

**A MODEL FOR OPTIMISING SUBTITLES FOR DEAF AND HARD-OF-HEARING
TELEVISION VIEWERS IN SOUTH AFRICA**

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ABSTRACT

A MODEL FOR OPTIMISING SUBTITLES FOR DEAF AND HARD-OF-HEARING TELEVISION VIEWERS IN SOUTH AFRICA

As a result of the lack of provision for Deaf and hard-of-hearing television viewers on South African television channels, there is a pressing need for research on ways in which to accommodate this community in this regard. Consequently, this study focuses on one possible solution to the problem, namely the optimal use of open subtitles for the benefit of this viewer group.

There are three primary ways in which Deaf and hard-of-hearing television viewers are able to access information and entertainment, namely sign language, lip-reading, and subtitling. Subtitling is the most common method used for making television programmes accessible to Deaf viewers. Currently, the dominant mode for subtitled programmes broadcast across SABC TV channels is open subtitling due to the fact that very few households have access to the decoders required for closed subtitling.

At present, South Africa does not have specific legislation for subtitling for the Deaf viewer nor does the broadcasting industry follow any standardised set of subtitling guidelines. In addition, the number of programmes that are subtitled (or even intermittently subtitled) is limited and insufficient for Deaf viewers. This suggests that these viewers are not being adequately accommodated in terms of programme viewing and do not have the necessary access to information.

The first step in accommodating Deaf and hard-of-hearing television viewers effectively will be the standardisation and consistent application of subtitling guidelines. For this purpose, this study presents a model for optimising open subtitles for Deaf viewers. This model is devised by means of a synthesis of the parameters for closed subtitling and the subtitling needs of Deaf and hard-of-hearing viewers in South Africa. In the process, those principles of closed subtitling that provide this group with all the information that are available to hearing viewers are transferred to open subtitling. The guiding principle nevertheless remains not to alienate the hearing audience by introducing unnecessary visual obstacles.

OPSOMMING

'N MODEL VIR DIE OPTIMALISERING VAN ONDESKRIFTE VIR DOWE EN HARDHORENDE TELEVISIEKYKERS IN SUID-AFRIKA

As gevolg van die gebrek aan voorsiening wat daar op Suid-Afrikaanse televisiekanale gemaak word vir Dowe en hardhorende kykers, is daar 'n dwingende behoefte vir navorsing oor maniere waarop hierdie gemeenskap in die verband geakkomodeer kan word. Gevolglik fokus hierdie studie op een moontlike oplossing vir die problem, naamlik die optimale gebruik van oop onderskrifte tot voordeel van hierdie kykergroep.

Daar is drie primêre wyses waarop Dowe en hardhorende televisiekykers toegang tot inligting en vermaak kan verkry, naamlik gebaretaal, lip lees en onderskrifte. Onderskrifte is die mees algemene metode om televisieprogramme vir Dowe kykers toeganklik te maak. Tans maak die SABC uitsluitlik van oop onderskrifte gebruik aangesien baie min huishoudings toegang het tot die dekodeerders wat benodig word vir geslote onderskrifte.

Huidiglik bestaan daar ook geen spesifieke wetgewing in Suid-Afrika rakende onderskrifte vir Dowe kykers nie, en daar bestaan ook geen gestandariseerde stel riglyne vir onderskrifte nie. Verder is die aantal programme wat van onderskrifte voorsien word (of wat enigsens onderskrifte bevat) beperk en ontoereikend vir Dowe kykers. Gevolglik wil dit lyk asof daar nie voldoende voorsiening gemaak word vir hierdie kykers wat programaanbod betref nie, en dat hulle ook nie die nodige toegang tot inligting het nie.

Die eerste stap in die effektiewe akkommodering van Dowe en hardhorende televisiekykers sal die standarisering en konsekwente toepassing van riglyne vir onderskrifte wees. Om hierdie rede doen hierdie studie 'n model aan die hand vir die optimalisering van oop onderskrifte vir Dowe kykers. Hierdie model is 'n sintese van die parameters vir geslote onderskrifte en die onderskrifbehoefte van Dowe en hardhorende kykers in Suid-Afrika. In die proses is daardie beginsels van geslote onderskrifte wat hierdie groep toegang gee tot al die inligting wat beskikbaar is aan horende kykers, oorgedra aan oop onderskrifte. Die onderliggende beginsel bly egter om nie die horende gehoor te vervreem deur onnodige visuele hindernisse te skep nie.

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A fundamental function of television subtitling is to reduce frustration caused to hearing-impaired viewers by being faced with silent moving mouths.

ITC Guide on Standards for Subtitling (1999:11).

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CHAPTER 1: INTRODUCTION

1.1. Contextualisation and problem statement

Deaf¹ and hard-of-hearing viewers have three ways of accessing television material, namely through subtitles, sign language, and lip-reading (de Linde & Kay, 1999:37). Subtitling supplements the two other modes of communication in particular when sign language or lip-reading is not possible or available.

Gottlieb (1998:247) distinguishes between two types of subtitling:

- ◆ Intralingual subtitling (in the original language).
 - ◆ This includes:
 1. Subtitling of domestic programmes for the Deaf and hard of hearing.
 2. Subtitling of foreign-language programmes for language learners.
- ◆ Interlingual subtitling.
 - ◆ The subtitler crosses over from speech in one language to writing in another, thus changing mode and language.

The majority of current subtitling in South Africa is broadcast by the South African Broadcasting Corporation (SABC) and can be classified as interlingual subtitling (only into English).² The SABC has not only been given a mandate concerning programming but also has its own views regarding language, services, and subtitling. In a document drafted in October 1994 and approved in February 1995, the SABC (1995) presents its view on subtitling as follows:

There will also be use of sub-titling [*sic*] to facilitate sharing of programmes, language learning and comprehension by the hearing impaired. Subtitling, which is much cheaper, should play a significant role in local productions, especially news and actuality programmes, to facilitate access to and participation in South African affairs programmes by the public at large.

¹ DEAFSA (2002a) points out that the term "Deaf" is written with a capital "D" - in the same way as one refers to "Jewish people" using a capital "J". The British Deaf Association (BDA) suggests that deaf (lower-case "d") indicates the "audiological condition of not hearing", and Deaf (upper-case "D") indicates "those deaf people who identify culturally and linguistically as members of the sign language-using Deaf community" (2000a).

² Although other broadcasters, such as e.tv and M-NET, do air subtitled programmes periodically, the focus in this study will be on the SABC as South Africa's "public service broadcaster" (SABC, 2002c).

In practice, the SABC has not implemented this plan of action extensively, particularly when it comes to broadcasting subtitled programmes for the Deaf and hard of hearing. Thus, apart from the fact that there are only a limited number of subtitled programmes broadcast across SABC TV channels, these programmes have not been subtitled with Deaf audiences in mind nor are they aimed at the Deaf and hard-of-hearing community in particular (with the exception of *Dtv* - a 30 minutes programme dedicated to this viewer group).

Although it goes without saying that a substantial population of Deaf and hard-of-hearing individuals rely greatly on programmes that are subtitled and signed in order to access information or entertainment, the implementation of subtitling proves somewhat problematic in South Africa. Various efforts have been made by individuals and organisations that represent and share in the interests of the Deaf and hard of hearing to bring their needs to the attention of the SABC.

Notably, extensive negotiations have been conducted between DEAFSA³ and the SABC since 1990 in an attempt to address the needs of the Deaf in terms of basic access to television, information and subtitled material (Kruger, *et al.* 2000:40-42). Even though a need for subtitling for the Deaf and hard of hearing has been identified by this community and the SABC⁴, and brought to the attention of the SABC, Kruger, *et al.* (2000:27) suggest that the SABC's main motivation in using subtitling is "to increase the market for programmes, as well as the accessibility thereof" and not to make issues such as language rights or the needs of the Deaf community priorities.

What makes this persistent lack of provision for the Deaf and hard of hearing even more difficult to understand, is the fact that the SABC conducted a

³ DEAFSA, formerly known as the National Council for the Deaf (SANCD) was founded in 1929. The Deaf Federation of South Africa (DEAFSA) is a "co-ordinating, umbrella organization which facilitates services to the South African deaf and hard-of-hearing communities" (2002a).

⁴ This is clear from minutes of meetings between the then National Council for the Deaf (SANCD) and the South African Broadcasting Corporation (SABC) in 1993 (See Bester, 1993).

survey in this community during October 2001 (Dias, 2001). One of the objectives of this survey was to "try and understand the deaf community as a whole in terms of their general lifestyle issues and concerns; perceptions and thoughts about their television viewing habits, their needs, wants, expectations from TV as a whole; and then from deaf programming" (Dias, 2001:1).

According to Dias (2001:3), a large percentage of Deaf people (93%) "claim to enjoy watching programmes specifically made for them. Therefore, these programmes are an important part of their lives". In addition, one of the findings was that "the deaf community simply wants more access to normal television program [sic] line-ups" and that this could be achieved by means of "signing programmes (specifically for the illiterate sector of the deaf community) or subtitling programmes (for the literate sector as well as for the illiterate sector, to aid as a [literacy] learning tool)⁵" (Dias, 2001:4).

The above findings on the need for access to the normal television line-ups corroborate the findings of a study on subtitling in South Africa conducted by Kruger, Verhoef and Kotze (2000). According to Kruger, *et al.* (2000:88/89), the "large-scale introduction of subtitling" would make a significant contribution to increased access to information and entertainment by Deaf people.⁶ The programmes identified by Kruger, *et al.* (2000:88) as being popular among Deaf and hard-of-hearing viewers, and that they watch on a regular basis, include: sport, films, news, soap operas, drama and sitcoms followed by game shows, talk shows, documentaries and educational programmes.

⁵ According to DEAFSA (2002b), in South Africa, "approximately 66% of Deaf persons are functionally illiterate".

⁶ According to the population census of 1996 (SA Statistics 2000:1.13), South Africa recorded a total of 2 657 714 disabled people. A total of 383 408 hearing impaired people were registered. In a summary report on subtitling in South Africa, Kruger and Kruger (2001) state that, based on 1996 figures, the number of people with hearing disabilities who would benefit from subtitling is at least 1.5 million, but could be as many as 5 million.

Unlike in South Africa where no legislation currently exists on subtitling, countries such as Australia, Canada, the UK, and the USA have legislation and guidelines in place for programmes for the Deaf and hard of hearing which contain subtitling.⁷ These countries use closed subtitling⁸ extensively to cater for the needs of the Deaf and hard of hearing. The main reason for this is that closed subtitling allows more freedom in terms of adapting subtitles for a particular audience, such as the Deaf and hard of hearing.

Currently, the dominant mode for subtitling in South Africa is open subtitles⁹, mainly due to the fact that the majority of the population does not have access to pay channels nor the required decoders¹⁰ when closed subtitling via teletext¹¹ is used. Since subtitling for the Deaf and hard of hearing is done predominantly by means of closed subtitling in other countries, the use of open subtitling, in itself, poses limitations on optimising subtitling for the Deaf and hard-of-hearing community.

Primarily, subtitled television comprises three main components: image, subtitles and spoken dialogue (de Linde & Kay, 1999:39). Since Deaf and hard-of-hearing audiences do not have access to spoken dialogue or any other auditory information, subtitling for this group has to include this information without obstructing viewing by hearing audiences. Although some

⁷ See, for example: FEPDA, 1999; NADP, 2002; RNID, 2002; Robson, 2001a; and VOICE, 2000/2001.

⁸ Closed subtitling means that "hidden data is embedded in a TV programme" (Bester, 1995:2). In order to see the subtitles / captions you need a "decoder box" (Bester, 1995:2).

⁹ Bester (1995:2) explains that "in the case of open captioned [or subtitled] programmes the text appears on the screen for everybody to see".

¹⁰ Ivarsson and Carroll (1998:175) define decoder as follows: 1. An electronic apparatus that transforms *digital* signals into information that can be used, like letters or words. 2. An apparatus attached to a television set that permits viewing of encoded satellite or cable programmes or *closed subtitles*, often called "black box".

¹¹ Teletext is "a system by means of which information is superimposed on a television signal and broadcast. The signals, concealed in the *blanking lines*, activate a *character generator* in the television set, which creates the characters and mixes them into the television picture when a specified teletext page is selected" (Ivarsson & Carroll, 1998:179).

research¹² in South Africa has focused on the Deaf and hard-of-hearing community, there is still room for research on ways in which to address the need of this community to access any type of information, for example, through the optimal use of open subtitles. To date, the few studies¹³ that have been conducted in South Africa have not focused primarily on Deaf and hard-of-hearing television viewers nor have there been studies on ways in which to optimise open subtitling for the benefit of the Deaf and hard of hearing.

On the basis of the above background the main questions this study will address can be formulated as follows:

1. What are the parameters for open and closed subtitling?
2. What are the subtitling needs of the Deaf and hard-of-hearing television viewers in South Africa?
3. How can subtitling be optimised for the Deaf and hard-of-hearing community in South Africa within the limitations posed by open subtitles?

1.2. Research aims

Based on the questions listed above, the aims of the study will be to:

- ♦ Determine the parameters for open and closed subtitling.
- ♦ Determine the subtitling needs of the Deaf and hard-of-hearing television viewers in South Africa.
- ♦ Propose a model for optimising subtitling for the benefit of Deaf and hard-of-hearing television viewers in South Africa within the limitations posed by open subtitles.

¹² See, for example: *An Investigation into the Social Identity of the South African Deaf Community: Implications for the Education of Deaf Learners* (Ram, 1998).

¹³ See, for example: *Subtitling in South Africa* (Kruger, et al. 2000); *Theory and practice of subtitling: the case of Cyrano de Bergerac* (Kruger, 2000); and *Summary report: Subtitling in South Africa* (Kruger & Kruger, 2001).

1.3. Method of investigation

Against the above background, the study will be conducted as follows:

The following chapter will define subtitling, discuss terms related to subtitling such as open and closed subtitling, and identify subtitling parameters. The chapter will also present an overview of subtitling and captioning standards in countries such as Australia, Canada, the UK, and the USA as well as an overview of legislation pertaining to the volume of subtitling and provision for subtitling programmes for the Deaf and hard of hearing. The primary focus of this chapter, however, will be to highlight the principles of closed subtitling that could be applied in open subtitling.

Chapter 3 will determine the subtitling needs of Deaf and hard-of-hearing television viewers in South Africa. This will be achieved by means of a situation analysis of subtitling in South Africa, including reports and background information on South Africa's public broadcaster, the SABC, as well as on interest organisations such as DEAFSA and The New Production Corporation (producers of *Dtv*). In addition, an informal survey was conducted in order to obtain information regarding the subtitling needs of a sample of Deaf television viewers as well as to determine whether open subtitles make it possible for these Deaf respondents to gain access to, and enjoy *7de Laan*¹⁴. These findings will be compared with similar research conducted by the SABC (Dias, 2001) and Kruger, Verhoef and Kotze (2000).

In Chapter 4 a model for optimising subtitling for Deaf and hard-of-hearing television viewers in South Africa will be presented. This will be achieved through a synthesis of the analysis of the subtitling parameters as well as the subtitling needs of Deaf viewers. In the final chapter a summary of the model for optimising open subtitling for Deaf and hard-of-hearing viewers will be presented and avenues for further research will be discussed.

¹⁴ The Afrikaans soap opera, *7de Laan*, has been chosen for the purpose of this study as the only consistent example of subtitling on SABC television (as will be discussed in 3.4. and 3.4.1).

CHAPTER 2: PARAMETERS FOR OPEN AND CLOSED SUBTITLING

2.1. Introduction

The primary aim of Chapter 2 will be to determine the parameters for open and closed subtitling. For this purpose, terminology relating to subtitling, such as captioning, open and closed subtitling, intralingual and interlingual subtitling, and subtitling parameters will be defined and discussed. This discussion will provide a working definition for subtitling.

Subsequently, an overview of the international scene will be given. This overview includes examples of countries, such as Australia, Canada, the UK, and the USA, that broadcast subtitled programmes to their Deaf and hard-of-hearing viewers and implement legislation that provides some structure for the volume of subtitling in each country.

In this section, reference will also be made to two guides for closed subtitling, namely the *ITC Guide on Standards for Subtitling* (1999) and the *BBC Subtitling Guide* (1998). These documents are examples of comprehensive guides for subtitling. Lastly, overlapping qualities found in these guides will be discussed with the objective of highlighting those principles of closed subtitling that are applicable to open subtitling. This application should not only allow Deaf and hard-of-hearing audiences optimal viewing but also improve and allow greater access to information.

2.2. Definitions

Before a comparison between the characteristics of open and closed subtitling can be presented, terms related to subtitling have to be clarified and defined. Therefore, this section will attempt to arrive at working definitions for **subtitling** which includes *captioning* and *intralingual* and *interlingual subtitling*; **open** and **closed subtitling**; and subtitling **parameters**.

