland, SIC at Portugal, RTP1 at Portugal. Meanwhile, some of the channels preferred to use punctuation with no space, such as TVE2 at Spain and ITV1 at UK. SuTI preferred to use punctuation with no space on all of the lines in their subtitles.

4) **Style and Effects**

Neves (2005: 192) said that Europe used mixed (upper and lower) case characters in their main subtitles and upper case for emphasis or comments about sound effects and music. Sometimes, subtitler applied mixed case for pre-recorded programs and upper case for subtitling news. Meanwhile, deaf people in Portuguese claimed that the upper case is more difficult to read. Stressing words in SDH might influence the deaf viewers to get the point at the same time, but in fact that the deaf viewers still cannot get the meaning of an upper case in a line of subtitles. Using italic for the special effects might help the viewers to notice the narrator voice, or the speaking over the phone, also it can be used for foreign language.

Actually in general subtitle, Bannon on Kuo (2014: 98) mentioned that subtitle capitalization can be used to echo the stress points in the dialogue, thus illustrating the character's intent to the audience. To support the Bannon's statement, the figure 2.1 below shows the example.

Worried: MUST you go?
Confrontational: Must YOU go?
Frantic: Must you GO?

Figure 2.1

b. Colour

In general subtitle, Karamitroglou (1998) claimed that type characters in subtitle should be coloured pale white (not "snow-bright" white), and also the grey colour or the "ghost box" are more recommended for subtitles. The reason is both are not too bright and neutral to the eyes, so it can increase the legibility. As Neves (2005: 193) said before that the use of colour in subtitle is taken to be a special feature of subtitling for the hearing impaired and is used according to different conventions. Neves (2005: 193) showed the differences between using a blue lettering over yellow background and blue lettering over white background on TVE2 at Spain. It contra with what the research at Southampton University about the use of colour in subtitle which mentioned that the most legible colour combinations are white letters on black boxing are followed by yellow, cyan, and green on black colours. Actually, the most subtitler used coloured letters over black background for showing the speech and sound effect or music on subtitle.

Neves (2005: 198) said that subtitler has the standard for manage the coloured by divided into three parts; (1) White on black for speech, (2) Yellow on white for speech conveyed through electronic devices (Telephone, Handphone, and TV)

and for speaker's name or sound effects and (3) Cyan over black for showing the music or song lyrics. Neves (2005: 200) mentioned that the *vKv Subtitling Guidelines* showed the result of their research by interviews, chat-shows and contest, and documentaries that the coloured of white over black always be used for the reporter(s)/presenter(s). Also, they mentioned that white on black is recommended for all on screen voices and yellow on black for off-screen narration voices.

c. **Layout**

Three different aspects will be taken into account in terms of layout: number of lines, positioning and alignment (Neves, 2005: 201). Those aspects will describe as one by one in this part below.

1) **Number of Lines**

Every country has their own standard to get a higher quality of their subtitle. In a subtitling, to increase the quality of subtitle is also by manage the number of lines on the subtitle. In this case, between one country and others has a different standard to determine the number of lines on the subtitle. As Kuo (2014: 85) mentioned that Malaysia which have a multilingual language (Malay-English-Chinese) used three lines that divided by three languages above. Meanwhile, in Hong Kong the single-lined is

become the standard of creating a subtitle there. It is different with Taiwan, which applied two lines even it can be in a single-line. Most European countries present subtitles in one, two or three lines, whilst preference seems to go for two liners (Neves, 2005: 201). The two lines also applied on interlingual subtitle as *The Code of Good Subtitling Practice* mentioned. Kuo (2014: 86) claimed that if the subtitle is for the deaf and hearing impaired viewers, the subtitler has to use three or four lines to the subtitle.

Karamitroglou (1998:online) added that subtitles should be presented at a time with the maximum is two lines. If in a single-line, it should be on the lower part. Meanwhile, Neves (2005: 201) excluded three liners for SDH because she considers them to go against the grain of optimal readability.

2) Positioning and Alignment

Positioning and alignment in subtitling also becomes an important feature that must be considered by the subtitler. Further problems will derive from the justification of subtitles, position on screen (center, left or right) and alignment (both lines center aligned, left or right aligned). In most European countries, subtitles available at the bottom of screen and applied on center justified and center

aligned. Germany and Italy use left alignment regardless of the subtitle's position on screen. (Kuo, 2014: 80) said that the most conventional way for subtitles to appear is horizontally centred at the bottom of the screen. It cause by (usually) the lower part of the screen is less information about the image or picture on audiovisual program, the camera focuses on center of screen. It helps the viewer focuses on the center of screen, because it also facilitates the eye's movement. This is also important when the subtitler has to consider about eye's movement, to reduce the eye's movement, subtitle has to place in the center of screen in which lines are right justified the first line should be the longest. As Karamitoglou (1998) on Kuo (2014:78) mentioned that to facilitate the eye's movement, subtitle should appear at least 1/12 of the total screen height from the bottom and the margin is around 1/12 from both (left and right) sides. It means that the subtitle has to available on the same position between the height from the bottom and the margin on the screen.

In SDH, using positioning is an advantage to help deaf viewers identify the speaker (Neves, 2005:202). The important thing is the subtitler has to consistence to manage the position and alignment in a subtitle, especially in SDH.

As the Luyken (1991:47) on Neves (2005:203) mentioned before, that whatever the subtitle position, consistency is all-important since the viewer will begin to anticipate the appearance of the next subtitle. If the subtitle is inconsistence, it will be decrease the readability of the subtitle.

3. **Verbal Components**

One of the elements on the subtitling of SDH is verbal component. Transposition from the oral to the written modes and issues pertaining to the subtitles themselves belong to verbal components (Neves, 2005:204).

In verbal component, the subtitler has to convert the speech of the speaker into a writing style in a subtitle, especially in SDH. SDH needs more than converting that speech, but the subtitler of SDH must giving a lot of information to identifying the speaker's said by a simple words. Using a symbol may be help the deaf viewers to describe the characters, also understand contain of the speech. Symbols in a SDH are limited, it depends on the way deaf viewers get the information about that symbols. It will different with the general subtitle, SDH has to cover the symbols in which a simple and easy to understand, especially for deaf viewers. Using punctuation or giving different fonts implied the paralinguistic information on the verbal component of speech (Neves, 2005:206).

4. Non-Verbal Components

Non-verbal component is the one of the elements in SDH. This will be the big deal in the components of audiovisual texts on SDH in which make the difference with general subtitles. Sound effects and music are one of the topics in non-verbal component, means that deafness would miss out on this aural information. Non-verbal component can stimulate reality and suggest mood of the viewers, especially in SDH. In this case, the deaf viewers can feel the atmosphere on the movie. It differentiates SDH with the general subtitle. In general subtitle, there is no sound effect in a subtitle, sometimes some cinemas show the lyric of soundtrack movie on their subtitle (mostly in a cartoon, or movie for kids).

B. Review Previous Studies

To prove the originally of this research, the researcher wants to present the previous researcher dealing with to this object of the research. There are some researchers conducting similar research. First, Joselia Neves talked about the detailed of SDH. She described about the differences between deaf viewers, more details about SDH, and the implementation SDH in Portuguese case. Also, she mentioned about the standard of SDH. In this research, the researcher compared between the standard of SDH by Joselia Neves and the standard of SuTI itself.

Second, the Untari, Asiyah and Anggraini's journal, *"Subtitle for the deaf (SDH) media as an new model to teach English vocabulary for the deaf or Hard of Hearing students."* On their journal, the researcher got the information about how SDH applied on the deaf and Hard of Hearing students as a new model in English vocabulary. Then, for the theory of SuTI itself, the researcher used Untari, Purnama and Purnomo's project, *Laporan Pengabdian Kepada Masyarakat Pengembangan Literasi Audiovisual Bagisiswa Tunarungu Melalui Penerapan Teknologi Suti (Subtitle Tunarungu Indonesia).* This research is the main source text and research in this research. The researcher applied SuTI on SMK N 9 students which belong to deaf and Hard of Hearing. This research aimed to improve the Untari, Purnama, and Purnomo's finding about SuTI and to minimize the weaknesses of SuTI by analyzing the strengths and the weaknesses of SuTI.

CHAPTER III

RESEARCH METHODOLOGY

A. Research Design

In this research, researcher used a descriptive qualitative method. Creswell (2008: 4) mentioned that qualitative research is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. The process of research involves emerging questions and procedures, data typically collected in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher making interpretations of the meaning of the data. Lincoln in Emzir (2010:1) added that in qualitative research there will be involving an interpretive and naturalistic approach to its subject matter. It means that the researcher should be collect the data by analyse the subject's personal experience, introspective, life story, interview and observe the subject's individual's live.

