

Reading All The Way to Functional Literacy: Using Same Language Subtitling in Television Programmes in India

Divya Jyoti Randev

(Assistant Professor, Department of Journalism, GGSDS College, Panjab University, India)

Abstract : *Many countries around the world have benefitted from same language subtitling in films and television programmes. Subtitles help the learner use listening and spoken skills to enable word recognition and build vocabulary. Research by several scholars has established a positive relationship between reading same language subtitles and improvement in language skills. This contributes to the development of functional literacy which ultimately leads to an increase in literacy levels. India has experimented on a small scale with same language subtitling where respondents were exposed to music based programmes, thus promoting entertainment-based learning. India can learn from the benefits reaped by other countries by implementing subtitling in academics and improving teaching techniques to promote intensive learning. The technique can be applied to various genres of programmes on television so that learners can learn by watching a programme that interests them, therefore, not considering learning to be a tedious, obligatory task.*

Keywords: *Captions, functional literacy, same language subtitling, subtitles, reading*

I. Introduction

The world is on its way to becoming a global information society. The developed and developing nations are reaping the benefits of the ICT¹ revolution. But this benefit has been limited to small pockets and sections. An important factor that has been known to contribute to this advancement is literacy. The rise in literacy rates is directly proportional to the rise in the use of the internet and other modern technologies. Subtitling of films, programmes and music in native and foreign languages have contributed to an extent in developing reading skills of television viewers. Researchers have studied the development of reading skills and habits, which form an essential constituent of functional literacy. Small projects in India have also determined the positive relationship between reading same language subtitles (SLS) and the development of reading skills.

II. The Definition Of Literacy: Focussing On Reading

The type and extent of the definition of literacy varies with each nation and social system. According to the 2011 census in India (Government of India, 2011) [1], 72.99% of the Indian population is literate. This refers to people over the age of seven years who can read and write in any language. The literacy rate seems high enough for a developing nation like India.

With censuses over the years, the definition of literacy in India has also been changing:

“In all the censuses, besides data on literacy, additional information was also collected. In 1872 the information about 'youths up to age 20 attending school, college or under private tuition was recorded. In 1881 Census, the information was collected whether the individuals were under instruction or not, if not, whether they were able to read and write. In 1891 Census, besides the information regarding the language in which the person was literate the foreign language known (if any) was also recorded. From 1901 to 1941 censuses, there was an additional question whether the literate knew English or not. Information on the standard of education was collected for the first time in 1941 census and after that it was asked in every subsequent censuses. In 1971 the information on Literacy and Educational level was collected from each individual” (Census of India 2011, Census Terms, n.d.) [2].

Many researchers have questioned the method of collecting census data. To conduct the census in India, workers visit every household to enquire about the number of literate and illiterate members. There is a good chance of people reporting themselves to be literate, thus, inflating the overall literacy figures (Kothari and Bandyopadhyay 2010) [3]. Therefore, the need to clearly define the constituents of 'literacy' arises. UNESCO defines literacy as a combination of reading, writing and oral skills. The International Adult Literacy Survey (IALS) conducted in 2003 measured functional literacy on three scales: prose literacy, document literacy and quantitative literacy (U.S. Department of Education. Institute of Education Statistics 2005) [4].

Indian students have not fared well in International literacy assessments as compared to students from other countries. The OECD Programme For International Student Assessment (PISA+) 2009 found that “15-year-old student populations in Tamil Nadu-India and Himachal Pradesh-India were estimated to have among the lowest reading literacy levels of the PISA 2009 and PISA 2009+ participants with more than 80% of

students below the baseline of proficiency” (Walker 2011: 22) [5]. This means that even though India’s literacy levels are rising with each passing year, the quality of education and the corresponding literary proficiency levels are not adequate.

Restricting ourselves to reading skills, it can be said that it is one task to acquire reading skills, but it is essential that the skills acquired are put to use. It is the application of the reading skills which is of prime importance to internalise what has been learnt. Therefore, one should not “think in terms of 'skills', but to think in terms of specific activities or tasks in which language is used purposefully (Bachman and Palmer 1996) [6].

While stating his views about the Indian education policy, Kothari (2008: 773-780) [7] states, “There is little in education policy that remotely approaches the scale of the challenge of transitioning 250 million budding readers to functional reading ability as a lifelong intervention”.

Also, the focus should not primarily be on the multitudes qualifying as ‘literate’ every year. There is also a need to understand the numbers and the causes of relapses. The national literacy mission report (1994) [8] stated that the percentage of relapses are as high as 40%. The report makes an important point in stating that the learning contexts need to shift from “guided learning to self-reliant learning”.

Learning to read is one of the most important schooling activities. It is a cognitive activity that involves absorbing information by viewing it. This information has to be transmitted through a medium like paper or, when we talk about subtitles, a television screen.