2.2.1. Subtitling

Bester (1995:2) explains that the most common method used for making television accessible to the Deaf and hard of hearing is "captioning", also referred to as "subtitling".¹⁵ Robson (2001c) makes a further distinction by stating that "subtitles" are intended for "hearing audiences" and "captions" for "deaf audiences". With another view in mind, "subtitling" and "captioning" are used interchangeably. For example, what a North American television company would call "captioning," a British television company would call "subtitling" (Robson, 2001h).

Clark (2001), however, proposes that subtitles and captions actually have very little in common: subtitles are always open, they are a translation, and "assume you can hear the phone ringing, the footsteps outside the door, or a thunderclap". Captions, in contrast, are usually closed, are in the same language as the audio, and "notate sound effects and other dramatically significant audio". A subtitled programme "can be captioned" (subtitles first, captions later) while captioned programmes "aren't subtitled after captioning".

Although these different viewpoints define subtitling and captioning, Ivarsson and Carroll (1998) provide a definition which will form the basis for this study's working definition of subtitling. Ivarsson and Carroll (1998:178) define "subtitles" as "text which represents what is being said on the screen whether it is a visible, *open subtitle* or a *closed teletext subtitle* which can be added to the picture if viewers so wish, provided they have a teletext *decoder* in their television set". In contrast, "captions" are defined as "text that has been

¹⁵ By way of explanation, subtitling is a form of "audio-visual language transfer" (de Linde & Kay, 1999:1). According to Luyken (1991:11), "Language Transfer describes the means by which a film or television programme is made understandable to target audiences who are unfamiliar with the source language in which the original was produced". Primarily, Language Transfer may either be "visual" or "aural" (de Linde & Kay, 1999:1).

Luyken (1991:40) proposes that the two main methods of Language Transfer currently in use are "subtitling" and "revoicing" (with possible combinations). The former technique consists of "superimposing the text onto the picture" (this process is called subtitling) and the latter technique consists of "replacing the original voice track of the programme or film by a new one" (de Linde & Kay, 1999:1).

inserted in the original picture by the maker of the film or programme (or a title that replaces it)" (Ivarsson & Carroll, 1998:174).

At this point, it is necessary to make a further distinction between two types of subtitling, namely intralingual subtitling and interlingual subtitling (de Linde and Kay, 1999:11). Fundamentally, the distinction lies in the different subtitling requirements for Deaf and hard-of-hearing viewers.

Intralingual subtitling is defined as a process aimed at "reproducing, in a written form, the dialogue of a television programme to enable deaf and hard-of-hearing people to access spoken information" (de Linde & Kay, 1999:10/11). Intralingual subtitling is also known as Same Language Subtitling, and it is used "for television programmes which are broadcast to different language communities with the relevant subtitle version encoded" (Dries, 1995:26). This type of subtitling is established in countries that make provision for the volume of subtitling by implementing legislation and practical guidelines for subtitling programmes.

Interlingual subtitling, on the other hand, is defined as subtitling "from one language into another language, and from spoken dialogue into a written, condensed translation which appears on the screen" (Dries, 1995:26). It is also "for foreign language films" or "non-native language users" (de Linde & Kay, 1999:1/2). Interlingual subtitling is the only type of subtitling that is extensively available to Deaf and hard-of-hearing viewers in South Africa.

In spite of making reference to interlingual subtitling or interchangeable captioning, Kilborn (1989:427) suggests that the main purpose of most subtitling is going to remain that of "converting continuous or intermittent speech and dialogue into a form in which it can be read". Subtitled television is a medium for accessing information and according to de Linde and Kay (1999:39) subtitles have to "synchronize with both speech and image", "present an accurate interpretation of a dialogue", and "remain on screen long enough for them to be read by viewers". However, what determines the "basic characteristics of the medium" is the integration of these components: the

image, spoken dialogue, and subtitles, along with viewers' reading capacities (de Linde & Kay, 1999:39). For the purposes of this study subtitling is viewed as one of the principal means through which the Deaf and hard of hearing are able to access information which is presented on screen (Dries, 1995:26).

2.2.2. Open and closed subtitling

Open subtitling is defined by Ivarsson and Carroll (1998:177) as "a subtitle which is [an] integral part of the film or programme". Open subtitles cannot be removed by the viewer and are followed by both the hearing and Deaf and hard-of-hearing audience.

Closed subtitling is defined, by Ivarsson and Carroll (1998:174), as "a subtitle of the *teletext* type that can be viewed by means of a *decoder* and *character generator* in the television set". Closed subtitling is used extensively, specifically for audiences with specific needs, such as the Deaf and hard of hearing. Even though legibility may be compromised, teletext type subtitling is less intrusive than open subtitling, thus allowing greater access to the content of the programme. Not only can the viewer choose to have subtitles displayed, but closed subtitling may provide Deaf audiences with additional information that does not, necessarily, obstruct viewing by hearing audiences.

However, in South Africa there are economic and policy factors to consider. Therefore, it is important to highlight applicable principles of closed subtitling to open subtitling in order to ensure optimal viewing as well as improved and greater access to information, for both the hearing and Deaf and hard-of-hearing television viewer.

2.2.3. Subtitling parameters

Parameters can be defined as "a set of facts or a fixed limit which establishes or limits how something can or must happen or be done" (Procter, 1995:1025). As there are no subtitling standards for subtitling programmes specifically for the Deaf in South Africa, the way in which information is

presented to Deaf and hard-of-hearing viewers becomes important to consider.

Importance is attributed to standards of subtitling for the Deaf viewer for various reasons. For example, according to the Review of Captioning Standards submitted by the Australian Caption Centre in February 1999, captioning standards are important, and required, as they ensure a uniform presentation standard across networks and regions. Furthermore, they provide a level playing field for all networks to provide the same standard, thus not giving cost advantage to a network that feels it can provide low quality captions that are inappropriate for the audience. They also allow for better sharing of caption files if they are all produced to the same general standard. It is therefore important to set up industry training programs and accredit captioners to the standards and to provide a very clear guideline for regulatory authorities (such as the ABA) if a complaint is made about standards. The standards are a result of sixteen years of consultation and development with the Deaf and hard of hearing communities, and are currently being used by all Australian networks.

In the context of Europe, Karamitroglou (1997) believes that instead of imposing new subtitling conventions, large satellite broadcasting companies have stressed the need for "a unifying code of subtitling practices" that would allow them to reach varied audiences. Guides for subtitling specifically for Deaf audiences contribute to the process of structuring the way information is best presented to and accessed by the viewer.

Therefore, two guides for subtitling will also be discussed as examples of how subtitles may be structured in order to allow Deaf viewers to have greater access to information. The following guides from the UK, will be analysed: the *ITC Guide on Standards for Subtitling* (1999) and the *BBC Subtitling Guide* (1998). These guides are comprehensive, practical and provide extensive examples.¹⁶ Other guides, such as *A Code of Good Subtitling Practices*

¹⁶ There is one other guide, *A handbook for television subtitlers*, by Robert Baker (1984). After numerous requests, I have not been able to obtain a copy.

(1998) proposed by Mary Carroll and Jan Ivarsson, and *Towards a Standardisation of Subtitling Practices in Europe: Guidelines for Production and Layout of TV Subtitles* (1997), proposed by Fotios Karamitroglou, do not focus extensively on subtitling for Deaf and hard-of-hearing viewers.¹⁷

2.2.4. Working definitions

For the purposes of this study, a working definition of subtitling is presented as follows:

Subtitling is dialogue which is transferred into visible text. This text is representative of what is being said on screen and appears for everybody to see. It is, thus, intended for the Deaf as well as the hearing television viewer.

In this study, captioning will be referred to as an interchangeable term to subtitling. Reference to subtitling includes the two modes of subtitling, namely open subtitling (visible on screen – cannot be switched off) and closed subtitling (teletext type – the viewer with decoder chooses whether or not to watch the subtitles). This study will only concern itself with countries that transfer spoken dialogue into a written condensed version primarily for the benefit of Deaf and hard-of-hearing viewers, that is, for improved and greater access to information. Finally, parameters will refer to the set of limitations and possible alternatives this study will be presented with in determining which principles of closed subtitling may be applied to open subtitling in order to optimise viewing.

2.3. Open subtitling and closed subtitling

Television is “vital in defining the cultural landscape of modern societies and provides a primary source of information, education and entertainment” (RNID, EFHOH & FEPEDA, 2002:3). Television is also a medium whereby

¹⁷ Secondary references will also be made to: de Linde and Kay (1999); FEPEDA (1999); Ivarsson and Carroll (1998); and Luyken (1991).

Deaf people are able to acquire necessary information. In addition, television offers a programme maker the opportunity to code information by four different "signal routes" (Roffe, 1995:219) or "simultaneous channels" (Gottlieb, 1998:245):

- ◆ The verbal auditory channel (including dialogue, background voices, and sometimes lyrics).
- ◆ The non-verbal auditory channel (including music, natural sound and sound effects).
- ◆ The verbal visual channel (including superimposed titles and written signs on the screen).
- ◆ The non-verbal channel (picture composition and flow).

The coded information which is presented through these channels, in particular through the verbal visual channel, is clearly available to both the hearing and Deaf viewer. Both groups are able to view and access the information in the form of open subtitles. However, in South Africa, information is not available to either group as closed subtitling, the form used in other countries. Therefore, in order to include characteristics best suited to optimise viewing and allow for greater informational accessibility, the two modes of subtitling, open subtitling and closed subtitling, will be discussed.

Open subtitling is defined as a subtitle which is an "integral part of the film or programme and cannot be removed" by the viewer (Ivarsson & Carroll, 1998:177). Open subtitles are "inseparable from the image" (Dries, 1995:26) and have the advantage of reaching a wider audience. In addition, open subtitling allows for a greater exposure of other languages and cultures (Bester, 1995:11) for the benefit of allowing viewers, such as the Deaf and hard of hearing, to be better informed and to improve their reading.

Open subtitling, however, has the disadvantage of making "unwarranted demands on the traditional TV audience's powers of concentration" (Kilborn, 1993:643), thus drawing the viewer's attention "away from the visual action which some see as being at the centre of the television experience" (Kilborn, 1993:643). However, it is necessary to provide Deaf viewers with the same

information that is available to hearing viewers. This information, however, should not be presented in a way that will obstruct viewing.

In contrast, closed subtitling is defined as "a subtitle of the *teletext* type that can be viewed by means of a *decoder* and *character generator* in the television set" (Ivarsson & Carroll, 1998:174). According to Luyken (1991:68) teletext is "the most flexible transmission technique to convey subtitles for a multilingual audience" and will remain optional as long as the viewer selects to view them, unlike open subtitles which will always appear on the screen. The advantage of closed subtitling is that additional information, otherwise made available to the hearing audience (by virtue of the soundtrack), may be accessed by the Deaf viewer alone.

Closed subtitling further presents the platform for technological improvements. Gottlieb (1998:248) refers to technological advancements that will lead to personal subtitling (choosing between different styles and levels of subtitling). Another advancement, according to Ivarsson and Carroll (1998:130-131), is providing viewers with programmes where a choice of several sets of subtitles may be selected in order to best suit a viewer's reading skills.

Disadvantages of closed subtitling include the fact that the "pace of programmes" cannot be expected to convey the full range of information contained in the television image (ITC, 1999:4). Depending on the character generator, an added drawback is the limited "spacing and number of characters available on screen" (Ivarsson & Carroll, 1998:130).

Undoubtedly, both hearing and Deaf and hard-of-hearing viewers may benefit from open subtitles. Not only does open subtitling have the potential to enhance reading skills, thus contributing to literacy, but different groups of audiences may be fully accommodated as no decoder is need. However, Ivarsson and Carroll (1998:129) point out that the subtitles that take the specific hearing and reading difficulties of the Deaf into consideration are "the closed subtitles which are prepared specifically for this target group".

In addition to Deaf and hard-of-hearing television viewers there are other groups that may benefit from open subtitling and subtitling in general. Subtitling not only provides additional, otherwise necessary, information services to a larger audience but it is specifically accessible to "people learning a second language, people with learning disabilities and children starting to read" (RNID, EFHOH & FEPEDA, 2002:5). The Voice Project (2001) established that through effective subtitling, Deaf parents have the opportunity to check the contents and quality of the television programs watched by their hearing children. Furthermore, Deaf husband and wife, but also Deaf and hearing people together, being offered equal opportunities, can take an active part in the scenes of subtitled programs, debate and laugh together and simultaneously at witty remarks. Deaf people can also pass information obtained through subtitles to friends and colleagues, and the Deaf user has the chance to choose his/her favourite program at any time of the day.

Apart from the modes of subtitling, technological advancements (see 3.3.3) are certainly improving the quality of information delivery, that is, how subtitling is being provided and, in turn, accessed. For example, in 1999 a workshop-seminar¹⁸ was held in Bologna where it was established that different technological applications are used for subtitling "according to the various types of programs [*sic*] (DVD technology, speech recognition system, stenotype for the subtitling of the live coverage of events)". Impressively, digital broadcasting is rapidly changing the face of transmitting information, as seen in Digital Video Broadcasting (DVB Subtitling).

Countries such as the USA are using 'simpler technology', such as decoders, in order to access information via closed subtitling. Other countries, such as Australia, Canada, and the UK, also make provision for the volume of subtitling and implement functional legislation for subtitling for Deaf and hard-of-hearing television viewers, as will be discussed in the following section.

¹⁸ *The new digital technology to overcome handicaps: Experiences and prospects of European broadcasters.*

and sign language interpretation is rare in EU member states and accession countries" (RNID, EFHOH & FEPEDA, 2002:10).

RNID, EFHOH and FEPEDA (2002:3) therefore propose that European and national decision makers and National Regulatory Authorities (NRAs), as well as broadcasters and consumer electronic manufacturers, play a central role in achieving "equal access to broadcasting for deaf and hard of hearing people". RNID, EFHOH and FEPEDA (2002:3) are not only calling for the necessary co-operative provision to ensure that Deaf and hard-of-hearing people are "not excluded from access to TV broadcast services" but also for European and national decision makers and NRAs to take action, through the review of Television Without Frontiers Directive (TVWF).²⁰ The review will ensure that "broadcasters increase the amount of subtitling and also sign language presentation and interpretation across all platforms, programme types and times of day" (RNID, EFHOH & FEPEDA, 2002:14).

Noticeably, in South Africa there is no functional legislation for subtitling material and a lack of fully subtitled programmes for Deaf and hard-of-hearing television viewers broadcast across SABC TV channels. The only sign interpreting can be found in 5-minute news bulletins on SABC3. Although programmes such as *Generations* and *Muvhango* (broadcast on SABC1 and SABC2 respectively) are intermittently subtitled, *7de Laan* (also broadcast on SABC2) is currently the only fully subtitled programme that accommodates Deaf and hard-of-hearing audiences as well as audiences who do not understand Afrikaans but are able to follow English subtitles. *Dtv*, on the other hand, is a 30 minutes programme specifically produced for Deaf viewers but only broadcast once a week, on Sundays from 12:30-13:00, on SABC3. Although it offers Deaf viewers information and entertainment, this programme alone, is insufficient.

²⁰ *Submission to the European Commission on Subtitling and Sign Language for the Report on the Application of the 'Television Without Frontiers Directive', July 2002.*

Significantly, in contrast to the situation in EU member countries and South Africa, countries such as Australia, Canada, the UK, and the USA make use of subtitling extensively. In these countries, where there is an established production of audio-visual material, intralingual subtitling is commonly used. In addition, there is legislation as well as guides on subtitling programmes. The following brief overview will thus focus on the form (open subtitling or closed subtitling) or system of subtitling²¹, legislation on subtitling, and the percentage of programmes that are subtitled in these countries.

2.4.2. Australia

In Australia, teletext captions are used. In terms of legislation, The Television Broadcasting Services (Digital Conversion) Act of 1998 contains a clause which stipulates that all Australian free-to-air broadcasters must "caption all news and current affairs programs and all programs shown in prime time (6:00 PM to 10:30 PM)", as from January 2001 (Robson, 2001g).

Quotas concerning captioning in Australia are further applicable to commercial licence holders and national broadcasters (i.e. ABC and SBS), when the licence holder commences broadcasting in digital, and applicable to the analogue as well as the digital services (Australian Caption Centre, 2003). There are, however, a number of exemptions such as non-English language programmes and music programmes that have no vocal content (Australian Caption Centre, 2003).

In terms of significant captioning organisations, The Australian Caption Centre (1982) is Australia's largest captioning organisation. The Centre promotes captioning and the use of captioning to the Deaf and hearing impaired. It also

²¹ By way of explanation, according to the Australian Caption Centre (2003) countries using "the PAL system of television (most of Europe) use teletext captions" while countries using "the NTSC television system (North America) use the Line 21 captioning system". In addition, "subtitling" and "captioning" are used interchangeably: what a North American television company would call "captioning", a British television company would call "subtitling" (Robson, 2001h).

provides a wide range of free information services about captioning and aims to develop and expand captioning.