From some views above, it can be conclude that the descriptive qualitative methods are collecting, classifying then analyzing data which are forms of sentences, and the last is the researcher draws conclusion based on the data analyzed. This research is called a descriptive because in this research described the strengths and the weaknesses of SuTI. This researcher used a descriptive qualitative research to analyze about the implementation of SuTI on English movie for deaf viewers.

B. The Research Setting

Given (2008) said that the research setting can be seen as the physical, social, and cultural site as the researcher conducts the study. This research conducted at the deaf students of SMK N 9 Surakarta. The setting of the research is in SMK N 9 Surakarta. It is located in Jl. Tarumanegara 1, Banyuanyar, Banjarsari, Surakarta, Central Java. The researcher chooses deaf students 2016 in SMK N 9 Surakarta, because the researcher has some reasons. Firstly, the subjects were interviewed by the founder of SuTI before in 2015 ago. Secondly, the subjects were graduated at SMP LB YRTRW (*Sekolah Menengah Pertama Luar Biasa Yayasan Rehabilitasi Tuna Rungu Wicara*) Surakarta. It means that the subjects have a high degree on their reading ability than the deaf who never joined at the deaf school. Based on these reasons, the researcher wants to investigate about the implementation of SuTI on *Angry Birds* movie.

C. Subject of the Study

As Nasution (1991:119) mentioned that to find the subject of research, the researcher should be selecting a number of individuals for a study. The subjects of this research are the deaf students from SMK N 9 Surakarta. Novan, Zahra and Fadia are the name of the subjects in this research. They were graduated from SMP LB YRTRW Surakarta. Then, they continued their study in SMK N 9 Surakarta on their senior high school at 2017. Novan takes TKJ (*Teknik Komputer dan Jaringan*), Zahra takes *Animasi*, and Fadia takes

Tata Busana for their focus. The subjects have the strategies to increase their reading ability. They have knowledge to get a communication with hearing people, it is the reason why the researcher chooses them as the subjects in this research. As the data from Untari (2017), mentioned that the subjects have the audiology background which influence on their reading and writing ability. In this research, the researcher chooses the subjects based on their reading ability, because the researcher focuses on SuTI. The researcher preferred to the deaf viewers from SMK N 9 Surakarta, because they can use their reading ability to measure the elements of SuTI.

Table 3.1

Table data of the background's subjects

No.	Background	Subject 1	Subject 2	Subject 3
1.	Audiology Background	-deaf with a high level. -the deafness is known since the age was 1,5 years old. -only listens a very hard sound. -not using a hearing device.	-deaf with a high level. -the deafness is known since the age was 1,5 years old. -only listens a supersonic sound. -using a hearing device, but temporary.	-deaf with a high level. -the deafness is known since the age was 1,5 years old. -cannot listen the sound.
2.	Reading Ability	-Has many strategies to get the point of the story. -Has the strategy to get a new words by reading a lot, re-reading, giving the mark of the new words, confirming the words that the subject not understand yet to the teacher, browsing to the internet.	-Has many strategies to get the point of the story. -Has the strategy to get a new words by reading a lot, re-reading, giving the mark of the new words, confirming the words that the subject not understand yet to the teacher.	-Reading by playing online games and using the social media.

3.	Writing Ability	-Not good enough as the reading ability. -Still confuse about how to determine which one is Subject, Predicate, or Object in a sentence.	-Not good enough as the reading ability. -Still confuse about how to determine which one is Subject, Predicate, or Object in a sentence.	-The writing ability is good enough as the reading ability.

D. Data and Source of the Data

The main data sources in qualitative research are words and events from people who have been observed. In addition, there are addition data such as document and others (Moleong, 2009:157). The data of the research is *Angry Birds* movie which applied SuTI on Purnomo, Purnama, and Untari (2017) observation. The primary source of the data is the result of interview from the subjects (deaf viewers).

E. Research Instrument

Research instrument has the main role to complete the data. Creswell (2008: 158) states that research instruments can indicate the established validity and reliability of the scores on those instruments, the individuals who developed them, and any permission need to use them. The main instrument in this research is the result of an interview the deaf students 2016 of SMK N 9 Surakarta. To support this research, the researcher used pen, book, papers, smartphone, laptop and electronic dictionary.

F. Techniques of Collecting Data

The researcher should apply the techniques to collects the data. It can be interview, observation, document or audio-visual material. In this research, the researcher used an interview technique to collects the data. Creswell (2008: 181) states that in quality interviews, the researcher conducts face-to-face interviews with participants, interviews participants by telephone, or engages in focus group interviews, with six or eight interviews in each group. In this research, the researcher used focus group to interview the subjects in a group by controls in the line of questioning to the subjects. This research is done by the several steps. The steps of collecting data that used in this research are:

1. The researcher collected the movie, *Angry Birds* in fight scene from the researchers before (Purnomo, Purnama, and Untari: 2017) which applied the SuTI.

2. The researcher applied the *Angry Birds* movie to the subjects, the deaf students 2016 of SMK N 9 Surakarta.

3. The researcher prepared some questions related to the *Angry Birds* movie, to detect the strengths and the weaknesses of SuTI.

4. The researcher asked to the subjects how much they can understand the whole story of the *Angry Birds* movie, to understand the effect of the implementation of SuTI.

5. The research identified the result of an interview parts, includes from questions and answers, voice recording, video recording, and notes.

6. The researcher classified and analysed the data into two parts; the strengths and the weaknesses of SuTI by Neves' theory.

G. Technique of Analyzing Data

Qualitative data analysis is defined as working with data which includes organizing, classifying, synthesizing, and understanding the data, and also determining the data that will be presented (Bogdan and Biklen, 1982: 145). From the definition above, the researcher used three steps to analyze the collected data, they are:

1. Data Reduction

Data reduction is the first step which is used to select the relevant data so that the researcher can easily focus on the main problems (Bogdan and Biklen, 1982: 145). This is the process of reducing and transforming the raw data. In this part, the researcher collected the result (the answered from the questions) of interviewing the subjects, the researcher limited the data as the elements of SuTI based on Neves' theory only, then the researcher identified the standards of SuTI by classified the strengths and the weaknesses of SuTI. The researcher reduced the data from the dialogues (questions and answers) of the subjects in the interviewing process. If there were some

dialogues which out of the topic to the elements of SuTI from Neves'

theory, the researcher would reduce the data.

2. **Data Display**

The second step of the data analysis is data display. Data display

refers to a step in which the researcher summarized the data into

particular categories. In this research, the researcher used table and

description to explain the findings of the research. In this case, the

researcher arranged the data in description data in order to describe the

strengths and the weaknesses of SuTI.

3. **Drawing Conclusion**

The last step is drawing the conclusion about the implementation

of SuTI on English movie by showing the strengths and the

weaknesses of SuTI.

H. Data Validation

This research uses triangulation that generally connected with qualitative

research. As Moleong (2014:178) mentioned before that a triangulation

technique is the technique to check the data by using something beyond the

data. The researcher used data triangulation which used observation and

interview for getting data. In this research, the researcher does observation and

interview about the strengths and the weaknesses of SuTI to the deaf

viewers. The researcher compared the data with interview data result (what the

subjects said). It means that this research used data triangulation.

CHAPTER IV

RESEARCH FINDINGS AND DISCUSSIONS

A. Research Findings

Table 4.1

Table data of the strengths and the weaknesses of SuTI

Subjects	Elements of SuTI							
	Duration		Text Presentation		Description of Verbal Component		Description of Non-Verbal Component	
	S	W	S	W	S	W	S	W
Fadia (S1)	-	✓	✓	-	✓	-	-	✓
Zahra (S2)	-	✓	✓	-	✓	-	✓	-
Novan (S3)	-	✓	✓	-	✓	-	-	✓

After the researcher doing the observation and interview to the subjects, the researcher finds the strengths and the weaknesses of SuTI. This chapter focuses on the finding of the strengths and the weaknesses of SuTI. In this chapter, the researcher separates the data findings into two points. The first point talks about the result into the strengths or weaknesses of SuTI by classify the elements on SuTI. The second point describes about the implementation of SuTI in *Angry Birds* movie by analyzed how the subjects

enjoy the movie. The description and identification of the strengths and the weaknesses of SuTI applied in *Angry Birds* movie.