Reading skills are a visible proof of one’s education. In a series of interviews conducted in Wisconsin in 1992-93, forty residents helped conclude that reading skills were a mark of refinement and good breeding and had a cultural significance. Several respondents were proud to be ‘avid readers’ and remembered reading as an enjoyable experience (Brandt 2009) [9].

III. Same Language Subtitling

Television programmes, films and songs are increasingly being subtitled in India. Same language subtitling (or captioning) refers to the use of subtitles in programmes in the same language as is being used in the audio. While some differentiate between captions and subtitles, many agree that they are one and the same. Closed captions often refer to same language subtitles. Subtitles, on the other hand, may refer to either same language or translated text. Some researchers have also argued that captions can be turned on or off but subtitles are always visible on the television screen. For the purpose of this article, the words are used interchangeably.

There are three types of subtitles that are used in television programmes: same language subtitles, translated subtitles and dual (same language and translated) subtitles.

There is another type of subtitling known as live captioning or subtitling which may be used in live broadcasts and requires the use of voice recognition software and sometimes, more than one subtitlers to produce quality content.

Gottlieb (2001) [10] explains that a subtitler has to deal with four types of channels. The visible-auditory channel (includes dialogue, background voices and lyrics), the non-verbal auditory channel (includes music, natural sound and sound effects), the verbal-visual channel (includes superimposed titles and written signs on the screen) and the non-verbal visual channel (includes the composition of the picture and the flow). Gottlieb (2001: 16) [10] used the term ‘semiotic jaywalking’ to describe the transfer of content from the spoken to the written mode.

Subtitling was originally used for the hearing impaired to help them comprehend the dialogues and sound soundtrack of audiovisual content. The term ‘Same Language Subtitling’ became popular in India with a project lead by Brij Kothari at the Indian Institute of Management, Ahmedabad. This cost-effective programme was adopted at the national level in 2002.

In eight field tests that were conducted in the rural and urban areas of the state of Gujarat in India, subtitled Hindi film songs were shown to children from fourth and fifth grade. It was found that over a period of three months, children exhibited significant improvement in reading skills. They sang along on their own without being told to do so (Kothari 1998) [11].

Kothari also claims that along with reading skills, same language subtitles contribute to creating a reading culture. “When a neo-literate² (or non-literate) sees another neo-literate or literate reading and singing along with popular songs, he/she is motivated to do the same” (Kothari and Takeda 2000: 135) [12]. There is a section of literate individuals who are termed ‘early-literate’ as they are not ‘functionally reading people’. The project aimed at contributing to mass literacy by subtitling song-based programmes in various Indian languages to target the over 600 million Indian television viewers who have ‘a deep-rooted passion for film songs’. Over the past decade, same language subtitling has been implemented on Doordarshan’s³ film song programmes in several languages, such as Hindi, Bengali, Gujarati, Marathi, Telugu, Tamil, Kannada, Malayalam, Oriya and Panjabi (www.planetread.org) [13].

When people view a subtitled programme, the text they see and the sound they hear reinforce each other in perfect synchronization (Kothari and Takeda 2000) [12]. Kilborn (1993: 646) [14] writes, "With

subtitling, the original soundtrack is conserved and a written version issued in the form of a series of titles, which keep the viewer informed about what the person in question is saying".

IV. Arguments Against And For Subtitles

Some studies concluded that subtitles were responsible for distracting the readers. Zanon (2006) [15] mentions that viewers consider subtitles a nuisance because they cover visual information and therefore, lessen the credibility of the film. Koolstra and Beentjes (1999) [16] also note that subtitles cover a part of the television screen, thus distracting the viewer. Danan (2004) [17] makes an interesting point in saying that subtitles foster a form of laziness among viewers.

But Vanderplank (1988: 272-273) [18] says that "far from being a distraction and a source of laziness, subtitles might have a potential value in helping the learning process by providing learners with the key to massive quantities of authentic and comprehensible language input". In a study conducted on high school students, Goldman and Goldman (1988) [19] proved that closed captioned television programmes increased the motivation levels of the students apart from improving their vocabulary. Captioning is known to have motivational, attentional and affective impact on viewers (Baltova 1994) [20]. Jane King (2002: 509-523) [21] mentions certain benefits of using captioned films for EFL⁴ learners. These benefits also apply to same language subtitling. Some of them are as follows:

1. Motivate students to learn English, especially to listen to the dialogues in movies
2. Bridge the gap between reading skills and listening skills
3. Reinforce students' understanding of English context-bound expressions
4. Follow a plot easily
5. Learn new vocabulary and idioms
6. Develop students' concentration in following lines
7. Learn how to pronounce certain words
8. Develop word recognition
9. Process a text rapidly and improve rapid reading

Easily get a clear image of related dynamic verbs and sound effects words in brackets appear on the screen, synchronised with corresponding actions and sounds such as slam the door and giggle.