In New Zealand, teletext captions are also used but no legislation is in place covering captioning. Consequently, most of the captioning that is done in New Zealand is paid for by Government grant. An example of this is Television New Zealand (which runs TV1 and TV2), the only captioning organisation in operation. Funding has also allowed for programmes to be captioned as from April 2000 (HearingLoss, 2002). The allocation of \$1.4 million by NZ On Air was provided for television captioning in New Zealand and is shared among the three main television networks (TV1, TV2 and TV3). This funding "will cover the captioning of 65 hours of programming per week" (HearingLoss, 2002).

2.4.3. Canada and the United States of America

In contrast to Australia, Line 21²² captions are used in Canada. The Canadian regulations are governed by the Canadian Radio-Television Commission (CRTC). In 1995, the CRTC set captioning requirements for English language stations to be implemented by the end of the licence term, that is, within a period of seven years (by 2002). Stations were encouraged to caption all news and 90% of other programmes (Australian Caption Centre, 2003). In October 2002, the Canadian Broadcasting Corporation committed to 100% captioning of all its English language television and Newsworld (Australian Caption Centre, 2003).

As in Canada, the USA uses Line 21 captions. Notably, the USA also has extensive captioning legislation covering all forms of video presentation whether it is delivered on free-to-air television, pay (cable) television, video or DVD (Australian Caption Centre, 2003). As captioning quotas are covered by The Telecommunications Act of 1996 and various rulings from the Federal

²² According to Robson (2001b) "closed captions are captions that are hidden in the video signal, invisible without a special decoder. The place they are hidden is called line 21 of the vertical blanking interval (VBI)".

Communications Commission (FCC), basic requirements and deadlines will ultimately ensure that "100% of non-exempt new programming [will] be captioned by 2006" and that "75% of old programming [will] be captioned by 2006" (Australian Caption Centre, 2003).

This will be achieved as "all 'new' (aired for the first time on or after January 1998) video programming must be captioned by January 2006. This is a phase-in, requiring 25% of programming by January 2000, 50% by January 2002, and 75% by January 2004"; "for 'old' programming (aired for the first time before January 1998), 30% must be captioned by January 2003, and 75% by January 2008"; and "with Spanish-language programming, the deadline is 2010 for new programming and 2012 for old programming" (Robson, 2002). In effect, for 'new' programming, airing for the first time after the effective date of the law, the FCC is allowing an eight-year transition period with "milestones" along the way. At the end of that eight-year period (as of January 2006), all new programming must be captioned (Robson, 2001e).

In terms of accessing teletext type subtitling, decoder chips are required and also covered by legislation. The Television Decoder Circuitry Act of 1990 (Public Law 101-431) mandates the addition of decoder chips in U.S. televisions (Robson, 2001f). This would mean that "as of July, 1993, when the Television Decoder Circuitry Act took effect, roughly 500,000 standalone decoders had been sold, and roughly 1,000,000 televisions with caption decoders" (Robson, 2001d). Since that date, roughly "20,000,000 televisions per year are being sold with caption decoders in them" indicating that there are "close to 150,000,000 TV's with decoders in North America" as of 2001 (Robson, 2001d).

2.4.4. The United Kingdom

The type of subtitling used in the UK is closed subtitling. In terms of legislation, the introductory section of the *ITC Guide on Standards for Subtitling* (1999:3) establishes that "[t]he Broadcasting Act 1990, Section 35,

requires Channel 3 licensees to provide minimum amounts of subtitling for deaf and hard-of-hearing people and to attain such technical standards in the provision of subtitling as the ITC specifies". Public broadcaster stations, however, such as BBC1 and BBC2, are not bound to caption (Australian Caption Centre, 2003) but have, nonetheless, undertaken self-imposed quotas (based on the requirements of the commercial television stations) that will see 80% of all programming captioned by 2004.

In Ireland, closed subtitling is also used. The National Association for Deaf People (NADP) is running a campaign to amend the Irish Broadcast Bill. This Bill does not recognise the importance of television subtitling to the Deaf and hard-of-hearing community nor does it make any recommendation for a minimum quota of subtitles on Irish TV (NADP, 2002a). NADP has, therefore, campaigned for 50% of all programmes, on Irish TV Stations, to be subtitled by the end of 2001 (NADP, 2002a). With an estimated minimum of 100 000 of the half a million Deaf and hard-of-hearing that would benefit directly from subtitles, NADP feels that the 50% should rise to 100% by the end of 2006, and include a minimum of 10% of signed television (NADP, 2002a).

In summary, countries such as Australia, Canada, the UK, and the USA, serve as examples of countries that use subtitling extensively. They make provision for the volume of subtitling and implemented functional legislation for subtitling programmes by setting deadlines for the programmes that do not contain subtitling. By 2010 Canada, the UK, and the USA should have 50% to 100% of their programmes subtitled. This is significant in that different viewer groups, such as the Deaf, will be provided with greater access to information.

Since subtitling for the Deaf and hard of hearing is done predominantly by means of closed subtitling or teletext captioning in these countries, the use of open subtitling, in itself, poses limitations on optimising subtitling for Deaf South African viewers. The following is a discussion of the two guides for subtitling programmes, specifically for Deaf viewers, as well as the importance of subtitling standards.

2.5. Subtitling parameters

As outlined in 2.2.3 the objectives of this section are to determine the principles of closed subtitling as well as practical standards and to apply these to open subtitling, in order to optimise viewing for Deaf and hard-of-hearing television viewers in South Africa. In order to extract overlapping qualities and identifiable parameters that are equally represented in both the *ITC Guide on Standards for Subtitling* (1999) and the *BBC Subtitling Guide* (1998), these guides will be analysed in terms of the following categories:

- ◆ Appearance on screen
- ◆ Comprehensiveness of information
- ◆ Reading speed
- ◆ Sound effects
- ◆ Synchronisation and time

By way of introduction, the *ITC Guide on Standards for Subtitling* (1999) is a document that provides “guidance on the technical standards which are to be attained in the production and presentation of “closed” subtitles” and it does not apply to “open” or “in-vision” captions (ITC, 1999:3). The technical standards for subtitle transmission are covered separately by the *ITC Technical Performance Code*. The *BBC Subtitling Guide* (1998), similarly, presents requirements for “subtitling television programmes for the benefit of deaf and hard-of-hearing viewers in the UK” (BBC, 1998:3).

The *ITC Guide* (1999:5) suggests that the “craft” of the teletext subtitler is to meet certain objectives while working within the constraints imposed by the teletext medium. These objectives, or what may also be referred to as “the priorities for effective subtitling”, can be summarised as follows (ITC, 1999:4):

- 1) Allow adequate reading time.
- 2) Reduce viewers' frustration by:
 - a) attempting to match what is actually said, reflecting the spoken word with the same meaning and complexity, without censoring;
 - b) constructing subtitles which contain all obvious speech and relevant sound effects; and
 - c) placing subtitles sensibly in time and space.

- 3) Without making unnecessary changes to the spoken word, construct subtitles which contain easily-read and commonly-used English sentences in a tidy and sensible format.
- 4) In the case of subtitles for children, particular regard should be given to the reading age of the intended audience.

The *BBC Guide* (1998: 3) also proposes that “different types of programme, different items within a programme, and even different sections within an item, will require different subtitling approaches”. Therefore, the subtitler should always take the context into account, “judge carefully which practices need to be given precedence over others in a given programme”, and from the presented guidelines “match” those that are applicable to the “style of the programme” (BBC, 1998:3).

With a similar viewpoint, RNID, EFHOH and FEPEDA (2002:8) suggest that countries in Europe are “accustomed to different quality standards and formats for their subtitles” and believe that “some minimum standards are necessary to ensure that subtitles and sign language are accessible to all”. Regarding EU member countries, RNID, EFHOH and FEPEDA (2002:8) suggest that National Regulatory Authorities (NRAs) should “monitor the quality of subtitling (e.g. speed, font, colour, layout and format) and sign language interpretation and consult with national organisations for Deaf and hard-of-hearing people over user requirements, and introduce national standards, where appropriate, to ensure that subtitling and sign language services are accessible to all”. To this end, RNID, EFHOH and FEPEDA (2002:9) suggest the following minimum standards be taken into consideration:

- ◆ Good contrast and solid background for subtitles.
- ◆ Reasonable font size and legible characters.
- ◆ A reasonable reading speed through editing, ensuring that great care is taken so that the whole meaning of the broadcast is conveyed.

Requirements for subtitling programmes for Deaf audiences, as outlined in guides for closed subtitling, contribute to the process of structuring the way information is presented to the Deaf viewer. The *ITC Guide* (1999) and the *BBC Guide* (1998) are thus analysed in terms of the following categories:

2.5.1. Appearance on screen

◆ Speaker visibility:

In order to identify a speaker an option could be to highlight the different speakers of a programme by using colours. A limited range of colours can be used to distinguish speakers from each other, namely yellow, cyan (light blue) and green (BBC, 1998:6). However, the unnecessary use of cyan and green should be avoided, as viewers with poor eyesight find these colours difficult to read. Emphasis should be placed on the fact that once a speaker has a colour, s/he should keep that colour throughout the programme. A more practical approach would be to indent text dialogue by using (-) at the beginning of each line when there is an individual speaker (Ivarsson & Carroll, 1998a).

Another option for identifying a speaker could be to insert the name of the character before the translated dialogue appears as text. This could be done by using character-name labels for clarification (ITC, 1999:14). For example: John: I thought you were coming home. On the other hand, the source of speech could be labelled. For example: LOUDSPEAKER: "And they're off!". Other situations "where the source of speech is not immediately apparent include telephone voices, radios, announcements, etc." (ITC, 1999:14).

In addition, according to the *ITC Guide* (1999:17), "single quotes '...' can indicate non-synchronous speech" (for example, a voice-over or thoughts) and "double quotes '..." can suggest mechanically reproduced speech" (for example, radio, loudspeakers etc. or a quotation from a book). Also, "text in brackets can indicate whispered speech or asides" and "brackets can also be used to indicate the way in which a person speaks" (for example, (SLURRED) He has gone.) (ITC, 1999:17).

Yet another option for identifying speakers is to indicate an off-camera speaker through symbols. This can be done by using "either the teletext left-pointing and right-pointing arrows, or the visually more effective combination of the 'greater than' (>) or 'less than' (<) symbols" (ITC, 1999:14). Should a

narrator be employed throughout the programme, italics could be used to indicate speech off-screen or subtitles could be centred without symbols.

♦ Positioning of subtitles:

In closed subtitling, the normally accepted position for subtitles is towards the bottom of the screen since most of the action revolves around the centre of the screen (Karamitroglou, 1997). Another option could be to adjust the position of the subtitles according to the source of the speaker. Therefore, text may also be justified left or right depending on speaker position.

♦ Text display:

In closed subtitling the text is normally presented in a black box (ITC, 1999:6), that is, subtitles are typed in white text on a black background (BBC, 1998:6). A blue background with white text can also be useful to indicate a different quality of voice such as a robot or ghost (ITC, 1999:13). The *ITC Guide* (1999:6) puts forward the fact that the majority of text/background colour combinations are not satisfactory for subtitling, being insufficiently legible. The most legible text colours on a black background are white, yellow, cyan and green, while the use of magenta, red and blue should be avoided.

Ideally, each subtitle should consist of a single complete sentence, linguistic units (ITC, 1999:8) or "idea units" (ITC, 1999:25). Subtitle text must, therefore, be distributed from line to line and page to page in "sense blocks" and/or "grammatical units" and the number of lines in any subtitle must be limited to two (Ivarsson & Carroll, 1998a). As a general rule, however, the *BBC Guide* (1998:34) states that each subtitle should consist of "no more than three lines".

According to Karamitroglou (1997) subtitled text should "appear segmented at the highest syntactic nodes possible". This means that each subtitle "flash" should comprise a single complete sentence. In addition, the upper line and the lower line of a two-line subtitle should be "proportionally as equal in length as possible, since the viewers' eye is more accustomed to reading text in a rectangular rather than a triangular format" (Karamitroglou, 1997). Ivarsson

and Carroll (1998a) state that “wherever two lines of unequal length are used, the upper line should preferably be shorter to keep as much of the image free as possible and in left-justified subtitles in order to reduce unnecessary eye movement”.

♦ Display time and text characters:

No subtitle should appear for less than one second or, with the exception of songs, stay on the screen for longer than seven seconds (Ivarsson & Carroll, 1998a). Each subtitle line should also be limited to under 35 characters in order to accommodate a satisfactory portion of the (translated) spoken text (Karamitroglou, 1997).

2.5.2. Comprehensiveness of information

When editing, as far as possible, each subtitle should be semantically self-contained, all idiomatic and cultural nuances should be considered, and the language in which subtitles are presented should be (grammatically) “correct” (Ivarsson & Carroll, 1998a), as will be discussed in 4.4.2 and 4.5.2. Since people generally speak much faster than the text of their speech can be read, it is, also, almost always necessary to edit speech. The subtitler should edit “according to the amount of time available” (BBC, 1998:12) as it is not always necessary to simplify or translate for Deaf or hard-of-hearing viewers. This is not only condescending, it is also frustrating for lip-readers.

According to the *ITC Guide* (1999:19), the subtitler may consider adjusting the speed of presentation if the programme is primarily intended for profoundly Deaf viewers. Again, care should be taken not to give the impression of “spoon feeding, as this can be resented” (ITC, 1999:19). In these instances the following three main editing devices can be employed (ITC, 1999:19):

- ♦ Reduce the amount of text by reducing the reading speed and removing unnecessary words and sentences.
- ♦ Represent the whole meaning.
- ♦ Increase the use of three-line subtitles and reduce the number of additions.

2.5.3. Reading speed

When it comes to reading there are certain features considered to have a marked effect on reading. These include "subtitle rate (speed at which subtitles are displayed); lead times (time at which subtitles appear after the onset of speech); shot changes (number of shot changes occurring with a subtitle); extent of editing (number and type of omissions from the source utterance); and visibility of speaker (whether a speaker is on- or off-screen)", according to de Linde and Kay (1999:59). Lastly, reading speeds are also affected by "the subject matter of a programme or film" (de Linde & Kay, 1999:6).

There have been many difficulties establishing reading speeds for Deaf viewers, as no figures have been accepted (Luyken *et al.*, 1991). Karamitroglou (1997) found that the reading speed of the "average" viewers (aged between 14 and 65, from an upper-middle socio-educational class) for a text of average complexity (a combination of formal and informal language) has been proven to range between 150 and 180 words per minute, i.e. between 2 ½ and 3 words per second. This means that a full two line subtitle containing 14 to 16 words should remain on the screen for a maximum time of something less than 5 ½ seconds. However, it has been suggested that one would actually have to expand the estimate to around 6 seconds because one should also add about ¼ to ½ of a second that the brain needs to start processing the subtitle it has traced (Karamitroglou, 1997).

On the other hand, according to the *ITC Guide* (1999:19) "for many pre-lingually deaf children, preliminary experiments suggest that a subtitle presentation rate of 70-80 words per minute is appropriate". According to the *ITC Guide* (1999:11), the subtitle presentation rate for pre-recorded programmes should "not normally exceed 140 words per minute". In addition, it was found that "deaf children over 11 years benefit from subtitles as they are currently provided" but "children under the age of 11 years need simpler subtitles" (ITC, 1999:19).

Lastly, well-grouped subtitles are also important for ease of reading – producing subtitles which are “broken in odd places or which start in the middle of one sentence and end in the middle of another, just because this is the easiest way of fitting the shots” does not aid reading (BBC, 1998:29). Subtitles should, therefore, start and end at logical points in a sentence.

2.5.4. Sound effects

The Deaf and hard of hearing do not have access to the soundtrack of a programme. Therefore, any relevant sound effect not immediately obvious from the visual action should be subtitled (as will be discussed in 4.4.3 and 4.5.4). This includes sound effects that “become apparent in the subsequent action”, e.g. the telephone ringing before it is picked up (ITC, 1999:15). Showing that action does happen off-screen will prevent Deaf viewers from thinking that they have missed important information. If a sound effect, such as a gun shot or explosion is heard off-screen, it could be shown in square brackets. For example, [gun shot] and indicated either above the translated text or appear in a single line during a pause in the storyline.

Any relevant dialogue off-screen or other off-camera voices should also be subtitled. Expressive dialogue (for tone of voice) that is critical to the meaning of the scene can be represented by using ‘(!)’ and/or ‘(?)’ (ITC, 1999:13). Non-verbal communication, such as facial expressions and body language can be inadequate in conveying tone. Lastly, “song lyrics should be subtitled verbatim” (ITC, 1999:13) and music should also be subtitled if it is significant to the plot as it indicates when scenes change, the mood, or a change of tempo.