From the observation and interview, this is the result of this research. It knows from the observation of the researcher by asking the subjects one by one. Details of the elements or standard of SDH and the result of the strengths and the weaknesses of SuTI when SuTI applied on *Angry Birds* movie will be investigated in this chapter.

1. **The Strengths of SuTI**

   a. **Text Presentation**

      On the text presentation, the subtitler has to consider the font, colour and layout aspects. Based on the observation and interview, the researcher found that the element of text presentation mostly make they enjoy the movie and help them to read the SuTI. First, in font aspect, the deaf viewers agree that the font in SuTI help them to read the subtitle. SuTI follows the standard in SDH, it used *MS Sans Serif* for the font style. Font style also determines the quality of subtitle itself, when the font style does not follow the standard of SDH, it will make the deaf viewers hard to read the subtitle. *Sans serif* it usually applied on subtitle, because that font is easy to read and increase the legibility in a subtitle. But, if the font style is good it will be useless if the font size does not follow the standard of SDH.

      According to the researcher interview, it shows that the deaf viewers claimed that the font size in SuTI help them to read the

subtitle. SuTI applied 40 for their subtitle, and it will more clearly and does not disturb the image on the screen. Font size in a general subtitle is around 20, but special for SDH the subtitler applied 40 on the subtitles, they have to consider the target viewers, deaf viewers. SuTI applied 40 for font size, it appropriates with the standard of SDH alone. Font style and font size appropriate with the standard of SDH, but it is not perfect yet if the colour on the subtitles still make the deaf viewers confuse and hard to read.

SuTI used a white colour to their subtitles. It means that SuTI follows the standard of colour in SDH. White colour is a neutral colour and it usually applied on general subtitle, because white colour is a safe colour to apply on the screen. As the researcher interview, the subjects claimed that the white colour which applied on SuTI help the deaf viewers to read the subtitle. It shows by the subjects' respond the researcher's question about the colour of SuTI. They agree that white colour is a safe colour to facilitate their eyes to read the SuTI.

The subjects still enjoy the subtitle when the colour is white. The researcher also asked them if the colour of subtitles is appropriate to the speakers who speak, is it help them or no, they answered by actually yes. It means that the white colour on SuTI help the deaf viewers to read the subtitle, but it will better and increase the legibility of SuTI if it used the colour depend on the speakers who speak on the screen. Meanwhile, it becomes a problem when various speakers speak

simultaneously on the movie, but the colour is limited. It makes the deaf viewers confuse and difficult to remember the colour of the speakers. It will different when that colour applied on a short movie with the limited speaker, it might help the deaf viewers to identify who are speakers on the screen.

Layout also is an important aspect to determine the quality of SDH. In layout aspect the researcher has to consider the number of lines and positioning and alignment on the screen. In this case, SuTI used a center point on the screen, so the margin between left and right are same is around 10. It makes the deaf viewers enjoy reading the subtitle. The position in SuTI also consistence as the standard of SDH, it can help the eye movement of deaf viewers. The deaf viewers claimed that the position of SuTI does not disturb their view on the image on the screen.

From the data above, it knows that the positioning and alignment on SuTI appropriate with the standard of SDH. Actually there are many styles on the positioning and alignment on subtitling, but SDH has their standard to ease the eye movement of the deaf viewers.

After the researcher analyzed on the data above, it knows that the elements of the text presentation in SuTI has followed the standard of SDH. The deaf viewers show the satisfaction to use SuTI on watching movie in the text presentation, it start from font style, font size, colour, and positioning and alignment the subtitle on the screen. It concludes

that the text presentation aspect in SuTI belongs to the strengths of

SuTI.

1) **Font Type**

As mentioned before, one of the elements in the text presentation

part is about font. In font aspect, it includes type space, size, letter

spacing, style, and effects.

a) **Typeface**

SuTI has a specific font that applied into their movie. SuTI

used *MS Sans Serif* and regular font style on *Angry Birds* movie.

SuTI also used a specific font to shows the special effects on *Angry*

Birds movie. As the figure 4.1 below, the researcher explained the

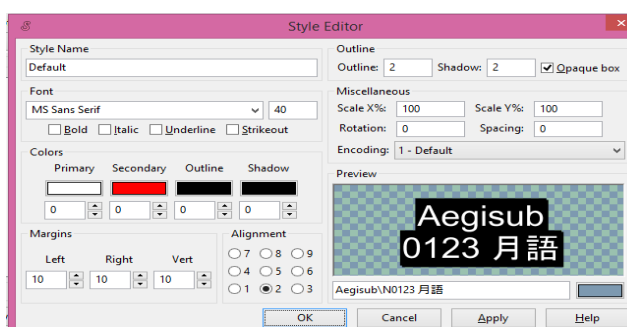details about the style of SuTI on *Angry Birds* movie more details.

Figure 4.1

b) Font Size

In SDH, the opaque box is very helpful for deaf viewers. As mentioned before that the subtitler will be better if the SDH sets in the center at the bottom of the screen, because at the bottom of the screen is less information. Applied the opaque box is a good idea, because it is not affecting the image on the screen. Meanwhile, SuTI does not apply the opaque box at their subtitles. SuTI applied 40 font size on *Angry Birds* movie as the figure 4.1 mentioned before. SuTI preferred to use a bulkier font to describe the speakers' name and a small font (which upper case on the first line) for the dialogue. Figure 4.2 shows the detail information about the font size on SuTI.

Figure 4.2

c) Letter Spacing

As the standard of EYD *(Ejaan Yang Disempurnakan)* in Indonesia, mentioned that the use of punctuation (especially for question mark, exclamation mark) is applied without a space in the

end of the letters. The figure 4.3 and 4.4 explain the details about the use of punctuation without space in SuTI.

Figure 4.3

Figure 4.4

d) Style and Effects

SuTI applied an upper case only to identify the speakers' name it is adding by colons (:). SuTI preferred to use a punctuation (such as, the question mark and exclamation mark) to stress points on the dialogues. Also, on figure 4.5 will explain one of the styles on SuTI. SuTI used an italic for the line *"Dia pasti bisa"* for showing the expression of the character CHUCK that he believe on himself that the character namely HAL can destroy the pig's castle. Using an italic on that line is stressing the expression of CHUCK as he talks to himself.

Figure 4.5

2) **Colour**

Colour has become a special feature in subtitling, especially in SDH, because the deaf viewers can differentiate the speakers who speak in the movie or TV. Sometimes coloured subtitle helps the viewers to get the meaning, especially for deaf viewers. For deaf viewers, they can understand the speakers in a movie scene and also they can differentiate between two speakers or more while the scene is actually short. Meanwhile, in the other case, when the scene on the movie is too long and the characters that play on the scene are too much, it becomes a big problem for the deaf to get the point of that story in that movie. In movie which has many characters in the scenes, it should be a problem when it used coloured subtitles, because the subtitler has to repeat the same colour for the difference characters. It causes by the characters are too much, the conversations are too complex, and the colours are too limit. It may be confuse to differentiate who is the speaker who speaks on the scene in the movie. Also, it is about the duration that play so fast, and the conversations between one character and other characters are too crowded, it makes

the deaf viewer confuse and difficult to understand the story of that movie.

Coloured letters sometimes helps the viewers to identify the speakers in the movie, especially for deaf viewers, but the subtitler has another strategy to help the deaf viewer to identify the speakers. There are displacing subtitles, punctuation, adding arrows or adding speakers' names. SuTI has the strategies to identify the speakers in the movie, one of the strategies is by adding punctuation and speaker's name. SuTI provides about the speakers' name on *Angry Birds* movie. SuTI prefers to use white colour for the subtitle in *Angry Birds* movie, SuTI has not standard yet to manage the colour of subtitle itself, SuTI applied all the subtitles by white coloured letters with no background or cover.

It should be better if the apply coloured letter in subtitles, especially for SDH appropriates to the viewers by range of age or making the standard of coloured in SDH, it follows by the culture of the country, etc. SuTI should be appropriated or follows Indonesian's deaf. SuTI applied a white colour in all the lines on their subtitles. White colour reputed a familiar and neutral colour for subtitling in Indonesia. In Indonesia, the movie was translated and subtitled with a white colour, even it is on cinemas. The subtitler choose white colour, because it is the safe colour that applied on the screen. Although, using colour in a subtitle can help the deaf viewers to identify the speakers,

but in some cases, it can disturb the deaf viewers to remember the speakers' colour, especially when the dialogue is tight and fast. In *Angry Birds* movie, SuTI used white colour on all the lines because SuTI consider the consistency in using a font and colour to increase the legibility.