In children, subtitles may contribute to the understanding of the alphabetic principle. It also builds the motivation to read and develops a mature appreciation of the rewards of reading (National Research Council, India 1998) [22]. Therefore, the cognitive and affective advantages of subtitling have been well recognised.

V. Reading The Subtitles

Subtitles need to score high in terms of readability. Readability refers to the "quality that makes possible the recognition of the information content of material when it is represented by alphanumeric characters in meaningful groupings, such as word, sentences, or continuous text" (Sanders and McCormick 1993: 102) [23].

In an eye-track study using same language subtitles, it was confirmed that a reader does not make a conscious effort to read subtitles on the television screen, the process is automatic (d'Ydewalle et al. 1991) [24]. The concept of automated reading was also supported by Stroop (1935) [25] who conducted the Stroop Color and Word Test where subjects were asked to identify the names of colours. Words were printed in different colours and the subject had to read aloud the name of the colour rather than the word itself. Several subjects made errors and read out the word rather than identifying the colour.

Jensema (2000: 284) [26] notes, "In general, people who view a particular video segment have similar eye movement patterns. The addition of captions to a video results in a major change in eye movement patterns, and the viewing process becomes much more of a reading process." Jensema makes a useful statement that "Caption reading dominates eye movement and screen action tends to be secondary."

Subtitles should be placed at the bottom of the screen so that they do not interfere with the on-screen action. There are countries like Japan where subtitles are "sometimes placed vertically on the side of the screen" (Gottlieb 2001: 244-248) [10]. Also, if there are more than two lines in the text, it would be too much text for the viewer. Pedersen (2011: 19) [27] talks about the spatial constraints of subtitling. "... you can only fit a certain number of characters into a line, and that you can rarely use more than two lines in each subtitle". Where movies and other programmes are concerned, subtitles can be condensed and may be shorter than the content in the audio. Music programmes, however do not allow that much flexibility and no content can be omitted from the lyrics of the song being played.

The number of characters per line depends on the font type. Italicised and capitalised text takes up more space. To increase legibility, sans-serif typefaces should be used in subtitles. These include Arial and Times New Roman (Ivarsson and Carroll 1998) [28].

The alignment of the text on screen also contributes to its legibility. Ivarsson and Carroll (1998: 49) [28] state that while left aligned subtitles are often used in television, in several countries, centred subtitles are used “due to unconscious adoption of the principle applying in the cinema, or possibly to the fact that optical film stock was used for the subtitles”.

When one views television, visual attention can be attentive and pre-attentive. The attentive is controlled by conscious awareness and concentrates on a few objects at one time. The pre-attentive can operate over the entire visual field. Therefore, one is able to concentrate on the action on the screen and the subtitles at the bottom (Theeuwes 1993) [29]. The viewers also divide their attention between visual stimuli (reading and watching) and auditory information (listening) (Grillo and Kawin 1981) [30].

A listener might be usually affected by factors, such a foreign accent, intonation and ambient noise. Same language subtitling provides “... access to both the soundtrack and subtitles allows for easier word segmentation by indicating which words are being spoken” (Bird and Williams 2002 [31] and Mitterer and McQueen 2009: A146–A150 [32]). Subtitles can be synced perfectly with the audio by making them “change color to match the audio track exactly so that even a non-literate person is able to identify the word being sung, at any given time” (Kothari 2001) [33].

Same language subtitles may be deemed unnecessary by some readers but research has shown that readers still read them approximately 20% of the time (d’Ydewalle, et al. 1991) [24]. Viewers “make use of them nevertheless, just because they are on the screen, and it is notoriously difficult not to read something that is put before your eyes” (Ivarsson & Carroll 1998: 132) [28]. “Over 90% of viewers like SLS, not specifically because it gives them reading practice, but because it allows for singing along, knowing and writing down song lyrics, and clarifying words in songs that they were unsure of. Thus, reading improvement for most viewers is a subconscious process and a by-product of entertainment” (Kothari et al. 2004: 23–44) [34].

Consistent reading practice increases the vocabulary of readers which further increases their comprehension ultimately leading to the enjoyment of reading. This is known as the ‘Matthew effect’ (Stanovich 1986) [35].

Same language subtitling not only helps the native language learner but also learners who are in the process of acquiring a foreign/second language, that is, both EFL and ESL⁵ learners (Borrás and Lafayette 1994) [36].

VI. Academic Proficiency Through Same Language Subtitling

Presently, there are various genres of television programmes that are subtitled. These include films, news, music videos and television series. The viewer and “educators may choose from an abundant supply of programmes of potential use with language learners of all ages and interests” (Spanos and Smith 1990: 1) [37].