A sound effect should be typed in white caps, should sit on a separate line and each sound effect subtitle should be “displaced towards the source of sound” (ITC, 1999:16); either placed to the left of the screen, unless the sound source is to the right, then it should be to the right (BBC, 1998:35). The use of background colour (e.g. white text on a red background) and upper-case text, should also provide a distinction between sound effect subtitles and speech

subtitles. On the other hand, "flashing text" can also be used "to direct attention towards particularly important sound effects", but this should be done only if the subtitle is to be displayed for more than three or four seconds (ITC, 1999:16).

2.5.5. Synchronisation and time

Subtitles have to "synchronize with both speech and moving image" (de Linde & Kay, 1999:48). For this purpose, according to the *BBC Guide* (1998:39), subtitles must remain on screen long enough to be read by a Deaf or hard-of-hearing viewer who will also be trying to take in other visual information at the same time.

The duration of all subtitles within a production must adhere to a regular viewer reading rhythm (Ivarsson & Carroll, 1998a). Therefore it is important to establish the duration of subtitles on screen or the presentation rates of subtitles. At present the guides for closed subtitling propose that subtitle appearance should coincide with the onset of speech. The disappearing subtitle should roughly start with the end of the corresponding segment as subtitles that remain too long on screen are likely to be "re-read" by the viewer (ITC, 1999:11). Nevertheless, subtitles should be displayed for a sufficient length of time for viewers to read them and "the presentation rates usually depend upon the programme content" (ITC, 1999:11).

On the other hand, if no subtitle is present the viewer may experience "false alarm" (ITC, 1999:16). When there is silence an "explanatory caption" should be used so that "viewers will not wonder whether the teletext system has broken down" (ITC, 1999:16). For example: LONG PAUSE. Certainly, losing subtitles is "as frustrating for the Deaf viewer as losing sound is for the hearing viewer" (ITC, 1999:17).

Furthermore, subtitles should match the pace of speaking as closely as possible and the target point for synchronisation should be at naturally occurring pauses "in speech-sentence boundaries, or changes of scene" (ITC,

1999:11). Ideally, when the speaker is in shot, subtitles should not anticipate speech by more than 1.5 seconds or hang up on the screen for more than 1.5 seconds after speech has stopped (BBC, 1998:27). Many subtitles, therefore, start on the first frame of the shot and end on the last frame (BBC, 1998:29). Again, subtitles must not only keep in time with the beginning and end of utterances but also with the natural flow of speech (de Linde & Kay, 1999:46).

2.6. Conclusion

The primary focus of this chapter was to determine the principles of closed subtitling. In doing so, terminology relating to subtitling was, firstly, defined. Discussions on open and closed subtitling also provided clarity for a working definition for subtitling. Thus, for the purposes of this study, subtitling is defined as dialogue which is transferred into visible text. This text is representative of what is being said on screen and it is intended for the Deaf as well as the hearing viewer.

Subsequently, an overview of the international scene included examples of countries such as Australia, Canada, the UK, and the USA, that implemented legislation for the volume of subtitling and broadcast subtitled programmes. In these countries, most programmes will be subtitled by 2010. In contrast, South Africa does not have legislation specifically for subtitling for the Deaf viewer and there is a lack of fully subtitled programmes with Deaf audiences in mind.

Reference was also made to two guides for closed subtitling: the *ITC Guide* (1999) and the *BBC Guide* (1998). These guides are comprehensive examples of practical guides for subtitling and provide structures for the way information is presented to Deaf audiences. Overlapping parameters found in these guides were discussed with the objective of highlighting the principles of closed subtitling to open subtitling.

Finally, the remaining chapters will determine the subtitling needs of Deaf and hard-of-hearing television viewers and apply the principles of closed subtitling to open subtitling. This application should ultimately provide Deaf and hard-of-hearing audiences in South Africa with optimal viewing and allow Deaf and hard-of-hearing audiences to access information that will not obstruct the viewing experience of hearing audiences.

CHAPTER 3: THE SUBTITLING NEEDS OF SOUTH AFRICAN DEAF AND HARD-OF-HEARING TELEVISION VIEWERS

3.1. Introduction

The primary aim of Chapter 3 will be to determine the subtitling needs of the Deaf and hard-of-hearing television viewers in South Africa. For this purpose, it is necessary to define the Deaf and hard-of-hearing television viewing community and discuss audience demographics, viewing habits, and language preferences. This chapter will also look at the 'types' of programmes and public service the SABC's Public Broadcasting Service channels (SABC1 and SABC2) are broadcasting and providing for Deaf and hard-of-hearing television viewers. Findings will be presented from a survey that was conducted by the SABC (Dias, 2001) as well as a survey conducted by Kruger, Verhoef and Kotze (2000).

The viewing needs of Deaf and hard-of-hearing viewers will further be determined by analysing responses given to open-ended questions, in a general questionnaire, for an informal survey that was conducted for this study. Respondents were asked about their viewing habits, and perceptions in terms of their reading proficiency. The primary aim with the informal survey was to obtain information regarding the viewing needs of a sample of Deaf television viewers as well as to determine whether open subtitles make it possible for these Deaf respondents to access subtitled material (questions were related to the subtitles of SABC2's *7de Laan*).

Finally, other comments regarding perceptions on the current state of subtitling across SABC TV channels provided by respondents will be discussed. In identifying the viewing needs of this target audience, it is possible that their responses and comments contribute to the process of creating a model for optimising subtitles in order for Deaf television viewers to access information.

3.2. The Deaf and hard-of-hearing community in South Africa

At the 2001 International Conference on Deaf Education, Deafness was identified as the "single largest disability grouping in South Africa" (The Centre for Deaf Studies, 2001). It is estimated that "some 10% of the South African population is disabled in some way" and that "approximately 3.5% have some degree of hearing loss" (The Centre for Deaf Studies, 2001). Apart from these findings, DEAFSA²³ (2002c) believes that Deaf and hard-of-hearing individuals exist "within the broader society". Deaf people start learning about their Deaf community, Deaf culture, and Sign Language at school, as this is where "Deaf children meet others like themselves for the first time" (DEAFSA, 2002c). Therefore, "Deaf identity" (Ram, 1998:88) becomes important.

As Deaf and hard-of-hearing people not only belong to their community but also form part of the broader society, it is necessary to define this community in some detail. The following may be taken as a broad definition of community: "when a group of people come and live together, share common goals and carry out certain responsibilities towards each other" that group of people can be called a community (DEAFSA, 2002c). Any given community is further "bound by its own language and culture" and for the Deaf community, Sign Language is the 'binding factor'. Not only do Deaf communities have their own language but they view themselves in society as "belonging to a linguistic minority with its own culture" (DEAFSA, 2002c).

In terms of the position of the hard of hearing in the Deaf community, Ram (1998:82) points out that "there is substantial disagreement amongst Deaf persons as to whether hard of hearing people are considered to be part of the Deaf community". Two participants in her survey replied that the hard of hearing are not part of the Deaf community, substantiating their response by stating that "the hard of hearing think that they are better than the Deaf and should therefore belong to the hearing world. There is a tendency for the Deaf community to perceive hard-of-hearing individuals who have relatively good

²³ Deaf Federation of South Africa.

programme with the help of a hearing aid but as they are perceived to have “usable hearing” and “relatively good speech”, they are said to belong to the hearing world. As the prelingually and postlingually Deaf have the greatest need, this study will place more emphasis on this group without neglecting the needs of the hard of hearing.

Optimal viewing and access to information ultimately allows Deaf and hard-of-hearing individuals to be better informed. Therefore, for the purpose of this study, the basic need and the right of this community to access information will be addressed in detail.

3.2.1. Accessing information

In order for South African citizens to claim and exercise basic human rights, they “require information and education to understand and influence the changes taking place around them and to be empowered to exploit economic and other opportunities that arise” (ICASA, 2002). For this purpose, the Independent Communications Authority of South Africa (ICASA) has stipulated that “all people should have access to basic telecommunications services at affordable prices” (ICASA, 2002). This obviously includes Deaf and hard-of-hearing members of society. In addition to the stipulations made by ICASA, the Disability Rights Charter of South Africa, specifically Article 14 on Communication, outlines the right Deaf viewers have to access communication:

Communication is an important aspect of access to public services. Access to communication, therefore, forms an integral part of the equalisation of opportunities for people with communication disabilities, such as Deaf people, people with speech disabilities and people with visual disabilities (DEAFSA, 2002c).

Although the objective is to improve the means by which Deaf and hard-of-hearing viewers can access subtitled information, it is important to discuss the different modes of communication that are available. There are three linguistic sources of information presentable to Deaf and hard-of-hearing viewers: “subtitles, sign language, and lip-reading” (de Linde & Kay, 1999:37).

Contrary to popular belief, **Sign Language (SL)** is not universal, nor international, and neither was it accepted, in the past, in schools for the Deaf (DEAFSA, 2002b). South African Sign Language (SASL) has, significantly, been included in the new South African Constitution and is now the official language of instruction for Deaf and hard-of-hearing learners. SL, however, is not a generic language understood by all Deaf people in Deaf communities. Therefore, the introduction of large-scale SL to television audiences would not, necessarily, solve the problem of access to information, even if one were to ignore the added obstacle it presents to a hearing audience.

In terms of **lip-reading**, according to Hardy (1970:337), "speechreading, or lipreading, can be defined as the skill that enables a person, regardless of whether his hearing is normal or impaired, to understand language by attentively observing the speaker". The Deaf and hard of hearing not only learn to recognise details in each situation regarding speech, but certain cues are also helpful. These include "facial expression, gesture, and postural changes [which] are frequently as revealing as the words uttered" (Hardy, 1970:338). Yet, lip-reading is seldom easy as certain factors, such as shot changes and the visibility of speakers, cannot be controlled. If viewers are not able to lip-read because of some (momentary or other) obstruction of the face of the speaker(s), the immediacy and comprehensiveness of the information is unrecoverable.

In contrast, according to Roffe (1995:218), the aim of **subtitling** is "to make the text understandable to the viewer and allow a full reading of the text". In the worst cases, subtitling is not only inadequate, but even impairs the viewer's enjoyment. Therefore, the material that is subtitled should be influenced by "some sort of assessment of what information the target audience needs" (Kilborn, 1989:427).

The fact that in this study the target audience is Deaf, already indicates that information should be presented in consideration of the absence of a soundtrack. Not only is subtitling necessary as a "support tool enabling the deaf to follow the programs", but also as a "vital means of participation"

(Voice, 2001). Most importantly, subtitling must be considered a “function” with a “very high social value” as it allows the Deaf to enjoy “independence, dignity and equal opportunities” (Voice, 2001). Ultimately, the Voice Project (2001) establishes that, “subtitling is the only viable solution (apart from the sign language for those who know it) enabling the hearing-impaired to overcome the handicap of television communication”.

In comparing subtitling to SL and lip-reading, notably, subtitles can be followed by both the hearing and Deaf and hard-of-hearing audience. In addition, subtitles have the advantage of reaching a wider audience. Audiences that consist of people with learning disabilities, people that are learning a second language, or children that are starting to read.

It is unlikely that sign interpretation and lip-reading will benefit both hearing and Deaf television viewers to the point where these modes of communication will be as accessible as a subtitled programme. Subtitled programmes in South Africa are accessed through the use of open subtitling. It is thus important to optimise open subtitling to provide the Deaf and hard-of-hearing viewer with basic access to information.

3.2.2. Surveys

Considering that Deaf television viewers need to be better informed, de Linde and Kay (1999:10) point out that “the principal means for deaf and hard-of-hearing viewers to access information on television is through subtitles”. Although the research to confirm this in South Africa is not considerable, it is significant. In the following paragraphs, three surveys will be discussed, namely Dias (2001), Kruger, Verhoef and Kotze (2000), and an informal survey conducted for this study.

3.2.2.1. Dias (2001)

In 2001 the SABC conducted a survey (Dias, 2001) in the Deaf community. Importantly, the survey found that “the most popular hobby or social activity

amongst the deaf community is watching television" and it was recommended that the SABC "acknowledge this fact and attempt to make this activity as deaf friendly as possible" (Dias, 2001:4-5). Therefore, additional suggestions were given as to how the SABC could improve on their services in terms of programming for Deaf viewers.

More specifically, this survey established audience access to television programmes, popular viewing times and the different 'types' of programmes watched by viewers. The primary objective of the survey was to "understand exactly how many members of the deaf community watch DTV and Signature on SABC3, and to measure the extent of their appreciation and their evaluation of such programmes".²⁴

With regard to these specific programmes broadcast for the Deaf, the survey showed that Deaf and hard-of-hearing viewers do, in fact, favour programmes made particularly for them. As findings show, "82% of the respondents claim to watch DTV regularly (53%) or occasionally (29%)" (Dias, 2001:3). *Dtv* is popular because it is specifically aimed at Deaf viewers and even though this programme is significant, it is not sufficient. Apart from watching programmes made specifically for them, the survey also found that "the deaf community simply wants more access to normal television program line-ups" and that this could be achieved by means of "signing programmes or subtitling programmes" (Dias, 2001:4).

3.2.2.2. Kruger, Verhoef and Kotze (2000)

Kruger, Verhoef and Kotze conducted a survey in 2000. Their research population consisted of adult television viewers (18+) representative of all language groups in SA (i.e. representative of the eleven official language groups) as well as the Deaf community. There were approximately 1050 respondents with 275 respondents from the Deaf community. Of these 275

²⁴ Both *Dtv* and *SIGNature* were programmes produced specifically for the Deaf as target audience. Due to a business decision made by the SABC, *SIGNature* is no longer aired. It has been incorporated into *Dtv* (see table in 3.3.2).

respondents, approximately 70% were pre-lingually deaf, 20% post-lingually deaf, and 10% hearing impaired.

In Phase II of their study Kruger, *et al.* (2000:59) focused on investigating “language needs as well as attitudes” by assessing viewing patterns and determining whether there was a need for access to information. Attention was not only paid to the attitudes of Deaf viewers regarding access to information but also to subtitling as a means of access.

Kruger, *et al.* (2000:93-95) also conclusively established that subtitling is relatively under-utilised within the South African context and that as the public broadcaster, the SABC is the one organisation where subtitling could be applied with most effect in terms of issues such as multilingualism and language rights. The study also found that the current programming available to the Deaf community is insufficient to meet even their most basic needs in terms of access to public broadcasting, that subtitling could make a significant contribution to education in the country (also in terms of addressing the high rate of illiteracy), and that the attitudes of viewers to subtitling as a means to provide access to programmes in the official languages is highly favourable.

Throughout this chapter, a correlation is made between the findings of these two surveys (Dias, 2001 and Kruger, *et al.*, 2000) and the informal survey that was conducted for this study. Even though the latter is not a formal, empirical study, the viewing habits, perceptions in terms of reading proficiency, and responses to current open subtitling (provided by episodes of *7de Laan*) of Deaf and hard-of-hearing viewers have to be evaluated among a sample from this audience group. Therefore, a general questionnaire was compiled with the aim of establishing the viewing needs of Deaf and hard-of-hearing respondents in terms of subtitled programmes, as well as their viewing habits, and their responses to the open subtitling on *7de Laan*.²⁵

²⁵ According to Silverman (1993:8/9), there are four major methods used by qualitative researchers: observation (in order to understand another culture), analysing texts and documents (understanding participants' categories), interviews ('open-ended' questions to small samples), and recording and transcribing (used to understand how participants organise their talk).

3.2.2.3. Informal survey

To begin with, a period of time was spent with a few members of a Deaf and hard-of-hearing community. This was done in order to gain first-hand experience of Deaf culture.²⁶ In this survey, comprehensive field questions and responses have, therefore, been documented and transcribed.

The sixteen respondents chosen to participate in answering the general questionnaire are Deaf and hard-of-hearing South African Grade12 learners (age 17+) from Transoranje School for the Deaf (Northern Gauteng) and St. Vincent School for the Deaf (Southern Gauteng) as well as adult television viewers (age 21+) from the Centre for Deaf Studies at the University of the Witwatersrand (WITS). As the general questionnaire was distributed to school-going Deaf learners and adults studying at the Centre, and not to other Deaf groups/audiences the responses of these sixteen participants are not representative of the entire Deaf community.²⁷

As participation would take approximately 2-3 hours, appointments were made with the respective groups. The rationale as well as the voluntary nature of participation was discussed. The participants received the questionnaire in English and interpreters explained the questionnaire to respondents and guided them in answering questions which were difficult to understand.

It was decided to limit the sample to participants who could read English. Although the programme is broadcast in Afrikaans, subtitles that appear on

²⁶ In his introduction, Burgess (1984:2) elaborates on the term "qualitative research" by stating that this term has been used by sociologists such as Filstead (1970), Bogdan and Taylor (1975) and Bogdan and Biklen (1982) to refer to "a series of research strategies": "participant observation, and in-depth, unstructured or semi-structured interviews". The focus being upon research strategies that "allow the researcher to learn about the social world at first hand".