3) **Layout**

   a) **Number of Lines**

   In Indonesia, the subtitle generally shows in two until three lines. SuTI alone has a standard to help the deaf viewers reading the subtitle, it is available on two until three lines. Two lines is divided into (a top line is for the speakers' name and a bottom line is for the speech or dialogue). Meanwhile, only a line used three lines as figure 4.6 explain below. As figure 4.6 below, the three lines is divided into (the top line is for the speakers' name, the center line is for the information about the situation that happens on that scene, and the bottom line is for the speech or dialogue).

Figure 4.6

b) Positioning and Alignment

SuTI has a high consistency on their positioning and alignment. As mentioned on figure 4.1 mentioned before, it shows that SuTI is available on the same position between the height from the bottom and the margin on the screen. SuTI applied 10 for left, 10 for right, and 10 for vertical on their margin and used two for their alignment. Also, they used a consistency on all the lines on the subtitles itself. It can help deaf viewers to increase their readability.

b. Verbal Component

SuTI used punctuation to their subtitle on *Angry Birds* movie. It shows that when the speaker said on a high volume, and scream out to other speaker, SuTI used an exclamation there.

Figure 4.7

Figure 4.8

As Kussmaul (1995: 61) on Neves (2005:220) said that tone of voice, facial expression and gestures are important clues and we must rely on our interpretations of words within their contexts. The subtitler has to consider the sound effect in the subtitling, such as tone of voice, pitch (intonation), loudness (stress), rhythm and speed. Emphasis also becomes one of alternative in prosodic feature, it can be giving an uppercase and distinctive colours, using block capitals to show the increasing of volume, using a punctuation to stressing some utterances and using a double exclamation to show the climax (Baker: 1984: 17) on Neves (2005:222). Another option to deal with paralinguistic information is by identifying the activity of the speaker which has a sound there (for example, whispering) with the labels, it will become [whisper]. By showing an activity that the speaker doing, it will increase the way deaf viewers feel the atmosphere on that movie.

SuTI has a strategy to deal with that case. The activity of the speaker which has a sound in Angry Birds movie is available on SuTI. As the figure 4.9, 4.10, 4.11, 4.12, 4.13, and 4.14 explain below.

Figure 4.9   Figure 4.10

Figure 4.11

Figure 4.12

Figure 4.13

Figure 4.14

From the pictures 4.9, 4.10, 4.11, 4.12, 4.13, and 4.14 the researcher claimed that it might help the deaf viewers to get the expression of the speakers. The deaf viewers can feel the atmosphere of the movie by reading the activity of the speakers on SuTI.

Using punctuation is one of the best solutions to help the deaf viewers to identify the tone of voice of the speakers. It will increase the feeling and create a nuance of the movie on the screen. As the aspect of verbal component above, it concludes that using a symbol to add the information about the activity of the speakers on the screen also became an effective strategy to help the deaf viewer get the feeling of that story. In *Angry Birds* movie, SuTI applied a symbol [ ] to give an information about the activity on *Angry Birds* movie. It

helps the deaf viewers to feel the atmosphere on that movie. When the researcher asked the deaf viewers about the symbols [ ] on *Angry Birds* movie, they claimed that they can understand the tone of voice on the dialogue of the speakers by looked the expression at the image and also from read the subtitle itself.

Figure 4.15

Figure 4.15 above shows the expression of the speaker namely RED that he feels disgusting because CYRUS was sneezing on his face. The researcher looked at the expression of the deaf viewers, their expression shows that they also feel disgusting it knows on their face. In verbal components, SuTI was successful to make the deaf viewers feel the expression on the speakers and feel as same as the speakers was done. It shows that the verbal components in SuTI belong to the strength, because it follows the standard of SDH.

2. **The Weaknesses of SuTI**

   a. **Time Constraint: Synchrony and Reading Speed**

      SuTI has a complex level which contains the standard of deaf viewers in Indonesia. In this part, the duration or time has the important role in components of SuTI. The duration or time here

depends on the viewers' reading speed. It means that in a reading speed, the viewers' ability is one of the important components to deals with. Meanwhile, the viewers' ability depends on their background knowledge. In this case, the subjects have different background knowledge each person. According to the table 3.1 in chapter III, the three subjects have a different background each person. From the data above, we know that Subject 1 and Subject 2 have a same level on their reading ability. They can understand a new words by reading a lot, re-reading, giving the mark of the new words, confirming the words that the subject not understand yet to the teacher, browsing to the internet. Meanwhile, the strategy of Subject 3 to improve his reading ability is by playing games and using his social media. From that data, the deaf viewers have their strategy to add some knowledge by improve their reading ability. Reading ability also determined by the education background, deaf people who join at the deaf community since an early age is different with deaf who never join at the deaf community. Deaf children who have the deaf parents have a better reading skill than deaf children who have the hearing parents (Untari, Asiyah, and Anggraini, 2013:5). It cause by the deaf children who have a deaf parent have a supportive home language environment to learn language to improve their reading ability. Based on Untari (2017), shows that all the subjects have the hearing parent, it means that their reading ability comes for their schools.

As Kuo (2014:72) mentioned before, the complexity of language, SuTI was applied it on *Angry Birds* movie. It shows by the subtitle each line used a simple dialogue for the speakers on that movie. Saggion (2011) added that text simplification is the process of transforming a text into an equivalent which is more understandable. It usually applied for language learners, and people with other special reading and comprehension necessities. In this case, deaf is one of group which has a special reading and comprehension. Siddharthan (2011) claimed that the main goal of simplification is to make information more accessible to the large numbers of people with reduced literacy. SDH should apply the simplification text on their subtitle, because it can help the deaf viewers to read the subtitle and understand contain of the story in a movie. SuTI in *Angry Birds* movie is design for deaf viewers in Indonesia, it uses simplify words. Also, SuTI is arranged to help the deaf viewers to understand the speakers on the cinema, or movie and what the plot of the story is talk about. SuTI is available not only in the simple words, but also includes all the information on the dialogue. On *Angry Birds* movie the dialogue between the speakers is created on a simple and conveyed the meaning clearly.

Figure 4.16

Figure 4.17

Figure 4.18

On Figure 4.16 above, we know that SuTI has a simplified words as the researcher mentioned before. The character namely CHUCK talked to MIME on the Source Text (ST) on English said that "You go up there! Show them how frightening MIMES can be!" translate to Target Text (TT) in Indonesian language became "Tunjukkan kau bisa terbang!". It means that the subtitler of SuTI applied simple words, because if that words translate into a literal meaning in Indonesian

language will be like this "Kau pergilah kesana! Tunjukkan kepada mereka bahwa MIMES si penakut bisa!". In a figure 4.17 shows in SuTI that characters namely BUBBLES was getting angry with the PIGS and said that "I told you not to mess with me!". If it translates in literal meaning becomes "Sudah kubilang padamu untuk tidak mengacaukanku!" It is too long, but in SuTI it becomes "Aku marah!" Same as the two figure above, next picture on figure 4.18 shows that the character namely CHUCK talked to BOMB that "My left is your left! We are facing the same directions!" translate to TT as "Sama saja!" If it translates on a literal meaning in TT will be "Kiriku juga kirimu! Kita menghadapi tujuan yang sama!" It shows that SuTI used very simple words which used terms that easy to understand for the deaf viewers. The three examples above shows that SuTI is not only use simple words on the subtitle, but also transfers the meaning on the dialogues from the speakers on *Angry Birds* movie.

As the appendices, we know that SuTI has many characters each line and the duration each line. From the appendices, we know that the duration of SuTI in *Angry Birds* movie follow the standard. Meanwhile, SuTI has a line that the duration is about 7.50 seconds, it shows that it is not same as the standard of maximum duration in subtitle, which is about seven seconds. It makes the subjects re-reading the SuTI and cannot focus on the image. Also, on the lines 14-26 the duration in SuTI alone is too fast and there are some lines which have

less than a second that not same as the standard of minimum duration in subtitle, which is about a second.

In the duration aspect, the three subjects show there is a problem on the duration. When the dialogue of the speakers on *Angry Birds* movie was so tight and the duration was so fast it made the deaf viewers confuse. It shows that the duration is the main standard to determine the quality of subtitle itself. Actually, SuTI has followed the standard maximum and minimum of subtitle, but in the reality on the duration still found a problem there. When the researcher asked the deaf viewers about the duration, they claimed that in a half of *Angry Birds* movie, in the duration around 00:32 until 00:50 they confused to read the subtitle. They cannot focus on the image, because they have to read the subtitle that plays on screen too fast. In this case, after the movie was playing three times, the deaf viewers still confuse on that scene. They only get the point that the birds fight the pig castle only, but they did not get the story when the speaker namely HAL was failed to fight the pig castle.