The learning process from subtitles involves repetition of the written text. Smith (1990) [38] notes the learning behaviour of students and writes, “they paid attention to the captions, anticipating the spoken text by saying the phrase aloud as soon as it appeared on the screen, even before it was spoken on the audio track... Seeing and hearing the words used repeatedly in the context of a coherent story with video cues made them appear more real, words students could actually use in everyday conversations”. In a study by Markham (1999) [39] students were shown two videos with or without captions. They were then subjected to listening exercises where students heard sentences from the video script and this was followed by four words. They had to identify the key word from the three distracters. It was concluded that the subtitles helped students to identify key words when they heard them again after reading the subtitles. Through an experiment on third and fourth grade remedial readers, Adler (1985) [40] concluded that the subjects could read five words on an average after viewing them in the subtitles whereas, those who received traditional instruction without subtitles could not.

Learning through same language subtitling promotes the acquisition of new vocabulary. This works for the ‘budding readers’ or ‘early literates’. This works even well in a community-setting. As Rogner (1992: 90) [41] puts it, “Literacy instruction using videotapes of captioned television programs proved somewhat, though not statistically, more effective in teaching new sight vocabulary words to functionally illiterate adults in a community-centre setting than similar instruction without the captioned videotape element”. Rogner (1992) [41] further talks about the importance of context for understanding of subtitled text. He states that reading can be easier if the context is complete.

In a study by Bird and Williams (2002: 509) [31], they proved the positive effect of single modality (sound or text) and bimodal (sound and text) presentation, “as measured by both improvements in spoken word recognition efficiency and recognition memory”.

In an experiment, 129 seventh and eighth grade ESL5 students were made to view a five to eight minute children-oriented science production. It was found that subtitling helped in vocabulary acquisition, word recognition and comprehension in context as compared to television viewing without subtitles or reading without sound (Neuman & Koskinen 1992) [42].

VII. Conclusion

It is important that subtitles contain language that is familiar to the viewers. Danan (2004: 71) [17] rightly notes, "If the material is too advanced, ... captions cannot sufficiently compensate for the fast rate of speech and the difficult vocabulary level... Thus, even with captions, visual input which is too far beyond the linguistic competency of the viewers may yield poor language gains." Danan (2004: 70) [17] also argued that subtitled content "does not necessarily prove students' ability to better comprehend new scenes without captions".

Many argue that captions are not suitable for all types of viewers who have different levels of language proficiency. There is also the question of the speed of the subtitles appearing on television. Guillory (1998) [43] states that if the language level is too advanced for the viewer, the subtitles cannot compensate for the advanced vocabulary and fast rate of speech.

"...subtitles which remain on the screen long enough to be read more than once are just as irritating as subtitles that disappear before the audience has had time to finish reading them" (Ivarsson and Carroll 1998: 67) [28]. Tests have proved that 90% of television viewers need less than four seconds to read a two-line title in, while some viewers need about two seconds (Hansson 1974 [44] in Ivarsson 1992 [45]).

Through a research project, Jan Emil Tveit (2004) [46] attempted to find out the required exposure time of a two-liner for the viewer to be able to read them as well as focus on the text on screen. Tveit's concluded that a decrease in the exposure time, from six to five seconds, did not make the viewer lose the on-screen information. As Tveit (2004: 62) [46] states, "cutting the exposure time by one second is more of an advantage than a disadvantage". It is also a challenge for the subtitlers to "match the subtitle to what is actually visible on screen" (Hatim and Mason 1997: 79) [47]. As has been mentioned before, subtitles can be made to change colour to sync with the audio. But, this involves spending a significant amount of time and energy.

Television subtitling alone cannot contribute a hundred percent in improving the language skills of the viewer. Nagy, Herman and Anderson (1985) [48] state that wide, regular reading helps in large-scale vocabulary growth.

Research related to same language subtitling has shown that it helps enhance the language skills of television viewers, be it through academic content or content that is meant to be pure entertainment. Learning, therefore, can be intentional or accidental. Zarei (2009) [49] states that the effect of same language or bimodal subtitling on vocabulary, recognition and recall was far superior to that of inter-lingual subtitling. In India, the application of same language subtitling has been scattered. If the country can introduce such programmes in the curriculum, one can expect significant development of language skills among students at various progressive levels of academia, thus, contributing significantly to raising the level of functional literacy amongst the population. For those whose interest lies in films and music, they will benefit unintentionally.

NOTES

- [1] The Information and Communication Technologies revolution has helped to further development in fields like education, economy and the environment by employing the latest technological innovations, such as the internet.
- [2] A neo-literate is defined here as someone who is not irreversibly literate. (Kothari and Takeda, 2000).
- [3] Doordarshan is the state-owned largest public service broadcasting corporation in India.
- [4] EFL stands for English as a Foreign Language. Subtitling has contributed immensely in helping students learn English as a foreign language.
- [5] ESL stands for English as a Second Language. ESL students are usually from a country where English is spoken widely.

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