²⁷ Webster (1986:14) explains that, "one problem in conducting research into deafness is finding subjects who can be collected together". That is, "if children are grouped together simply because they are 'deaf' then the results of research will be impossible to interpret. The reason for that is because there are likely to be as many differences *within* the deaf group as there are between the 'deaf' group and the hearing controls with whom comparisons are made" (1986:14).

7de Laan are in English and it would not benefit this survey to include the responses of participants who could not comment on the appearance, legibility and comprehensiveness of the subtitles. In addition, *7de Laan* as a 'type' programme is aimed at a particular target audience. Respondents are included in this target audience despite the fact that they do not have access to the soundtrack of the programme.

Most importantly, however, this survey was given to Grade12 school-going Deaf learners and adults studying at the Centre because it would benefit this survey to include respondents who were able to comment on their perceived viewing habits and were able to read the subtitles. Even though this survey is not concerned with the levels of literacy of each respondent, it is concerned with their viewing needs and perceived ability to read the subtitles that are presented. It would not facilitate the creation of a model for optimising open subtitles if Deaf viewers who were neither interested in the content of the programme nor able to read subtitles were asked to provide information.

The findings of this survey are, however, limited due to the following constraints:

Firstly, respondents were not approached on a national level. Responses and other comments are therefore limited to responses given by sixteen participants who do not represent the Deaf viewing community.

It is also difficult to substantiate the extent to which these Deaf participants are able to comprehend the information that is presented in the form of open subtitles. In general, variables could include the different Deaf viewer groups, the different literacy levels of each Deaf group, the efficiency with which respondents are able to process the quantity of information that is presented along with the visual demands of the programme, and the amount of practice respondents have reading subtitles on-screen due to the limited number of programmes that are broadcast with subtitles. Therefore, further research needs to be conducted in order to measure the extent to which different Deaf

viewers do in fact comprehend the content of a programme and follow the story because of subtitles.

This informal survey did not aim to prove or disprove literacy differences within the Deaf groups nor did it aim to measure the extent to which Deaf respondents understood the content of the episodes of *7de Laan* or discuss the reliability of the translation of the character dialogue of the episode into text. These Deaf respondents simply need to access information in order to be better informed. Therefore the general questionnaire was distributed with the aim of obtaining responses as to respondents' perceptions of subtitled programmes.

3.2.3. Audience demographics

The current lack of fully subtitled programmes is difficult to understand in view of the findings of the SABC's survey (Dias, 2001: 2-5) that 67% of the total respondents "claim to watch TV daily" and "84% of Deaf respondents claim to watch TV in the mornings, increasing to 97% in the afternoons and 99% in the evenings". TV viewership also remains similar across the weekdays with morning and afternoon viewing increasing on a Saturday and particularly on a Sunday. Based on these findings, television is certainly watched by Deaf viewers and is, thus, a means for these viewers to access information and become better informed.

In the survey conducted by Kruger *et al.* (2000:82-90) there were approximately 275 respondents from the Deaf community to the 500 questionnaires sent out to this community. Of these 275 respondents, it was found that 48,7% watch between one and five hours of television per week whereas 15,6% watch between five and ten hours per week, and 24% more than ten hours of television per week. In other words, approximately 40% of respondents watch more than five hours of television per week.

Although daily communication through SL and reading are ways in which respondents of the informal survey access information, watching television is

another. From the general questionnaire used in this informal survey it is also clear that television is an important medium through which these Deaf respondents can access information as, of the sixteen respondents seven watch more than ten hours of television per week whereas only one watches between five and ten hours per week. For these respondents, watching television is an important part of their lives and figures show that television is a "primary medium" (Kruger, *et al.* 2000:87) through which these Deaf respondents are also able to access information.

With regard to accessing information from programmes that are sign interpreted or subtitled, only one respondent from the informal survey would like to see programmes interpreted (SL) whereas fifteen of the sixteen respondents would like to see programmes that contain subtitles or that are both subtitled and interpreted. This shows that there is a need for both sign interpreting as well as subtitled programmes with the Deaf viewer as a target audience.

In the survey conducted by Kruger, *et al.* (2000:90), out of a total of 275 respondents, 192 pre-lingually Deaf answered as follows: 127 (66,1%) prefer SL and 65 (33,9%) prefer subtitles. Out of 55 post-lingually Deaf, 37 (67,3%) prefer SL while 18 (32,7%) prefer subtitles, and out of 28 hearing impaired respondents, 14 (50%) prefer SL and 14 (50%) subtitles. The figures of this survey indicate that these participants prefer programmes that do have subtitles but more importantly for them, programmes that are mostly sign interpreted.

In addition, the programmes identified by Kruger, *et al.* (2000:88) as being popular among these Deaf respondents, and watched on a regular basis, include: sport, films, news, soap operas, drama and sitcoms followed by game shows, talk shows, documentaries and educational programmes. Regardless of whether Deaf respondents had access to these 'types' of programmes or not, they indicated these preferences. In other words, these respondents have a need for programmes that are, currently, neither fully subtitled nor accessible as a result of a lack of subtitling and sign interpretation. Kruger, *et*

al. (2000:88/89) propose that the "large-scale introduction of subtitling" would not only make a significant contribution in providing programmes that are entertaining to Deaf viewers but also provide increased access to information.

Admittedly, the general questionnaire was not distributed to other Deaf groups/audiences. Therefore, the responses of the sixteen participants are not representative of the entire Deaf community. Nevertheless, it is notable that in the surveys conducted by Dias (2001) and Kruger, Verhoef and Kotze (2000) as well as in the informal survey, although programmes are not always broadcast with subtitles that have been designed with Deaf viewers in mind, it is suggested that subtitling does provide Deaf viewers with improved access to the content of programmes.

3.2.4. Viewing habits

In the survey conducted by Kruger *et al.* (2000:90) the question: "Do you think there are enough programs [sic] on TV with subtitles or sign language?" elicited the following responses: Out of 275 respondents, 149 (77,6%) pre-lingually Deaf respondents answered 'no' and 43 (22,4%) answered 'yes'. 46 (83,6%) post-lingually Deaf respondents answered 'no' and 12 (16,4%) answered 'yes', while 24 (85,7%) hearing impaired respondents answered 'no' and only 4 (14,3%) 'yes'. Out of the total of 275 respondents 219 (79,6%) answered 'no'. These responses confirm that these participants watch television on a regular basis. Nevertheless, these participants indicated that there were not enough programmes containing subtitling or sign interpreting, thus affirming the fact that they are not being well informed.

Dias (2001:4-5) similarly established that Deaf and hard-of-hearing viewers, like hearing audiences, enjoy watching television during peak times. Popular times include 6 to 7am weekdays, 5 to 6pm weekdays (soapies commence), 6 to 6:30pm (eTV news and soapies), 7:30 to 11:00pm popular time all week, and Sundays, popular times 8 to 9am, 11 to 12am, and 12 to 1pm (72% of the respondents claimed to be watching SABC3 during this time slot).

Additional suggestions were given as to how the SABC could improve on their services, in terms of programming, for Deaf viewers to have greater access to information during these times. These included signing one full news bulletin per week or scroll news headlines, subtitling repeat soaps in the mornings as "many deaf individuals are unemployed and watch television during the morning"²⁸ or, subtitling the omnibus of a soap opera, and subtitling one movie per week (Dias, 2001:5). On the other hand, it was proposed that more detailed descriptions of the storyline of the upcoming movies, programmes, and soap operas in TV guides and updates (both magazine and newspaper) be given (Dias, 2001:5).

Clearly, Deaf viewers also have a need for programmes that are sign interpreted. The suggestions that were made included signing the highlights of an important event or game; and signing the main events of each episode of a soap opera a few minutes before the programme commences (Dias, 2001:5). It was also recommended that the SABC consider "flighting deaf programming on weekday evenings with subsequent repeats to enable as many deaf individuals as possible to watch the programmes during more convenient times, as opposed to on a Sunday which they too consider a day for going out and socializing"²⁹ (Dias, 2001:4-5).

Likewise, Dias (2001:3) recommends that the relevant production houses, such as The New Production Corporation (producers of *Dtv*), "use the information gathered on hobbies, favourite sports, social events, common fears, hopes and dreams to formulate more relevant programming which covers issues that are important to the deaf community". Issues that could be covered in subtitled programmes for the Deaf, in programmes such as *Dtv*, include: more tips on coping mechanisms for the deaf, insight into other deaf communities abroad (how they function, how they cope, and what they do),

²⁸ According to DEAFSA (2002b) approximately "70% of the Deaf population are unemployed".

²⁹ Both *Dtv* and *Hand Prints* are alternately shown only on Sundays from 12:30-13:00, on SABC3.

more success stories of deaf people (aspirational and encouraging), and creating more awareness on special Deaf community events (Dias, 2001:4).

The addition of subtitles to programmes, possibly broadcast during peak times, would provide viewers, such as the Deaf, with relevant information. Further audience research would discover other viewing habits as well as specific viewing needs of different audience groups. The need to watch subtitled programmes that are entertaining for and provide information to Deaf viewers, however, has been identified in this study.

3.2.5. Language preference

Deaf and hard-of-hearing people vary in terms "of literacy, hearing loss and socio-economic factors" (ITC, 1999:4). On average, according to DEAFSA (2002b), "the adult Deaf person's general knowledge level is equal to an eight year old hearing child" and "approximately 66% of Deaf persons [in South Africa] are functionally illiterate". As subtitles are read, some level of literacy is indeed required by viewers. According to Kilborn (1993:647) subtitling requires "a degree of literacy and visual acuity, both of which cannot necessarily be presupposed in all members of the television audience".

Even though subtitling can be used as a literacy training tool and presumably, Deaf viewers who are less literate have an even greater need to access information, the choice to become literate would be available.³⁰ Effectively, however, whether literate or not, information is not accessible through closed subtitling in South Africa. Deaf television viewers in South Africa are only able to access necessary information either through programmes that are sign interpreted or, as discussed, through open subtitling.

³⁰ The SABC's own survey (Dias, 2001:2) found that "a quarter of the Deaf population indicated Sign Language as their home language, particularly Black Deaf people". Specifically, "a third of the Black Deaf population have a Grade 4/5 level of education" and also prefer Sign Language on TV. Consequently, "many Black Deaf people have lower levels of education [and] cannot read sub-titles [*sic*]". In contrast, "just on half the White Deaf population claimed to have completed Grade 10 or above" and "most White Deaf people prefer sub-titles [*sic*]". The Coloured and Asian Deaf communities "are split as to their preference" (Dias, 2001:2).

Another point to consider is the language in which programmes are subtitled as well as the home language of viewers (in the case of Deaf and hard of hearing, SL). The Deaf view South African Sign Language as their first language. Deaf viewers will, therefore, often 'read' the language presented on screen, as a second and even third language. Bester (1995:11) affirms that "when a second language is learned, it will be either English or Afrikaans".

Respondents of the informal survey indicated that they use SL to access information as well as English and Afrikaans. In terms of daily communication, five out of the sixteen respondents use SL most of the time while one respondent uses both SL and English. Three respondents use SL and Afrikaans, and only one respondent uses both English and Afrikaans. Significantly, in the survey conducted by Kruger *et al.* (2000:90), 246 (89,5%) out of a total of 275 respondents would watch programmes if they were subtitled into the language that they were able to read well. When answering questions pertaining to their perceived reading proficiency, most respondents of the informal survey read English either 'excellently' or 'well' while one respondent reads English 'poorly' but Afrikaans 'well'. All respondents preferring Afrikaans, read it 'excellently' and English 'well'. English as the chosen broadcasting language does appear to be read 'well'. These respondents are, therefore, able to access information because they use SL and are able to read subtitles well.

In terms of legislation, the Broadcasting Act ensures that services in South Africa are provided in all official languages. With regard to broadcasting languages, the Act, according to the SABC, does "not specify how this [language distribution] should be done in the television medium, nor does it outline what would be an appropriate allocation of air time for the various languages" (SABC, 2002a). At present, as the SABC is a public broadcaster, not only is the economic impact on its channels being considered but the SABC has also committed itself to "providing a portfolio of public television services which, in combination, provide equitable programming in all 11 official languages" (SABC, 1995). However, the SABC's service allocation per

language on television is "currently not necessarily equitable since programming is still predominantly in English" (SABC, 2002a).

In exploring English as one of the broadcasting languages, the SABC conducted a survey (1996) which consisted of asking participants about their language preferences by 'type' of programme. The study concluded that most people's first choice was for "TV broadcasts in their own language, with English being the language of second choice" (SABC, 1996:12). Regardless of the fact that for Deaf viewers SL would be their first choice as a broadcasting language, indirectly, their need to be informed either way had already been identified by the SABC in the late nineties.

In November 1999, the Committee/Task Team, formed at the August 1999 Language Workshop, re-convened to deliberate on the merit, programming implications and possible implementation of the proposal made at the August 1999 Language Workshop³¹. The deliberations were largely led by the SABC response to the proposals (SABC, 1999b:1).

Although accommodative programme scheduling possibilities were discussed within the context of broadcasting languages, it was proposed that subtitling, if added to genres such as drama on a limited scale, one-off genres such as documentaries, and movies, could be "utilized to add value in terms of a wider audience reach and language exposure to large audiences", "serve to expose the language and culture of the programme to a wider audience", and that subtitling is a "powerful mechanism for audience access to programmes" (SABC, 1999b:4). Therefore, even in this language context, the SABC was aware of the potential advantages subtitling would have, particularly when providing a service in reaching a wider audience.

³¹ Held on in August 1999, the SABC Language Workshop sought to "look at practical ways to arrive at an equitable treatment of all official languages on SABC-TV" (SABC, 1999a). It was suggested that "a Committee/Task Team, consisting of one representative per language group/language stakeholder be established to consult with the SABC on the practical implications of accommodating marginalised languages on television in particular" (SABC, 1999a).

Since the workshop and after several annual reports, two of the SABC's three terrestrial television channels have been dedicated to public broadcasting. SABC1 and SABC2 are South Africa's "biggest free-to-air channels" (2001/2002:38). Language allocation across the two PBS channels shows that programming is predominantly in English: SABC1- English (70,68% during prime time); and SABC2- English (47,90% during prime time) (2001/2002:43).

With regard to the influence of broadcasting languages in general, TABEMA³² (2002) presents a profile of the dominant languages that are broadcast across SABC TV. Figures for the end of 1999 show that the majority of SABC TV viewers were Afrikaans speaking (TABEMA, 2002). Notwithstanding the fact that these figures also do not indicate how many viewers were Deaf and hard of hearing, the trend towards English as a broadcasting language remains, possibly being accepted as a 'second language' by Deaf viewers. Kruger, *et al.* (2000:9) suggest that this is "part of a larger trend of globalisation or transnationalisation" and the fact that increasing numbers of people are "advancing their English language skills in the process" may be viewed as "an empowering process". English seems to remain the viable broadcasting language.

The 'types' of programmes watched by Deaf viewers as well as the viability of broadcasting languages have been outlined in the surveys (in 3.2.2). Before elaborating on the findings of these surveys, in particular the responses of participants relating to their subtitling needs, the South African Broadcasting Corporation (SABC) will be analysed in terms of the subtitled programmes that are broadcast across its PBS television channels. This will be followed by an account of the relationship and programme negotiations between DEAFSA and the SABC as well as a discussion on the cost of subtitling a programme.

³² Taakgroep vir die Bemagtiging van Afrikaans op televisie. See also www.afrikaans.com/tabema.htm.

3.3. The South African Broadcasting Corporation (SABC)

The Independent Communications Authority of South Africa (ICASA, 2002) believes that the fundamental responsibility of the public broadcaster is “to provide original programming of direct relevance to the public it serves”. Therefore, the Authority regulates the telecommunications and broadcasting industries in the public interest.

Under the Broadcasting Act No. 4 of 1999, “public broadcasting service” means: any broadcasting service provided by the South African Broadcasting Corporation (4/1999). According to the SABC’s 65th annual report (2001/2002:44), “income from television licence fees represents 16% of the SABC’s annual operating revenue and is used primarily to finance the national broadcaster’s PBS obligations”.³³ Even though the SABC is financed through revenue from television licenses and State grants as well as “commercial sources for the bulk of its annual operating revenue” it, nonetheless, provides a public service (SABC, 2001/2002:80).