Actually, the duration is one of the subtitler of SuTI has to consider in subtitling, because it influences the deaf viewers to get the meaning of the story. It is also affect on their reading skill. Although, the reading ability of the deaf viewers is different, but still they confuse when the duration is fast. It also comes from the factor of characters

per second (cps). The researcher analyzed that the character per second in SuTI has followed the standard of subtitle, which 12 cps is rather slow, 15 cps is normal or fast, and 17 cps is rather fast. Based on the appendix, the researcher found 49 lines are less than 12 cps, 12 lines are around 12 cps until 14 cps, 7 lines for 15 cps until 16 cps, 3 lines for 17 cps, and 8 lines are more than 17 cps. From the 79 data above, it knows that 61 lines are rather slow, 7 lines are normal or fast, and 11 lines are rather fast. Actually SuTI is dominantly belonged to rather slow, it might help deaf viewers read the subtitle. But, the fact is the deaf viewers still confuse on line 14 until 26 which there are six lines that have around 17 cps and more. The table 4.5 below will show the information about the cps in line 14 until 26.

From the data above, it knows that cps is determined the deaf viewers to read the subtitle. SuTI has followed the standard of SDH, but in some cases the deaf viewers did not get the meaning on the lines 14 until 26. It shows that the lines with a red one are more than 17 cps and the duration less than a second. It belongs to the weaknesses of SuTI, because of the duration in some lines are still made the deaf viewers confuse and hard to understand the meaning of the story.

b. Non - Verbal Component

SuTI applied the sound effects in Angry Birds movie. As the figure 4.19, 4.20, 4.21, and 4.22 below, it shows that SuTI used sound effects to create the feeling and increase the illusion of deaf viewers.

Figure 4.19

Figure 4.20

Figure 4.21

Figure 4.22

Giving the labels of the speakers' name also belong to the non-verbal components. It helps the deaf viewers to identify the speakers who speak on the screen. It will explain the deaf viewers learn the dialogue of the speaker if the speaker said behind the screen. SuTI used a label of the speakers' name on *Angry Birds* movie, and it can help the deaf viewers to identify the speakers on that movie.

In this aspect, SuTI has the main point and the strength in non-verbal components. This aspect shows something that makes SuTI is different from general subtitle. Information about sound effects and music are available on SuTI on *Angry Birds* movie. It will make the

deaf viewers build the nuance on the movie. In *Angry Birds* movie, there are a lot of sound effects, and SuTI add the information about sound effects there. The function of sound effects and music there is to make the dead viewers feels the atmosphere on the movie and identify the situation of the scenes on the movie. The researcher found the deaf viewers show they change their expression while they are watching the *Angry Birds* movie. It means that add the information of sound effect and music is effective to apply on SuTI. It influences the deaf viewers to enjoy the story on the movie.

Furthermore, adding the label of speakers' name is one of the elements in non-verbal components. It is the important thing, when in the SDH the name of the speakers who speak on the screen is available. It will help the deaf viewers to identify the speech of the speakers, even the speakers do not appear on the screen. Sometimes, the deaf viewers confuse to different the voice of narrator and the speakers on the movie. Adding the label of speakers' name is the best solution to help them to identify the speakers' name. But, sometimes it can be a problem when the duration is fast, the deaf viewers only get the label of the speakers' name.

B. Discussion

In the discussion, the researcher will explain the details of the implementation of SuTI on *Angry Birds* movie for the deaf viewers. The researcher will describe the elements of SuTI by classify the strengths and the

weaknesses of it based on the data observation. SuTI has their standard to manage the subtitle for deaf viewers in Indonesia. Based on the research, the researcher found that the elements of SuTI followed the standard of SDH. The theory that used in this research is theory about SDH, especially on the standard of SDH from Neves (2005). There are four elements to determine the standard of SDH by Neves; duration, text presentation, verbal and non-verbal components. As the researcher mentioned before, that in the elements of SuTI the researcher still found the weaknesses even it is in one element. It means that in some cases, one element in SuTI can belong to the strengths, but also it can include on the weaknesses of SuTI based on the deaf viewers' statements.

As mentioned before, when SuTI applied on Angry Birds movie the researcher found that duration aspect still became the problem for the deaf viewers. When the deaf viewers were watching the *Angry Birds* movie, they still could not get the point in some scenes. It cause by the duration of SuTI determines the way the subjects get the meaning of the movie. The subjects claimed that if some speakers are talk too much, the dialogue is tight and the duration of SuTI is running fast, they only get the SuTI. When the researcher asked the subjects is the duration of SuTI disturbs their focus on the movie, they answered totally yes, because in some scenes they cannot watch the visual (image) on the screen. Also, when the duration is running fast, the subjects only get the speakers' names they cannot read the dialogue on the subtitle clearly. It belongs to the weaknesses of SuTI. Even though, the speakers' names (the labeling of the speakers) help the deaf viewers to

understand who speaks on the screen, but it becomes the weaknesses of SuTI if the duration is running fast and the dialogue is tight.

For others elements, SuTI has followed the standard of SDH. In the text presentation, the aspect of font type, colour, and layout there are no problems that deaf viewers found. As deaf viewers statement that font type in SuTI help them to read the subtitle. It shows by the deaf viewers can read the subtitle clearly as in general subtitle. Also, for the colour aspect, the subjects suggest making a colour of SuTI based on the speakers who speak in the movie. But, they claimed that the white colour is safe to make the subtitle clearly. Although, using a different colour for the speaker has the problem. The limited colour, if the speakers in a movie are too much becomes a problem. Meanwhile, there is a problem in layout aspect. The subjects said that the number of lines and the positioning SuTI on the screen does not disturb their focus on the image. It shows that text presentation element belongs to the strengths of SuTI.

In verbal component, SuTI helps deaf viewers to feel the nuance of *Angry Birds* movie through giving the activity of speakers on the movie. Also, deaf viewers claimed that they can enjoy the speakers said by reading the description of verbal component of the speakers. Then, using the punctuation in SuTI made the deaf viewers feel the speakers' tone of voice and supported them to understand the facial expression of the speakers in the movie.

Then, in non-verbal components, SuTI has the strengths and the weaknesses for this aspect. In non-verbal component, based on the deaf

viewers statements that one of the problems is when the labeling of the speakers' name only make them know the name speakers on the movie (they can mention the speakers' name in the movie), but they cannot get who is the speakers who speak in the scenes of movie. Especially when the duration is running fast as mentioned before. The deaf viewers confuse with the SuTI, they cannot read contain of the dialogues and also cannot focus on the image on the movie. The genre of *Angry Birds* movie is animated comedy, it might be influence the subtitler to arrange the subtitle. Especially in fight scene, the subtitler has to manage the duration by simplify the words. Meanwhile, in non-verbal component the subject mentioned that they can imagine the tone of voice in the movie, and they can feel the atmosphere in the movie. SuTI facilitated the deaf viewers to enjoy the movie by adding the non-verbal components, such as voice, and sound effects. It can help the deaf viewers build their curious feeling on the next scenes in Angry Birds movie. This aspect makes SuTI is different from other SDH. The researcher also gets their expression, when they read the message on [ ]. It means that non-verbal component also belongs to the strengths of SuTI.

CHAPTER V

CONCLUSION AND SUGGESTION

This chapter is the last chapter of this research. After the researcher explained the discussion of the research findings which focus on the implementation of SuTI on *Angry Birds* movie for the deaf viewers by classified the strengths and the weaknesses of SuTI, the researcher concludes the conclusion and encloses the suggestions.

A. Conclusion

SuTI is designed to help the deaf community or hearing impairments to get the information or point of any audiovisual product, not only in the news or talk shows, but also in movies, films, and etc. The reason of the research before is the researchers realized that in Indonesia there is no rule or legal to manage facilitates of audiovisual information to the deaf and hard of hearing community. Also, in Indonesia there is an inconsistency in a using sign language and an option between sign language and SDH or CC. Based on the research before, the researchers concluded that SuTI is accepted for the deaf viewers to increase their understanding of getting the point or the message of the story in any audiovisual, in this research is movie. Although, SuTI is still have the weaknesses which has to revise, such as when the dialogues or sound effects texts appear on a screen. In this research, the researcher continued the research before which analyzed and explained about the strengths and the weaknesses of SuTI more details.