Furthermore, since the majority of current subtitling in South Africa is broadcast by the SABC, the SABC has its own views regarding language, services, and subtitling. Paragraph 8. of Television Services, more specifically, 8.3. Dubbing and Subtitling, is relevant to this study because it outlines the SABC’s views on language and subtitling:

Television Services

Dubbing and Subtitling

An allocation of funds for dubbing will be on an equitable basis, taking into consideration the demographic factor. There will also be use of sub-titling to facilitate sharing of programmes, language learning and comprehension by the hearing impaired. Subtitling, which is much cheaper, should play a significant role in local productions, especially news and actuality programmes, to facilitate access to and participation in South African affairs programmes by the public at large. African,

³³ According to the SABC’s annual report (2001/2002:44), “these funds contribute to services such as broadcasting in all 11 of South Africa’s official languages, and programming on both radio and on television that is informational, cultural, educational, and entertaining”.

European, North & South American, Asian and other language programmes will either be dubbed or subtitled equitably, according to the language needs of the target group. Children's programmes will continue to be dubbed and/or subtitled in the eleven official languages equitably, both in the interest of communication, development of home languages and language learning (SABC, 1995).

The SABC is South Africa's "public service broadcaster" (2002c), has been given a mandate concerning programming, and has presented its own views regarding subtitling (SABC, 1995). However, in practice the SABC has not implemented its plan of action particularly when broadcasting programmes specifically for the Deaf viewer³⁴ or programmes that have been subtitled with Deaf and hard-of-hearing audiences in mind.³⁵

This situation is, once again, difficult to understand as, previously discussed, the SABC conducted a survey in this community (Dias, 2001). One of the objectives of this survey was to "try and understand the deaf community as a whole in terms of their general lifestyle issues and concerns; perceptions and thoughts about their television viewing habits, their needs, wants, expectations from TV as a whole; and then from deaf programming" (Dias, 2001:1). It was established that Deaf and hard-of-hearing viewers enjoy watching television and not only favour programmes made particularly for them but indirectly need to access information because they too want to be entertained and better informed.

According to Dias, a large percentage of Deaf people (93%) "claim to enjoy watching programmes specifically made for them. Therefore, these programmes are an important part of their lives" (Dias, 2001:3). In addition, highest on the list of 'types' of programmes enjoyed are: news and Deaf programmes followed by movies (action and drama), then sport and weather. Soapies are also a favourite although at the time, least popular on the list provided was SABC2's *7de Laan*.

³⁴ With the exception of *Dtv*, a magazine programme aimed at the Deaf community but only broadcast on Sundays from 12:30-13:00.

³⁵ With the exception of *7de Laan*, a soap opera with mainly Afrikaans dialogue subtitled in English but not with the subtitling needs of Deaf viewers in mind.

3.3.1. SABC TV

SABC1 and SABC2 are South Africa's "biggest free-to-air channels, commanding audiences of more than 14 million and more than 9 million respectively" (SABC, 2001/2002:38). These two PBS television channels provide more than 16,3 million adults with informative, educational, and entertainment programmes. SABC3, on the other hand, is a public-commercial television channel (SABC, 2001/2002:52). It has increased its audience "from 5, 603 million adult viewers a day to almost 6 million, equal to 17% of the total audience in prime time (*Average Monday to Friday*)" (SABC, 2001/2002:52). Programmes are only broadcast in English and the channel "devotes the bulk of its programming" to a mix of "local and international drama, news and actuality programmes" (SABC, 2001/2002:52). SABC3 has also, potentially, reached 77% of target audiences and currently broadcasts the popular *Dtv* and *Hand Prints* for Deaf viewers (SABC, 2001/2002:55).

Notably, the SABC (2001/2002:95) estimates that it provides "five million deaf and hard of hearing with the signing of daily television news bulletins, as well as weekly signed programmes produced specifically for deaf viewers".

However, as generous as these figures may seem, there is no record of actual Deaf and hard-of-hearing audience figures that have been obtained by the SABC indicating the percentage of Deaf viewers that benefit from this service. In addition, programmes that are specifically broadcast for Deaf viewers, such as *Dtv*, are only 30 minutes and only broadcast once a week, on Sundays from 12:30-13:00. Other programmes, such as *Generations* and *Muvhango* are only intermittently subtitled. This suggests that Deaf viewers are, in fact, not being adequately accommodated in terms of programme viewing.

In addition, the 'types' of programmes on SABC TV, according to prime time broadcast schedules³⁶, across SABC1, SABC2 and SABC3 were "drama (48.29% during prime time), news and actuality (19% during prime time),

³⁶ Full Day: 05:00-23:00 and Prime Time: 18:00-22:00 (SABC, 1999/2000:25).

variety, magazine, sport, music, documentaries, religion, educational, and children" (SABC, 1999/2000:25).

Looking at the 'type' of programmes that were mostly watched³⁷ from April 2001 to March 2002, specifically on SABC2, drama (41,54 average % during prime time; 20,76 average % full day) and news and actuality (22,62 average % during prime time; 14,58 average % full day) remain at the top of the list (SABC, 2001/2002:39). This is significant in that these are the 'types' of programmes the Deaf also watch but due to a lack of sign interpreting and subtitling are unable to access fully.

7de Laan is a 'typically South African' soap opera (broadcast on SABC2) and one of the few locally produced programmes that is fully subtitled.³⁸ Although broadcast with mainly Afrikaans dialogue, episodes of *7de Laan* are subtitled in English, broadcast during the week from Monday to Thursday (approximately 120 minutes), and then rebroadcast over the weekend (omnibus), thus, offering continuity. In the informal survey's general questionnaire, this programme is used as an example, not only, of material that is fully subtitled and available to different audiences groups, such as the Deaf, who are unable to access the soundtrack, but also as an example of ground-work that has been done by the SABC in their attempt to cater for the different language groups.

In 2000 the SABC considered putting English subtitles on *7de Laan*. Their aim was to attract both "English and Afrikaans language speakers (many of whom can speak and understand English), while at the same time not wanting to alienate current viewers" (SABC, 2000). Research was needed to test audience reaction to the introduction of subtitles on *7de Laan* and for this

³⁷ The local content quotas on these channels will increase: drama increases to 35% in August 2003 (up from the current 20%) (SABC, 2000/2001:40).

³⁸ Interestingly, Koolstra, Peeters and Spinhof (2002:335) suggest that, "in general, domestically produced television programmes are more popular than similar programmes imported from abroad. The higher popularity of domestic programmes can possibly be attributed to content: domestic programmes are more closely related to local situation and culture than foreign programmes".

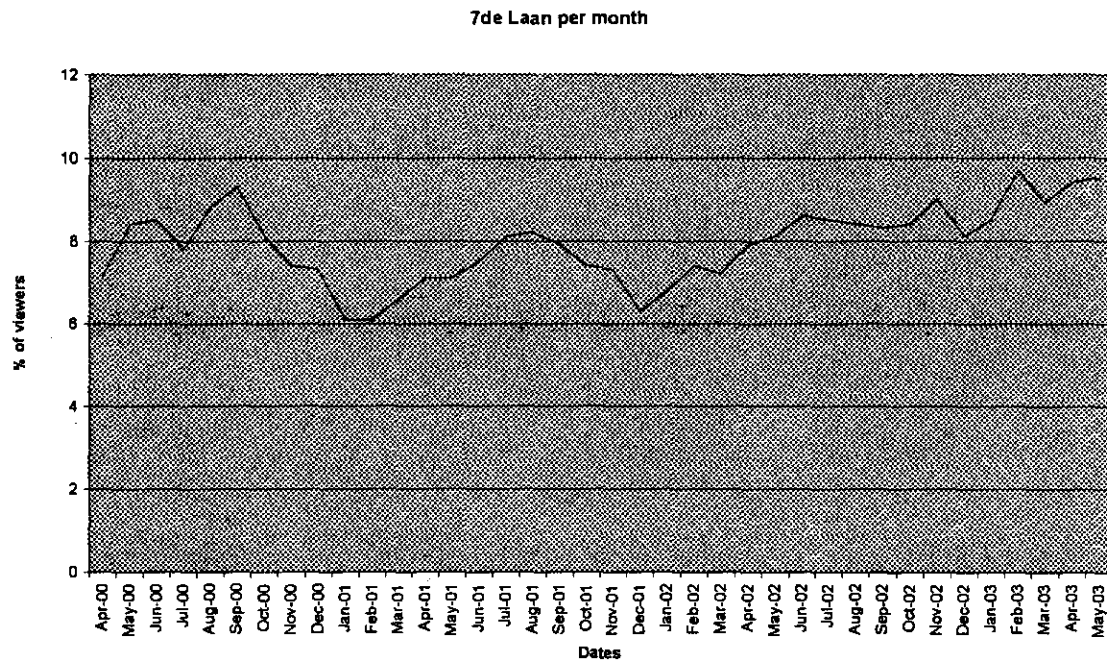
purpose "focus group discussions" were conducted with "both current and potential viewers from Gauteng" (SABC, 2000). Current viewers were regarded as respondents who watch *7de Laan* regularly and potential viewers were those who "watch other soaps regularly" (SABC, 2000). In addition, the potential viewers were mainly Sotho speakers and the sample was "biased towards female viewers" (SABC, 2000). Discussions were, nonetheless, conducted in August as well as September 2000 with six groups defined as the target market of SABC2.

Each group discussion began with respondents watching two full future episodes of *7de Laan* with subtitles. Significantly, these respondents were not told that this would be happening or that subtitling would be included in all future episodes of *7de Laan*. Similar to the advantages of subtitling that were discussed in 2.3. "viewers generally assumed that using subtitles was in order to make it easier for English speaking people or black people to be able to watch and follow the story. It could also be for the benefit of deaf people" (SABC, 2000). This is significant in that respondents indirectly identified the importance of having access to the content of a programme, for the Deaf as well as for other group audiences. It also shows that those Deaf and hard-of-hearing viewers who watch subtitled programmes such as *7de Laan* could be able to follow and better understand the story because of the subtitles.

None of the six groups, however, included Deaf and hard-of-hearing respondents. Nevertheless, this report was significant in that subtitles were indeed added to *7de Laan* episodes as from April 2001. Television Audience Ratings (AR's³⁹) after subtitles were added to all episodes of *7de Laan*, shown in the table below, seem to indicate that there was not a significant drop shown in the AR's for the month of April 2001, when episodes of *7de Laan* were broadcast with subtitles. With the exception of a brief plateau from April 2001 to May 2001 there appears to be a steady increase in audience figures.

³⁹ AR's (Television Audience Ratings): refers to the number of viewers, averaged across a time period (e.g. a commercial spot, a ¼ hour, or a programme) and percentaged on the total number of individuals in the relevant Target Audience (Harcombe, 2000). AR is also a "time weighted average": the average of the length of time that each person watched TV within the target audience, over a specified time period (Harcombe, 2000).

As from April 2001, a fourth episode of *7de Laan* was also broadcast on Thursdays and a change in time-slot possibly attracted 'new' audiences to watch the soap opera.



Adapted from TAMS⁴⁰.

After subtitles were added in April 2001, and as from June 2001 to current ratings, *7de Laan*'s AR increased as seen from the steady incline on the graph. Several factors could have contributed to this increase, such as the fact that more viewers and different audience groups were, and are able to follow the story because of subtitles.

Also, viewers that did not have access to the soundtrack or could not understand the language in which the programme was broadcast, namely Afrikaans, are currently able to access the content of the programme, and the fact that this locally produced soap opera holds the interest of audiences because of the story that is conveyed through the use of subtitling during a

⁴⁰ TAMS (Television Audience Measurement Survey): TV information is collected through the use of people-meters. People-meters measure people's viewing behaviour. It is semi-automatic electronic equipment, connected to the households' television equipment. It records TV set events automatically. Viewers log-in/out by pushing buttons on a remote control unit or on the set-top unit (SAARF, 2001).

changed time-slot. In accepting these factors, it is possible that the addition of subtitles did not alienate hearing viewers, that the SABC has not necessarily lost revenue by broadcasting this programme, that is fully subtitled, and that a public service is being rendered to television viewers, such as the Deaf.

3.3.2. From programme negotiations to current programmes for the Deaf

Subtitling for the hearing impaired is now common in many parts of the world, even in countries where subtitling is unusual. It is becoming more and more common, not least as a result of the hard work and effective lobbying by associations dedicated to improving the quality of life of people with hearing disabilities (Ivarsson & Carroll, 1998:129).

The question on whether there was a place for subtitling on the South African broadcasting scene was already addressed in 1993 (Swanepoel, *et al.* 1993:3). Primarily, it was established that subtitling should be seen as a complementary technique to dubbing (Swanepoel, *et al.* 1993:3). The reasons for this is that subtitling "is quicker and cheaper; it could "help solve the multilingual problem and redress the language imbalance immediately"; it could "give viewers access to local multilingual programmes, e.g. Generations"; it also offers "educational possibilities, e.g. to teach children to read and to acquire a second or third language"; and it could "help the SABC to cross cultural bridges between viewers from different cultural groups" (Swanepoel, *et al.* 1993:3).

At the time, subtitles were not "standardised" in the SABC and subtitling was done by "unqualified directors or operators in very expensive editing suits"⁴¹ (Swanepoel, *et al.* 1993:4). It was thus recommended that the SABC have a subtitling policy. Since the early 90s, negotiations have been conducted between DEAFSA (or the then SANCD⁴²) and SABC TV in order to allow a

⁴¹ Not much has changed in this regard in that subtitles are still not "standardised" although the SABC increasingly contracts the subtitling out to the production houses from which they purchase the programmes.

⁴² South African Council for the Deaf.

greater accessibility of television programmes to the Deaf and hard of hearing⁴³ (Kruger, *et al.* 2000).

In the 90s, the SABC used subtitling "only as a translation medium and then presented the captions in an 'open', in-vision manner for all the viewers of a channel to see" (Swanepoel, *et al.* 1993:4). Closed subtitles that were transmitted through an encoded system, such as teletext, were, and are, activated (selected) by means of a decoder. This teletext system was only available as "an extra to the viewers" and "few domestic users" considered purchasing such a system (Swanepoel, *et al.* 1993:4). Subsequently, the old equipment in use was disconnected and other Softel equipment did not "quite meet the requirements" (Swanepoel, *et al.* 1993:5).

Nonetheless, it was suggested that, if teletext were used, "subtitles in more than one language could be broadcast with a programme" (Swanepoel, *et al.* 1993:4). Instead, an alternative view was suggested: "if the subtitles were decoded at the transmitters and then inserted into the picture, becoming open captions in the process, many small areas – particularly rural areas – would be able to be targeted with their own language simultaneously" (Swanepoel, *et al.* 1993:4). The target date, the report proposed (Swanepoel, *et al.* 1993:5), was that by 1996 the technique of producing "captions on a large scale" would be mastered in order to provide "a variety of clients with a service" that was, and still is, sorely needed.

According to the SABC's 65th annual report (2001/2002:95), it has currently ventured into "taking social responsibility and investment seriously" stating that it is "aware that many physically disadvantaged citizens depend on its services as their sole source of information". In its 63rd annual report (1999/2000:52) the SABC had budgeted programmes, aimed specifically at Deaf viewers, at R3,8million as well as created a Community Development desk (March 2000). This Community desk had the objective of "identifying

⁴³ A brief summary of the negotiations which have taken place between DEAFSA and the SABC is available in Kruger, *et al.* (2000:40-42).

projects to assist in raising community morale, and to secure sponsors for these projects" (SABC, 1999/2000:53). According to the SABC (1999/2000:53), "such projects should guarantee job creation and encourage independence and self-sufficiency".

In contrast to on-going negotiations and the possibility of more programmes being broadcast with subtitles, the following table traces the duration of programmes that have been broadcast and produced specifically for the Deaf viewer⁴⁴ between 1994 and 2003:

Date	Name	Duration	Genre
From January 1994 until October 1995.	Sign Hear!	30 minutes per week.	Magazine.
From October 1995 until October 1996.	Sign Hear!	60 minutes per week.	Magazine and news review.
From October 1996 until December 2001.	Signature	30 minutes per week.	Magazine.
From October 1996 to date.	Dtv	30 minutes per week alternating with Hand Prints (alternated with Vee-Tv).	Magazine.
From January 2002 until end of series in 2002.	Vee-TV (BBC programme)	30 minutes per week (alternated with Dtv).	Magazine.
From January 2003 to date.	Hand Prints	30 minutes per week (alternates with Dtv).	Magazine.

These locally produced programmes are specifically aimed at the Deaf community and certainly have a greater impact on Deaf and hard-of-hearing television audiences. *Dtv* does incorporate signing, voice-overs, and subtitles. However, the aim of this study is to present a model that will optimise subtitles in programmes that have not been subtitled with Deaf viewers as the target audience. This is done in an effort to allow Deaf and hard-of-hearing viewers to access the same information afforded to the hearing audience (by virtue of the soundtrack) without alienating the hearing viewer.

⁴⁴ Refer to Kruger, *et al.* 2000:45 and The New Production Corporation, producer of *Dtv*.

3.3.3. Technological usage and the cost of subtitling a programme

Ram (1998:81) explains that Deaf people do not need to be "corrected" by using hearing aids; they cannot and should not be "fixed". Certainly, there are other ways in which life can be facilitated for the Deaf and hard of hearing. Sound detectors/sensors and vibrating pagers (used by Deaf people to get messages from callers) are regarded as necessities (DEAFSA, 2002a). Technological advances that are preferred by the Deaf include: the Teletypewriter (TTY) or Teldem, fax machines, flashing light alarms, vibrating alarm clocks and closed captioned television programmes (Ram, 1998:81). In recent years, this need is also increasingly addressed by means of the use of pagers and SMS services on local cellular networks.

In terms of subtitling and modern technology, however, subtitling is being included in DVD as well as digital broadcasting, as seen by DVB Subtitling⁴⁵. In other countries, such as the USA, 'simpler technology' is facilitating the process of accessing information. The Television Decoder Circuitry Act of 1990 (Public Law 101-431) mandates the addition of decoder chips in U.S. televisions (Robson, 2001f). This would mean that when viewers access information via closed subtitling, they do so by using a decoder.

When focusing on the costs of adding subtitles to programmes and the amount of time spent on production, Mr. Paul Poulsen, then working for the SABC (1996) confirmed that, "a subtitling workstation is budgeted for at R80 an hour" (Poulsen, 1993:10). Kruger *et al.* (2000) suggests that "this could probably be increased to between R100 and R150 per hour due to inflation etc." This would mean that "a 30 minute programme that requires around 9 hours to complete would cost approximately R720 (or R900 – R1 500 with inflation). This implies a cost of under R50 per minute" (Kruger *et al.* 2000).

⁴⁵ Digital Video Broadcasting is a "consortium of around 300 companies in the fields of Broadcasting, Manufacturing, Network Operation and Regulatory matters that have come together to establish common international standards for the move from analogue to digital broadcasting" (2001). These DVB standards for digital television have been adopted in the UK, across mainland Europe, in the Middle East, South America and in Australasia.

In comparing the cost of subtitling a programme to dubbing, in a later interview with Mr. Poulsen (1998), it was stated that the cost of subtitling is around R100/minute, whilst a full lip-sync dubbing is about seven times more expensive (Kruger & Kruger, 2001). Ivarsson and Carroll (1998:36) propose dubbing to be "ten to twenty times more expensive than subtitling".⁴⁶ When comparing the cost of subtitling a programme to that of dubbing or producing programmes in the diverse languages, subtitling is clearly much more economical.

Currently, the SABC is focusing on outsourcing programmes for the addition of subtitles. According to Mr. Poulsen (2003) "the SABC divides its cost structure" when outsourcing as follows: a fee is paid for translating, another for facilities used. The current fees (per minute) are R51.60 and R82.33 respectively, which adds up to R133.93 per minute.

Apart from changing cost figures, there are other general factors influencing the cost of subtitling. These include: length and character, language translation, dialogue density, available material, realistic schedules, techniques used, and time (Dries, 1995:28/29). Robson (2001i) highlights similar factors that influence the costs of captioning: synchronizing the captions, position captions, and encode captions take up more time. Rates will also depend on variables like: Dialog Density, Terminology, Equipment, Experience, and wanting the work done at the last possible minute (Robson, 2001i).

Understandably, the SABC may consider factors, such as target audiences, production, and subtitling costs, before broadcasting programmes with subtitles. However, adequately subtitled programmes have the potential of

⁴⁶ Although dubbing does not affect "the composition of the picture" and "the dialogue can be understood even by those who have reading difficulties or the illiterate", the text can be changed. As Ivarsson and Carroll (1998:36) explain, "in a dubbed version the text can be censored to conform with local morals or political viewpoints". In addition, the content of the script can be changed "for the sake of better lip synchronisation" (Ivarsson and Carroll, 1998:36). Also, authenticity is lost as a result of dubbing as the audience "does not hear the voices of the original actors" (Ivarsson and Carroll, 1998:36).

offering Deaf and hard-of-hearing viewers a medium through which they can access information and ultimately be better informed without necessarily, discouraging hearing audiences from watching the same programme.

The following section will explore to what extent the viewing needs of the Deaf and hard of hearing are currently being met and how subtitling is facilitating this process. This will be done on the basis of responses to open-ended questions provided by sixteen Deaf television viewers who participated in an informal survey (introduced in 3.2.2.3).

3.4. Subtitling and the Deaf and hard of hearing in South Africa

According to SABC press releases (June 1998), the then head of SABC's Research Department, Dr. Daan van Vuuren, headed a team of three researchers in assessing "six Masters [sic] students from the University of Pretoria on their research thesis at the SABC". Although in the field of Psychology, one student, Anita Bron, focused on "how to reach the deaf by using television as a medium" (SABC, 2002b). Her presentation, *The Deaf In South Africa*, reveals that "subtitles were recognised as one of the most important tools in catering for the deaf ..." (SABC, 2002b).

The limited number of programmes on SABC TV that are subtitled are not aimed at Deaf and hard-of-hearing viewers as a target audience alone (with the exception of *Dtv*). Alternatively, according to the South African Advertising Research Foundation⁴⁷ (SAARF), in Week 18: Monday (28/04/2003) to Sunday (04/05/2003) figures show that the most popular television programmes adults watched on SABC2 were *7de Laan* and the news. Again, these figures do not indicate what percentage of adult viewers are Deaf and hard of hearing. Although shown only in a weekly sample, these figures indicate a trend in adult viewership of SABC2 drama and news programmes

⁴⁷ SAARF is a "non-profit making organisation founded in 1974 to provide an on going, comprehensive, unbiased, valid, reliable and credible measure of mass media and product usage" (2001).

but also that these 'types' of programmes are popular amongst and important to Deaf audiences.

In terms of adding subtitles to *7de Laan*, according to *Dispatch Online* (2001), producers of the 'popular local soapie' introduced subtitles after research showed that the programme has "a high rating among Sotho viewers". Another reason given for the addition of subtitles is that "they accommodate deaf viewers". Again, this is significant in that it shows that Deaf viewers not only appreciate this avenue of entertainment but also have a need for programmes that contain subtitles also because of the potential these programmes have to provide information.

Although there are programmes on SABC TV, such as *Generations* and *Muvhango*, that are intermittently subtitled in English, *7de Laan*, also a locally produced soap opera, is the only programme that is fully subtitled regardless of the language spoken by the characters on screen. In addition, the mode of subtitling that is offered is open subtitling and allows both hearing and Deaf and hard-of-hearing audiences to follow the storyline.

The informal survey (introduced in 3.2.2.3) which will be discussed in the following section consisted of distributing a questionnaire to school-going Deaf learners and adults studying at a Centre. These respondents answered questions about their access to subtitled programmes, such as SABC2's *7de Laan*, their viewing habits, and perceptions in terms of their reading proficiency. Respondents also commented on the current state of subtitling across SABC TV channels.

3.4.1. Viewing needs and comments of Deaf and hard-of-hearing respondents

Responses to the open-ended questions, asked in the general questionnaire, of the informal survey indicate that the sample of Deaf respondents do indeed

watch SABC2's *7de Laan*. The programme is not only accessible to the respondents but viewers enjoy following the story because of subtitles.⁴⁸

In terms of the benefits of watching a programme with subtitles, one respondent stated that they watch *7de Laan*, not only because it has subtitles and is interesting, but because subtitles also helped them to read better. Another respondent affirmed that subtitles helped them to improve their English. Yet another respondent proposed that subtitles give them 'access' to the content, which allows them to understand the programme better.

Asked if they would prefer subtitles in another language, fifteen of the respondents answered 'no' while only one would like subtitles in Afrikaans. Although subtitles are presented in English, these respondents have not been exposed to subtitles in another language and do not know if they would, in fact, appreciate the change. Moreover, the perception that they are able to read English 'well' does not conclusively determine their complete understanding of the content of *7de Laan*. Their responses do in fact suggest that open subtitles make it possible for them to gain access to the content of *7de Laan*. These participants have responded positively despite the fact that subtitles were not specifically designed for this audience group.

Programmes that are not subtitled or that do not compensate for the soundtrack do not allow Deaf viewers to benefit fully from their content and meaning. In returning to the informal survey, one is able to understand the frustration these sixteen Deaf respondents experience in their need for optimal viewing. To the question: "What is the greatest hindrance when it comes to watching TV?" respondents indicated that they were not able to understand what the characters were saying as they either could not lip-read properly or because the character had their back turned to the camera. Respondents could also not fully comprehend what the speakers were saying because without subtitles, one respondent suggested that there was a "lack of

⁴⁸ Even though fifteen respondents of the informal survey said that *7de Laan* was popular only one respondent did not watch the programme because he was "not interested in it".

information". This, in turn, suggests that this respondent does not have full access to the content of current programmes. Subtitles are therefore needed in order to allow this viewers to follow what is going on.

A similar pattern emerges from the comments made by participants of the focus group discussions that were conducted when the SABC (2000) considered putting English subtitles on *7de Laan*. Despite the fact that these participants were hearing viewers, positive reasons why respondents thought subtitles a good idea included the fact that "by watching a programme like this, you learn about other cultures and that breaks down barriers between people" (SABC, 2000). Another respondent of the focus group, who currently watches *7de Laan*, affirmed that "although most of us feel that the Afrikaans spoken on *Sewende Laan* is *quite* simple, sometimes you need that extra help in order to get the gist of the story. When there are subtitles you just read quickly to make sure you understand what is being said" (SABC, 2000). Yet another respondent suggested that the 'translation', that is, the subtitles on *7de Laan*, "helps you educate yourself at the same time, and it helps with your speed of reading too" (SABC, 2000).

Criticisms included the fact that subtitles were "irritating" as they distract viewing and made respondents concentrate harder on the storyline as they caught their eye all the time. Respondents also felt that they missed out on small details because they were too busy concentrating on watching, listening and reading at the same time. In addition, respondents claimed that "subtitles are strenuous unless the programme is very interesting" (SABC, 2000) and that, assumingly, "it is easier for young people because they are fluent in English and can read fast" (SABC, 2000). Lastly, according to the report, "many of the Afrikaans viewers did not feel that the translations were well done" (SABC, 2000). As discovered in Chapter 2, the South African broadcasting industry does not follow a "standardised" set of subtitling guidelines. This could change once more subtitled programmes are produced and broadcast for Deaf audiences.

In concluding their responses to the open-ended questions of the general questionnaire, participants of the informal survey gave an indication as to which changes they would like to see happen in terms of television for the Deaf. One respondent said that they would “like to see all subtitles in all programme” and that sign interpretation should be added to the news.

Another respondent would like “most programmes with subtitles” and interpreters while, a different respondent wanted subtitles because they make it possible to understand what is happening in the programme. Yet another respondent suggested that Deaf people would be able to understand as long as there are subtitles. Lastly, other respondents suggested that there needs to be “more subtitles and more programmes for Deaf” viewers and that people should “lobby SABC for more subtitles”.

Few programmes are currently broadcast that are sign interpreted and fully subtitled, therefore, for the most part, these respondents have pointed out that they would like to see more programmes sign interpreted and subtitled. Thus, when aiming to present a model for optimising subtitles it is not only important to take subtitling requirements into account but also the subtitling needs of Deaf viewers who are simply trying to access information and be better informed.

3.4.2. An overview of subtitling needs

When subtitling for Deaf and hard-of-hearing television viewers it is important to take the following aspects into consideration:

- ◆ Prelingually Deaf people who do not develop “adequate oral communication skills” will use SL in order to communicate (DEAFSA, 2002b).
- ◆ The postlingually Deaf usually develop “speech and language superior to the majority of the prelingually deaf” as they have acquired “moderately-severe to profound hearing loss after the acquisition of a spoken

language" (DEAFSA, 2002b). They will depend upon the "visual sense for additional information" for the purpose of spoken communication (DEAFSA, 2002b).

- ♦ It is possible for the hard of hearing to follow a programme with the help of a hearing aid but "there is a tendency for the Deaf community to perceive hard of hearing individuals who have relatively good speech and usable hearing to belong to the hearing world" (Ram, 1998:82). The hard of hearing, however, form part of the viewer audience that could benefit from programmes that are optimally subtitled.

The focus in this section will therefore be on the subtitling needs identified by Deaf respondents of the surveys conducted by Dias, (2001) and Kruger, *et al.* (2000) as well as the subtitling needs identified by respondents of the informal survey. This is done in an effort to include the responses of Deaf participants to the process of structuring the way information is best presented to the Deaf viewer and ultimately, to the process of creating a model for optimising subtitles in order for Deaf viewers to have improved access to information.

The subtitling needs of Deaf respondents can be incorporated into the categories that were identified, through the analysis of two guides, in 2.5 as follows:

Notably, the subtitling need that speaker(s) must be visible has been identified and can be incorporated into the appearance on screen category. Simply put, Deaf viewers want to know who is speaking and what they are saying. Identifying the different speakers of a programme would allow these Deaf viewers to follow the dialogue delivered by the characters as well as the storyline.

The comments made by participants of the focus group discussions that were conducted when the SABC (2000) considered putting English subtitles on *7de Laan*, also provided information on the positioning of the subtitles on screen

(either left aligned or centred). The findings indicate that current viewers “are looking for something that will not be disruptive”, while potential viewers also “want something that is easily placed for reading” (SABC, 2000).

Respondents claimed that “if it’s on the side I can block it out easier” and “it doesn’t bother you as much” (SABC, 2000). Other respondents suggested that “if the subtitles are in the middle you can watch the actors’ faces and read the subtitles at the same time” (SABC, 2000). As discussed in 2.5.1, the clear and structured appearance of subtitles on screen can only enhance readability.

The subtitling need for information to be arranged in such a way that it is presentable to a target audience and easily followed by viewers has been identified and can be included into the comprehensiveness of information category. It is important to identify the target audience, the ‘types’ of programmes that will be subtitled for this audience, and decide on the volume of information that will be edited and translated. It is also important to identify the possible languages into which the subtitles could appear as this could accommodate the viewer’s preference and allow them to follow subtitles in the language of their choice. As the Deaf are the target audience in this study, the volume of information that will be condensed and presented to this audience is evidenced by the extent of editing.

The programmes identified by Kruger, *et al.* (2000:88) as being popular among Deaf respondents, and watched on a regular basis, include: sport, films, news, soap operas, drama and sitcoms followed by game shows, talk shows, documentaries and educational programmes. Looking at the ‘type’ of programmes that were mostly watched from April 2001 to March 2002, specifically on SABC2, drama and news and actuality remain at the top of the list (SABC, 2001/2002:39). This is significant in that these are the ‘types’ of programmes the Deaf watch and have a need for despite the fact that they may not fully comprehend the content as these programmes are, currently, neither fully subtitled nor accessible as a result of a lack of sign interpretation.

Moreover, Deaf viewers not only need to comprehend the content of the programme but they, like hearing audiences, according to Dias (2001:4-5) enjoy watching television during peak times. More specifically, TV viewership remains similar across the weekdays with morning and afternoon viewing increasing on a Saturday and particularly on a Sunday. Suggestions were made as to how Deaf and hard-of-hearing viewers could be accommodated during popular times (see 3.2.4).

The subtitling need for adequate reading time has been identified and can be incorporated into the reading speed category. Deaf viewers will also be able to follow the subtitles while watching the action on screen if attention is given to shot changes, camera angles, and close-up zooming. It becomes difficult to follow a programme when for example, a character's facial expressions are obscured or if there are quick shot changes without allowing Deaf viewers sufficient time either to lip-reading or follow the subtitles. Although subtitles should match the pace of speaking as closely as possible in effect, subtitles must be displayed long enough to be read by a Deaf or hard-of-hearing viewer who "will also be trying to take in other visual information" (BBC, 1998:39).

The subtitling need for music, sound effects that cannot be deduced from the action on-screen, and any dialogue spoken off-screen been indicated and forms part of the sound effects category. As Deaf viewers do not have access to the soundtrack of programmes, music as well as sound effects should be subtitled.

Lastly, the subtitling need for adequate subtitle rates and lead times have been pointed out and can be added to the synchronisation and time category. Further research should identify the subtitle rate (speed at which subtitles are displayed) and lead times (time at which subtitles appear after the onset of speech) for different audience groups (de Linde & Kay, 1999:59). Additional research will have to be conducted in order to determine similarities and differences between the prelingually Deaf, postlingually Deaf, and the hard of hearing within the Deaf community, when subtitling programmes for these sub-categories in this audience group.

It is important to remember that not all programmes will be subtitled, and not all programmes will be broadcast with subtitles that are 'tailor-made' for the Deaf audience. As open subtitling may benefit different viewer groups such as the Deaf and hard of hearing, one should also understand that the objective should also be to accommodate the hearing viewer.