The researcher used Neves' theory about the standard of SDH in this research. The researcher applied SuTI on *Angry Birds* movie which belonged to animated comedy movie. The subjects of this research are the deaf students of SMK N 9 Surakarta which belonged to prelingually profound deaf. The standard of SuTI is followed Neves' theory, there are duration, text presentation, verbal and non-verbal components. Based on the results through the observation and interview, the researcher concluded that there are strengths and weaknesses in the elements of SuTI. The strengths are verbal component and text presentation. It can help the deaf viewers read the subtitle easily. Also, SuTI makes the deaf viewers enjoy the movie, especially by giving the tone of voice of the speakers and sound effects of the special effects in some scenes. It can help the deaf viewers to deal with the story by imagine the tone of speakers' voices and help them to get the meaning of the story by feeling the atmosphere of the movie.

Meanwhile, the weaknesses are in the duration and giving the label (name) of speakers aspects. In the duration aspect, there are synchronization and reading speed. In this aspect, when SuTI applied on *Angry Birds* movie, the deaf viewers claimed that when the dialogue is tight and the duration is running fast they cannot focus on the story, they only focus on the dialogue text in SuTI and ignored the visual (images) on the movie. In duration around 00:32 until 00:50 in fight scene on *Angry Birds* movie, the deaf viewers confused when various speakers on that movie speak simultaneously. It means that duration aspect in SuTI does not appropriate

with deaf viewers' reading ability. Also, synchronization between SuTI and the speakers' mouth when they speak became the problem, especially when the dialogue of the speakers' is tight. Then, giving the speakers' name in SuTI sometimes became a problem. In fight scene, when the duration is running fast, the deaf viewers only get the speakers' names, they cannot read contain of the dialogues and they cannot focus on the image. It makes the deaf viewers failed to get the meaning of the story in a movie.

B. Suggestion

From the analysis about the implementation of SuTI, the researcher has some suggestions as follows:

1. The next researcher

After the researcher found the strengths and the weaknesses of SuTI, the researcher hopes that the next researcher can develop the elements of SuTI. Also, the researcher wants to make the next researcher increase this SuTI project and create the standard of SuTI better for deaf viewers.

2. The reader

The result of the research may be helpful for the readers in giving some understanding about SuTI. The researcher hopes that the readers can learn more about SuTI to help the deaf viewers enjoy the movie.

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Appendix 1

Table data of the characters of SuTI each line

No	Subtitle each line	Characters with space	Characters with no space	Others (punctuation, etc)
1.	RED:Kita akan terbang!	22	20	2
2.	RED:Kita harus terbang ke istana babi!	38	33	2
3.	RED:Siapa yang terbang duluan?	30	27	2
4.	MATILDA:Aku!	12	12	2
5.	BOMB:Aku! Aku! Aku!	19	17	4
6.	RED:Matilda!	12	12	2
7.	CHUCK:Kembangkan sayapmu!	25	24	2
8.	MATILDA:Terbangkan aku!	23	22	2
9.	RED:Tembak!	11	11	2
10.	MATILDA:[berteriak senang]	26	25	3
11.	BABI:[menyanyi]	15	15	2
12.	MATILDA:Awas kau, babi jelek!	29	26	3
13.	[suara ledakan]	15	14	2
14.	RED:Tembak!	11	11	2
15.	RED:Dia terbang dengan baik.	28	25	2
16.	CHUCK:Dia pasti bisa.	21	19	2
17.	HAL:[berteriak takut]	21	20	3
18.	BOMB:Dia hebat sekali!	22	20	2
19.	RED:Tunggu! Kenapa dia balik ke sini?	37	32	3
20.	RED:Awas!	9	9	2
21.	HAL:[berteriak takut]	21	20	3
22.	RED:Awas!	9	9	2
23.	BURUNG-BURUNG:[berteriak kaget]	31	30	3
24.	HAL:[berteriak takut]	21	20	3
25.	CYRUS:[bersin]	14	14	3
26.	RED:[jijik]	11	11	3
27.	BOMB:Mau tisu?	14	13	2
28.	CYRUS:[berteriak takut]	23	22	3
29.	[suara ledakan]	15	14	2
30.	[suara tabrakan]	16	15	2

31.	RED:Siapa berikutnya? Kita butuh burung yang berani.	52	46	3
32.	CHUCK:Tunjukkan kau bisa terbang!	33	30	2
33.	BOMB:Ya!	8	8	2
34.	MIME:Ya, tuhan!	15	14	3
35.	LEONARD:[bernyanyi]	19	19	3
36.	[suara tabrakan]	16	15	2
37.	LEONARD:Apa itu?	16	15	2
38.	STELLA:Dia babi yang jahat itu!	31	27	2
39.	BUBBLES:Terbangkan aku!	23	22	2
40.	BOMB:Ayo!	9	9	2
41.	BUBBLES:[berteriak] Awas kalian, babi jahat!	44	40	5
42.	[suara tabrakan]	16	15	2
43.	BABI-BABI:Tangkap dia!	22	21	2
44.	BUBBLES:[berteriak] Aku marah!	30	28	4
45.	[suara ledakan]	15	14	2
46.	RED:Bubbles berhasil!	21	20	2
47.	CHUCK:Kiri!	11	11	2
48.	BOMB:Kiriku atau kirimu?	24	23	2
49.	CHUCK:Sama saja!	16	15	2
50.	BOMB:Baiklah!	13	13	2
51.	RED:Terbanglah ke arah yang benar.	34	30	2
52.	STELLA:Ya.	10	10	2
53.	STELLA:[berteriak]	18	18	3
54.	[suara tabrakan]	16	15	2
55.	[suara tabrakan]	16	15	2
56.	RED:Sedikit lagi kena istananya!	32	29	2
57.	PECKINPAH:Kalian semua ditangkap!	33	31	2
58.	[suara ledakan]	15	14	2
59.	BOMB:Bersiap untuk terbang!	27	25	2
60.	CHUCK:Dia siap!	15	14	2
61.	RED:Terbangkan aku ke arah batu itu!	36	31	2
62.	RED:Siap! Tembak!	17	16	3
63.	RED:[berteriak]	15	15	3
64.	RED:Ini akan sangat sakit!	26	23	2
65.	[suara tabrakan]	16	15	2

66.	LEONARD:Apa? Suara apa itu?	27	24	3
67.	[suara kaca pecah]	18	16	2
68.	CHUCK:Arahkan aku seperti Red tadi.	35	31	2
69.	CHUCK:[berteriak takut]	23	22	3
70.	CHUCK:Aku belum siap terbang!	29	26	2
71.	[suara tabrakan]	16	15	2
72.	RED:Chuck! Kau baik-baik saja?	30	27	3
73.	CHUCK:[kesakitan] Aku baik-baik saja.	37	34	4
74.	BOMB:[berteriak penuh semangat]	31	29	3
75.	[suara tabrakan]	16	15	2
76.	BABI:[suara kesakitan]	22	21	3
77.	LEONARD:Panggil penjaga!	24	23	2
78.	BURUNG-BURUNG:[berteriak memberi semangat]Terrence! Terrence! Terrence!	71	67	6
79.	TERRENCE:[berteriak kesakitan]	30	29	3

Appendix 2

Table data of the duration of SuTI each line

No.	Subtitle each line	Start Time	End Time	Line Duration
1.	RED:Kita akan terbang!	0:00:01.02	0:00:03.67	0:00:02.65
2.	RED:Kita harus terbang ke istana babi!	0:00:03.75	0:00:08.37	0:00:04.62
3.	RED:Siapa yang terbang duluan?	0:00:08.37	0:00:09.72	0:00:01.35
4.	MATILDA:Aku!	0:00:09.72	0:00:10.87	0:00:01.15
5.	BOMB:Aku! Aku! Aku!	0:00:10.95	0:00:11.87	0:00:00.92
6.	RED:Matilda!	0:00:12.00	0:00:12.82	0:00:00.82
7.	CHUCK:Kembangkan sayapmu!	0:00:15.15	0:00:18.02	0:00:02.87
8.	MATILDA:Terbangkan aku!	0:00:18.10	0:00:19.42	0:00:01.32
9.	RED:Tembak!	0:00:19.67	0:00:20.70	0:00:01.03
10.	MATILDA:[berteriak senang]	0:00:20.70	0:00:24.10	0:00:03.40
11.	BABI:[menyanyi]	0:00:24.35	0:00:25.97	0:00:01.62
12.	MATILDA:Awas kau, babi jelek!	0:00:25.97	0:00:27.60	0:00:01.63
13.	[suara ledakan]	0:00:27.72	0:00:31.55	0:00:03.83
14.	RED:Tembak!	0:00:31.55	0:00:34.20	0:00:02.65
15.	RED:Dia terbang dengan baik.	0:00:35.27	0:00:36.75	0:00:01.48
16.	CHUCK:Dia pasti bisa.	0:00:36.87	0:00:38.50	0:00:01.63
17.	HAL:[berteriak takut]	0:00:38.50	0:00:39.67	0:00:01.17
18.	BOMB:Dia hebat sekali!	0:00:39.67	0:00:42.60	0:00:02.93
19.	RED:Tunggu! Kenapa dia balik ke sini?	0:00:42.77	0:00:44.47	0:00:01.70
20.	RED:Awas!	0:00:44.62	0:00:45.22	0:00:00.60
21.	HAL:[berteriak takut]	0:00:45.30	0:00:46.07	0:00:00.77

22.	RED:Awas!	0:00:46.12	0:00:46.62	0:00:00.50
23.	BURUNG-BURUNG:[berteriak kaget]	0:00:46.62	0:00:47.47	0:00:00.85
24.	HAL:[berteriak takut]	0:00:47.50	0:00:48.35	0:00:00.85
25.	CYRUS:[bersin]	0:00:48.75	0:00:50.02	0:00:01.27
26.	RED:[jijik]	0:00:50.02	0:00:51.70	0:00:01.68
27.	BOMB:Mau tisu?	0:00:51.77	0:00:53.00	0:00:01.23
28.	CYRUS:[berteriak takut]	0:00:53.17	0:00:54.90	0:00:01.73
29.	[suara ledakan]	0:00:55.07	0:00:58.85	0:00:03.78
30.	[suara tabrakan]	0:00:58.95	0:01:00.25	0:00:01.30
31.	RED:Siapa berikutnya? Kita butuh burung yang berani.	0:01:01.92	0:01:05.90	0:00:03.98
32.	CHUCK:Tunjukkan kau bisa terbang!	0:01:05.90	0:01:09.60	0:00:03.70
33.	BOMB:Ya!	0:01:09.62	0:01:10.25	0:00:00.63
34.	MIME:Ya, tuhan!	0:01:10.27	0:01:12.47	0:00:02.20
35.	LEONARD:[bernyanyi]	0:01:12.57	0:01:16.87	0:00:04.30
36.	[suara tabrakan]	0:01:16.87	0:01:19.10	0:00:02.23
37.	LEONARD:Apa itu?	0:01:19.10	0:01:20.22	0:00:01.12
38.	STELLA:Dia babi yang jahat itu!	0:01:20.22	0:01:23.42	0:00:03.20
39.	BUBBLES:Terbangkan aku!	0:01:24.70	0:01:26.65	0:00:01.95
40.	BOMB:Ayo!	0:01:26.67	0:01:27.42	0:00:00.75
41.	BUBBLES:[berteriak] Awas kalian, babi jahat!	0:01:30.72	0:01:33.22	0:00:02.50
42.	[suara tabrakan]	0:01:33.30	0:01:34.77	0:00:01.47
43.	BABI-BABI:Tangkap dia!	0:01:34.85	0:01:38.17	0:00:03.32
44.	BUBBLES:[berteriak] Aku marah!	0:01:38.27	0:01:40.97	0:00:02.70
45.	[suara ledakan]	0:01:41.07	0:01:41.77	0:00:00.70
46.	RED:Bubbles berhasil!	0:01:41.85	0:01:44.70	0:00:02.85

47.	CHUCK:Kiri!	0:01:44.87	0:01:45.77	0:00:00.90
48.	BOMB:Kiriku atau kirimu?	0:01:45.97	0:01:48.15	0:00:02.18
49.	CHUCK:Sama saja!	0:01:48.22	0:01:51.52	0:00:03.30
50.	BOMB:Baiklah!	0:01:51.55	0:01:52.50	0:00:00.95
51.	RED:Terbanglah ke arah yang benar.	0:01:52.60	0:01:55.72	0:00:03.12
52.	STELLA:Ya.	0:01:55.85	0:01:56.90	0:00:01.05
53.	STELLA:[berteriak]	0:01:57.12	0:02:02.02	0:00:04.90
54.	[suara tabrakan]	0:02:03.72	0:02:05.32	0:00:01.60
55.	[suara tabrakan]	0:02:10.42	0:02:13.57	0:00:03.15
56.	RED:Sedikit lagi kena istananya!	0:02:13.57	0:02:16.47	0:00:02.90
57.	PECKINPAH:Kalian semua ditangkap!	0:02:16.47	0:02:20.10	0:00:03.63
58.	[suara ledakan]	0:02:20.20	0:02:22.87	0:00:02.67
59.	BOMB:Bersiap untuk terbang!	0:02:23.15	0:02:25.45	0:00:02.30
60.	CHUCK:Dia siap!	0:02:25.52	0:02:28.90	0:00:03.38
61.	RED:Terbangkan aku ke arah batu itu!	0:02:29.00	0:02:31.27	0:00:02.27
62.	RED:Siap! Tembak!	0:02:34.82	0:02:37.22	0:00:02.40
63.	RED:[berteriak]	0:02:37.32	0:02:41.65	0:00:04.33
64.	RED:Ini akan sangat sakit!	0:02:45.17	0:02:46.55	0:00:01.38
65.	[suara tabrakan]	0:02:46.67	0:02:47.57	0:00:00.90
66.	LEONARD:Apa? Suara apa itu?	0:02:48.00	0:02:50.20	0:00:02.20
67.	[suara kaca pecah]	0:02:50.37	0:02:51.37	0:00:01.00
68.	CHUCK:Arahkan aku seperti Red tadi.	0:02:51.37	0:02:53.55	0:00:02.18
69.	CHUCK:[berteriak takut]	0:02:53.70	0:02:54.75	0:00:01.05
70.	CHUCK:Aku belum siap terbang!	0:02:54.87	0:02:57.40	0:00:02.53
71.	[suara tabrakan]	0:03:00.25	0:03:13.60	0:00:13.35

72.	RED:Chuck! Kau baik-baik saja?	0:03:14.27	0:03:15.65	0:00:01.38
73.	CHUCK:[kesakitan] Aku baik-baik saja.	0:03:15.77	0:03:18.12	0:00:02.35
74.	BOMB:[berteriak penuh semangat]	0:03:18.17	0:03:21.67	0:00:03.50
75.	[suara tabrakan]	0:03:21.72	0:03:24.65	0:00:02.93
76.	BABI:[suara kesakitan]	0:03:24.75	0:03:26.97	0:00:02.22
77.	LEONARD:Panggil penjaga!	0:03:27.42	0:03:30.30	0:00:02.88
78.	BURUNG-BURUNG:[berteriak memberi semangat]Terrence! Terrence! Terrence!	0:03:30.42	0:03:37.92	0:00:07.50
79.	TERRENCE:[berteriak kesakitan]	0:03:39.37	0:03:42.02	0:00:02.65

Appendix 3

Table Data of the Questions and Answers of the Subjects

No.	Pertanyaan	Jawaban		
		Novan	Zahra	Fadia
1.	Apa kamu paham cerita tadi?	Ya	Ya	Ya
2.	Apabila paham, cerita tadi tentang apa?	Burung yang ditabrak ditempat istana babi.	Tabrak ditempat babi. Angry Birds akan berusaha untuk tabrak ditempat babi.	Angry Birds berusaha memasukkan ke gedung sampai berhasil.
3.	Bagaimana kamu paham cerita di film tadi?	Dengan membaca tulisan berwarna putih.	Dari membaca tulisan berwarna putih dan melihat gambar secara bersamaan.	Dengan melihat tulisan berwarna putih dan melihat gambar secara bersamaan.
4.	Apakah waktu atau lamanya tulisan warna putih tadi terlalu cepat?	Ya	Ya	Ya
5.	Apabila terlalu cepat, bagian mana?	Tengah	Tengah	Kalau tulisannya bagian tengah.
6.	Apa kamu bingung apabila tulisan warna putih tadi bergerak cepat?	Lumayan	Ya	Ya
7.	Apabila bingung, bagian mana?	Akhir	Akhirnya	Bagian akhir
8.	Apakah tulisan seperti RED, MATILDA membantumu paham nama pemain di film tadi?	Ya	Ya	Ya
9.	Saat beberapa	Tidak	Ya	Lumayan
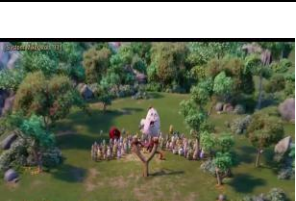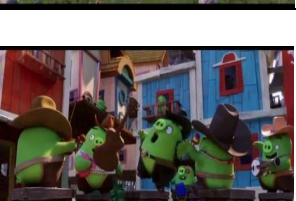
	pemain dalam film tadi berbicara cepat, apakah nama pemain seperti RED, MATILDA tadi membuatmu bingung?			
10.	Apa tulisan berwarna putih tadi membantumu paham cerita di film tadi?	Ya	Ya	Ya
11.	Apabila tidak, sebaiknya tulisan tadi berwarna apa?	-	-	-
12.	Seandainya tulisan warna putihtadi disesuaikan (disamakan) dengan nama pemain saat berbicara, apakah akan membantumu paham cerita di film tadi?	Ya	Lumayan	Lumayan
13.	Apakah tulisan berwarna putih tadi mengganggumu melihat gambar di film tadi?	Lumayan	Tidak	Tidak
14.	Apakah iya, sebaiknya ditaruh dimana?	-	-	-
15.	Apakah tanda baca seperti ! (tanda seru), ? (tanda tanya), . (titik) dan huruf miring dapat membantumu membayangkan nada bicara pemain dari film tadi?	Ya	Ya	Ya
16.	Apakah tanda kurung [ ] membantu paham cerita di film tadi?	Ya	Ya	Ya
17.	Apakah tulisan	Ya	Ya	Ya

	seperti [suara ledakan], [berteriak] membantumu menikmati film tadi?			
18.	Saat tulisan dalam kurung tadi bersamaan dengan percakapan pemain membuatmu bingung?	Tidak	Tidak	Lumayan
19.	Apabila bingung, bagian mana?	-	-	-
20.	Apakah ukuran (besar kecilnya) tulisan berwarna putih tadi membantumu membaca dengan jelas?	Ya	Ya	Ya
21.	Apa bentuk tulisan di film dapat membantumu paham cerita yang terjadi di film?	Ya	Lumayan	Ya

Appendix 4

Figures Each Line of SuTI on *Angry Birds* Movie

No	Figures each line	Subtitles each line	Characters with space	Characters with no space	Line duration
1.		RED:Kita akan terbang!	22	20	0:00:02.65
2.		RED:Kita harus terbang ke istana babi!	38	33	0:00:04.62
3.		RED:Siapa yang terbang duluan?	30	27	0:00:01.35
4.		MATILDA:Aku!	12	12	0:00:01.15
5.		BOMB:Aku! Aku! Aku!	19	17	0:00:00.92

6.		CHUCK:Kembang kan sayapmu!	25	24	0:00:02.87
7.		MATILDA:Terban gkan aku!	23	22	0:00:01.32
8.		RED:Tembak!	11	11	0:00:01.03
9.		MATILDA:[berteri ak senang]	26	25	0:00:03.40
10.		BABI:[menyanyi]	15	15	0:00:01.62
11.		MATILDA:Awas kau, babi jelek!	29	26	0:00:01.63
12.		[suara ledakan]	15	14	0:00:03.83

13.		RED:Tembak!	11	11	0:00:02.65
14.		RED:Dia terbang dengan baik.	28	25	0:00:01.48
15.		CHUCK:Dia pasti bisa.	21	19	0:00:01.63
16.		HAL:[berteriak takut]	21	20	0:00:01.17
17.		BOMB:Dia hebat sekali!	22	20	0:00:02.93
18.		RED:Tunggu! Kenapa dia balik ke sini?	37	32	0:00:01.70
19.		RED:Awas!	9	9	0:00:00.60

20.		HAL:[berteriak takut]	21	20	0:00:00.77
21.		BURUNG-BURUNG:[berteriak kaget]	31	30	0:00:00.85
22.		HAL:[berteriak takut]	21	20	0:00:00.85
23.		CYRUS:[bersin]	14	14	0:00:01.27
24.		RED:[jijik]	11	11	0:00:01.68
25.		BOMB:Mau tisu?	14	13	0:00:01.23

	BOMB: Mau tisu?				
26.	CYRUS: [berteriak takut]	CYRUS:[berteriak takut]	23	22	0:00:01.73
27.	[suara ledakan]	[suara ledakan]	15	14	0:00:03.78
28.	Calvin Swine [suara tabrakan]	[suara tabrakan]	16	15	0:00:01.30
29.	RED: Siapa berikutnya? Kita butuh burung yang berani.	RED:Siapa berikutnya? Kita butuh burung yang berani.	52	46	0:00:03.98
30.	CHUCK: Tunjukkan kau bisa terbang!	CHUCK:Tunjukkan kau bisa terbang!	33	30	0:00:03.70
31.	BOMB: Ya!	BOMB:Ya!	8	8	0:00:00.63

32.		MIME:Ya, tuhan!	15	14	0:00:02.20
33.		LEONARD:[bernyanyi]	19	19	0:00:04.30
34.		[suara tabrakan]	16	15	0:00:02.23
35.		LEONARD:Apa itu?	16	15	0:00:01.12
36.		STELLA:Dia babi yang jahat itu!	31	27	0:00:03.20
37.		BUBBLES:Terbangkan aku!	23	22	0:00:01.95
38.		BOMB:Ayo!	9	9	0:00:00.75

39.		BUBBLES:[berteriak] Awas kalian, babi jahat!	44	40	0:00:02.50
40.		[suara tabrakan]	16	15	0:00:01.47
41.		BABI-BABI:Tangkap dia!	22	21	0:00:03.32
42.		BUBBLES:[berteriak] Aku marah!	30	28	0:00:02.70
43.		RED:Bubbles berhasil!	21	20	0:00:02.85
44.		CHUCK:Kiri!	11	11	0:00:00.90
45.		BOMB:Kiriku atau kirimu?	24	23	0:00:02.18

46.		CHUCK:Sama saja!	16	15	0:00:03.30
47.		BOMB:Baiklah!	13	13	0:00:00.95
48.		RED:Terbanglah ke arah yang benar.	34	30	0:00:03.12
49.		STELLA:Ya.	10	10	0:00:01.05
50.		STELLA:[berteriak]	18	18	0:00:04.90

51.		[suara tabrakan]	16	15	0:00:01.60
52.		[suara tabrakan]	16	15	0:00:03.15
53.		RED:Sedikit lagi kena istananya!	32	29	0:00:02.90
54.		PECKINPAH:Kalian semua ditangkap!	33	31	0:00:03.63
55.		[suara ledakan]	15	14	0:00:02.67
56.		BOMB:Bersiap untuk terbang!	27	25	0:00:02.30
57.		CHUCK:Dia siap!	15	14	0:00:03.38

58.		RED:Terbangkan aku ke arah batu itu!	36	31	0:00:02.27
59.		RED:Siap! Tembak!	17	16	0:00:02.40
60.		RED:[berteriak]	15	15	0:00:04.33
61.		RED:Ini akan sangat sakit!	26	23	0:00:01.38
62.		[suara tabrakan]	16	15	0:00:00.90
63.		LEONARD:Apa? Suara apa itu?	27	24	0:00:02.20

64.		[suara kaca pecah]	18	16	0:00:01.00
65.		CHUCK:Arahkan aku seperti Red tadi.	35	31	0:00:02.18
66.		CHUCK:[berteriak takut]	23	22	0:00:01.05
67.		CHUCK:Aku belum siap terbang!	29	26	0:00:02.53
68.		[suara tabrakan]	16	15	0:00:13.35
69.		RED:Chuck! Kau baik-baik saja?	30	27	0:00:01.38

	RED: Chuck! Kau baik-baik saja?				
70.	CHUCK:[kesakitan] Aku baik-baik saja.	37	34	0:00:02.35	
71.	BOMB:[berteriak penuh semangat]	31	29	0:00:03.50	
72.	[suara tabrakan]	16	15	0:00:02.93	
73.	BABI:[suara kesakitan]	22	21	0:00:02.22	
74.	LEONARD:Panggil penjaga!	24	23	0:00:02.88	
75.	BURUNG-BURUNG:[berteriak memberi semangat]Terrence	71	67	0:00:07.50	

		! Terrence! Terrence!			
76.		TERRENCE:[berte riak kesakitan]	30	29	0:00:02.65