3.5. Conclusion

The aim of Chapter 3 was to determine the subtitling needs of the Deaf and hard-of-hearing television viewers in South Africa. For this purpose, it was necessary to define the Deaf and hard-of-hearing television viewing community, discuss audience demographics and viewing habits, and look at the South African Broadcasting Corporation (SABC) as a public service provider. Findings were presented from a survey that was conducted by the SABC (Dias, 2001) as well as a survey conducted by Kruger, Verhoef and Kotze (2000). Throughout this chapter, a correlation was also made between the findings of these two surveys (Dias, 2001 and Kruger, *et al.*, 2000) and the informal survey that was conducted for this study.

This chapter determined that Deaf and hard-of-hearing people form part of the viewing community. This audience also enjoys the same 'types' of programmes (broadcast during popular times) that are available to hearing viewers despite the fact that they do not have access to the soundtrack of programmes and that these programmes are not, currently, broadcast with subtitles. One of the programmes that is fully subtitled and thoroughly enjoyed by Deaf viewers is *7de Laan*. Following open subtitles allowed Deaf respondents of the informal survey, to follow the dialogue and storyline of the programme.

The informal survey focused on obtaining information regarding the subtitling needs of a sample of Deaf and hard-of-hearing television viewers. As this sample group is not representative of the Deaf viewing community, open-ended questions were directed at respondents' viewing habits, and their

perceptions in terms of their reading proficiency. Their comments on the current state of subtitling across SABC TV channels were also considered.

Subsequently, an overview of respondents' subtitling needs was presented. The subtitling needs for speaker visibility, the positioning of subtitles, adequate reading speeds, the comprehension of content, the subtitling of sound effects, and adequate subtitle rates and lead times were identified and incorporated into respective categories (identified in 2.5.).

The benefit of broadcasting programmes with subtitling lies in the fact that subtitles allow "spoken words and sounds to be visually displayed on the screen" (RNID, EFHOH & FEPEDA, 2002:4). Without this visual text, Deaf viewers cannot interpret the sounds that are indicated off-screen, they cannot comprehend character dialogue, they cannot understand the reasons behind facial expressions during shot changes and other visual cues that have not been subtitled, and ultimately do not know what is going on in the programme, that is, what message is being conveyed to them.

Specifically, in Chapter 4, guidelines for subtitling material for the Deaf and hard of hearing in South Africa will be addressed. This is not only done with a view that guidelines contribute to the process of structuring the way information is presented to the Deaf viewer but ultimately with the purpose of providing optimal viewing. Analysis of the principles of closed subtitling and the parameters of open and closed subtitling, that were discussed in Chapter 2 as well as the underlying needs of Deaf and hard-of-hearing television viewers, that were discussed in this chapter, contribute to Chapter 4 and ultimately, to a model for optimising subtitling.

CHAPTER 4: OPEN SUBTITLING FOR THE DEAF AND HARD OF HEARING IN SOUTH AFRICA

4.1. Introduction

The primary aim of Chapter 4 will be to present a model for optimising subtitling for the benefit of Deaf and hard-of-hearing viewers in South Africa within the limitations posed by open subtitles. This will be achieved through a synthesis of the analysis of the parameters of open and closed subtitling and the principles of closed subtitling (discussed in Chapter 2) and the subtitling needs of Deaf and hard-of-hearing television viewers (discussed in Chapter 3).

The overview of the international scene (in 2.4.) included examples of countries such as Australia, Canada, the UK, and the USA that implement legislation stipulating the volume of programmes that should be broadcast with subtitles. In contrast, it was found that South Africa does not have legislation for subtitling for Deaf viewers, nor sufficient fully subtitled programmes. In addition, subtitling in South Africa is exclusively presented by means of open subtitles whereas in the UK, for example, for this viewer group, subtitles are presented through closed subtitling.

The comprehensive examples of practical guidelines for closed subtitling found in the *ITC Guide on Standards for Subtitling* (1999) and the *BBC Subtitling Guide* (1998) provide the basis for the discussion of subtitling parameters. These guides focus primarily on closed subtitling and in so doing, provide structures for the way information is currently being presented to Deaf audiences in countries where television decoders are widely available. Consequently, the principles informing these guides will be important in this chapter, where a model will be presented for optimising open subtitling for the benefit of Deaf and hard-of-hearing viewers.

In the previous chapter (in 3.2.) it was determined that Deaf people in South Africa constitute an important part of the viewing community. It was also indicated that prelingually and postlingually Deaf viewers have the greatest

viewer need. For this viewer group, to begin with, there is a need for dedicated programmes specifically broadcast for the Deaf as well as programmes that have been subtitled with this viewer group in mind. The current lack of Deaf programming means that Deaf viewers are not being adequately informed.

The subtitling needs of Deaf viewers that were identified (in 3.4.2) were also incorporated into the categories that were identified after the analysis of the two guides. It was found that, for the most part, the needs of Deaf and hard-of-hearing viewers are also inadequately addressed across SABC TV channels.

The focus of this chapter will be on creating a model for optimising open subtitles in an effort to allow Deaf and hard-of-hearing viewers improved access to information that is contained in the soundtrack of programmes. Therefore it will be necessary to incorporate subtitling parameters and consider the subtitling needs of Deaf viewers when presenting the model ultimately, in order for Deaf viewers to be better informed and have access to the same information afforded to the hearing viewer.

4.2. Applying the principles of closed subtitling to open subtitling

In Chapter 2, the following working definition of subtitling was presented:

Subtitling is a dialogue which is transferred into visible text. This text is representative of what is being said on screen and appears for everybody to see. It is, thus, intended for the hearing audience as well as the Deaf and hard-of-hearing viewer.

Whereas open subtitling is text that appears for everybody to see, closed subtitling can only be activated (selected) by means of a decoder. The 'additional information' that is presented in closed subtitling is not necessarily optional for Deaf viewers and it should therefore also be made available to viewers who do not have decoders as well as other audience groups, such as

the less literate, people who are learning a language, or children who are starting to read, that may benefit from access to this information.

The dominant mode for subtitling in South Africa is open subtitles, mainly due to the fact that the majority of the population does not have the required decoders when closed subtitling via teletext is used. Thus, when applying the principles of closed subtitling to open subtitling the way in which information is presented to this audience group becomes important to consider, particularly in the context of open subtitling. Requirements for subtitling programmes for Deaf audiences were outlined in 2.5. in terms of the following categories:

- ◆ Appearance on screen
 - ◆ Speaker visibility
 - ◆ Positioning of subtitles
 - ◆ Text display
 - ◆ Display time and text characters
- ◆ Comprehensiveness of information
- ◆ Reading speed
- ◆ Sound effects
- ◆ Synchronisation and time

As discussed in 3.2.3, Kruger, *et al.* (2000:88/89) propose that the "large-scale introduction of subtitling" could make a significant contribution in allowing different viewer groups, such as the Deaf and hard of hearing to have increased access to information. By addressing more specific needs that will then be identified, Deaf audiences will have improved access to the content of programmes, otherwise solely provided by the visual action on-screen.

4.3. Evaluation of subtitling parameters and subtitling needs

In this study, parameters are defined as an established set of limitations which delineate how something can be done. It also refers to legislation and requirements that, in some countries, aim to regulate how subtitling is presented and standardised for subtitling programmes for Deaf and hard-of-hearing viewers.

Subtitling needs of participating Deaf and hard-of-hearing respondents to the different surveys were identified and incorporated into categories that were identified in 2.5. The subtitling needs (discussed in 3.4.2) identified in the survey by Dias (2001) and Kruger, *et al.* (2000) as well as in the informal survey used in this study include the following:

- ◆ Speaker visibility.
- ◆ The positioning of the subtitles.
- ◆ Adequate reading speeds.
- ◆ The comprehension of content.
- ◆ The volume of information translated.
- ◆ The languages into which the information will be translated.
- ◆ The extent of editing.
- ◆ The subtitling of music, sound effects and off-screen voices.
- ◆ Adequate subtitle rates and lead times.

It appears that the greatest hindrance for Deaf respondents of the informal survey, when watching television is the fact that these Deaf viewers are not able to follow programmes as no subtitles are displayed or 'too few' subtitles allow full access to the content of programmes. In other words, the information that is available is presented in such a way that it is not very easy to understand. Therefore, these Deaf and hard-of-hearing respondents would simply like to see some measure of interpreting as well as adequate subtitling presented with the programmes they watch.

The *ITC Guide* (1999:4) emphasises that subtitling editing is dynamic and "careful and sensitive editing is therefore needed in order to produce subtitles which will suit the intended audience, while still conveying the full meaning of the dialogue or commentary within the limitations set by the pace of the programme" (ITC, 1999:4). Consequently, it is possible for specific subtitling needs such as the above to be addressed once subtitling is established across SABC TV channels.

The first step in accommodating Deaf and hard-of-hearing viewers effectively will be the standardisation and consistent application of subtitling guidelines. The model that will be presented here will therefore provide an important

starting point in the process of standardisation of subtitling guidelines for subtitling programmes for Deaf and hard-of-hearing viewers.

4.4. Towards a model for optimising open subtitles for Deaf and hard-of-hearing television viewers in South Africa

The principles of closed subtitling that are directly applicable to open subtitling are addressed in the following categories: appearance on screen, comprehensiveness of information, and sound effects. Further research will need to be conducted in order to address the categories of reading speed and synchronisation and time specifically for this viewer group.

4.4.1. Appearance on screen: visibility of speaker

When watching programmes with or without subtitles, Deaf and hard-of-hearing viewers consider the visibility of a speaker mainly because they need to know who is speaking and what they are saying. In order to identify a speaker, it is possible to optimise open subtitles by using colours, character-name labels, labelling the source of the speaker, and indicating an off-camera speaker through symbols (as discussed in 2.5.1.).

In the following scene from episode 257 of *7de Laan*, identifying which character is speaking becomes important to the Deaf viewer as Francois and Oubaas 'tackle' one another while exchanging dialogue:

PORTAAL 1

NAG BINNE (21:00)

FRANCOIS LUISTER AF, RAAK AL MEER
OPGEWERK.

<i>7de Laan</i>	Subtitles in English
FRANCOIS BARS IN.	
<u>FRANCOIS</u>	<u>FRANCOIS</u>
Oor my dooie liggaam.	Over my dead body.
FRANCOIS BESTORM VIR OUBAAS.	Rooster!
<u>FRANCOIS</u>	My foot!
Sening... Biltong... Laventelhaan se voet... Vanaand draai ek jou nerf af.	Tonight I'll wring your neck.
<u>OUBAAS</u>	
Is dit so, jou... jou...	
HULLE GRYP MEKAAR.	
<u>HILDA</u>	<u>HILDA</u>
(IN 'N TOES)	
Los mekaar. Nou dadelik.	Stop it! Immediately!
MANS LOS MEKAAR TEËSINNIG.	
<u>HILDA</u>	<u>HILDA</u>
Julle gaan tekere soos barbare. Julle behoort julle te skaam.	You're like barbarians!
	You should be ashamed.
<u>OUBAAS</u>	<u>OUBAAS</u>
Dis sy skuld. Hy bars soos 'n Filistyn hier in.	It's his fault. Bursting in here. Philistine pig!
<u>FRANCOIS</u>	<u>FRANCOIS</u>
Oor jy nie jou kasterolie-kloue kan tuis hou nie, dis hoekom.	Because you can't keep in your castor oil.
OUBAAS EN FRANCOIS GLUUR MEKAAR AAN. HILDA MOEDELLOOS.	

SLOTTITELS

(Danie Odendaal Produksies, 2001:39).

The idea is not to draw attention to the subtitles by making use of different colours to highlight the text unnecessarily. Instead, the purpose of identifying

speakers is to indicate to the Deaf viewer that there is a speaker off-camera that is not yet visible or as in this example, to clarify for the Deaf viewer which speaker is delivering dialogue amidst confusion.

Although the characters are 'comical', Deaf viewers could miss out on what is being said as there are no close-ups during the 'tackle'. Expressive dialogue (for tone of voice) that is critical to the meaning of this scene is however represented by using '(!)'. In context Deaf viewers may recall that Francois and Oubaas have regular run-ins of this nature and could remember to pay closer attention to the subtitles while watching the character interaction. Additional clarification, such as character-name labels will only be necessary if a longer action scene, that would be perceived as being confusing, transpires.

In order for Deaf viewers to access information that may not be available to them because of the fact that a speaker is not on-screen, it is also possible to link a character's language use to specific language structures or vocabulary, through indirect characterisation (tone of voice, speaking rate, or gestures). This may be done by displaying abbreviations for names of characters or by applying two shades of colours to distinguish between two characters' speech in one subtitle.

Perhaps there are two characters that are whispering to one another in a telephonic conversation. Both characters are off-camera and one of the characters coughs a lot while delivering his/her dialogue. Without necessarily seeing the two characters on-screen, hearing audiences may quickly discover who the characters are because they can identify who is coughing. Deaf viewers, on the other hand, are at a disadvantage to begin with because without subtitles they do not know what is happening in the scene. Although both characters are speaking off-screen there are no subtitles to indicate that one of the characters coughs. An option to highlight the fact that one of the characters coughs could be to use brackets, for example: (COUGHING). Clearly, it is important for Deaf audiences to know who is speaking off-screen and if necessary, how they are speaking.

4.4.2. Comprehensiveness of information

For a Deaf viewer it may be difficult to co-ordinate speaker and text particularly when programmes are intermittently subtitled. Both *Generations* and *Muvhango* are dramas broadcast on SABC TV channels. Although subtitles are positioned towards the bottom of the screen and centred, Deaf viewers have to change their focus from the character interaction to the incomplete subtitle that is representative of the dialogue when characters speak in one language (English) and in mid-sentence change to another language (Sotho). Dialogue that is subtitled and incomplete is shown by using (...) "sequence dots" (Karamitroglou, 1997).

Although broadcast with mainly Afrikaans dialogue, episodes of *7de Laan* are subtitled in English. Despite the fact that some characters do speak in Sotho, in these instances the fact that subtitles are in English allows both the Deaf and hearing viewer who does not understand Sotho to follow what the character is saying, as evidenced in the following example from episode 255 of *7de Laan*:

RESTAURANT		NAG BINNE (19:00)	
<i>7de Laan</i>		Subtitles in English	
<u>SELLO</u> (IN SOTHO) Excuse me. I'll be back in a sec. SELLO OP, UIT.		<u>SELLO</u> Excuse me, back in a second.	

(Danie Odendaal Produksies, 2001:32).

The subtitler should consider the amount of time available when editing as it will not always be necessary to simplify or translate for Deaf or hard-of-hearing viewers (as discussed in 2.5.2.). Although in some instances verbatim transcripts are required, for example in a soap opera like *7de Laan*, text

editing or speech editing will be focused on dialogue as shown in the following scene of episode 257 of *7de Laan*:

HILDA WOONSTEL	NAG BINNE (21:00)
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<i>7de Laan</i>	Subtitles in English
OUBAAS WIL SJAMPANJE SKINK. <u>OUBAAS</u> Nog 'n glasie vir jou. <u>HILDA</u> (GIGGEL) O, nee. Ek kan nie. My knieë is lankal lam. Miskien was daar 'n bietjie te veel rum in my rumba-raai koek. <u>OUBAAS</u> (SKINK BUITENDIEN) Lammers en kalwers wat alleen die berge moet op, kom nooit ongeskonde aan die ander kant uit nie. HILDA VERWARD. <u>OUBAAS</u> Maar 'n knie of twee wat lam is kan gou reggedokter word... As jy die regte medisyne het. <u>HILDA</u> Die regte medisyne. <u>OUBAAS</u> Ja Hildatjie. Jy sien, die saak staan so. Ek is jou kasterolie en jy is my laventel. Ek is jou haan en jy is my hennetjie. (MAAK KEEL SKOON, VAT HAAR HAND)	<u>OUBAAS</u> Another glass? <u>HILDA</u> No thanks. My knees feel wobbly. Perhaps I put too much rum in my rumba-raffle-cake. <u>OUBAAS</u> Lambs and calves who climb mountains alone never reach the top unharmed. <u>OUBAAS</u> But a wobbly knee or two can be fixed in no time. With the right cure. <u>HILDA</u> The right cure? <u>OUBAAS</u> Yes. You see... It's like this. I am your castor oil. You are my lavender. I'm your rooster. You are my little hen.

Hildatjie... Sal ons nie maar ons kuikens in een bondel jaag nie. <u>HILDA</u> O, Septimus. Vra jy my om te...	Hildatjie... Shall we chase our chicks in one bundle? <u>HILDA</u> Oh, Septimus... Are you asking me to marry you?
--	--

(Danie Odendaal Produksies, 2001:39).

In this scene Oubaas pauses often and this shown by the single-line subtitles. The subtitler has also translated Oubaas's dialogue as close as possible to the original. Although a bit confusing, viewers do understand what Oubaas is trying to ask Hilda.

In a similar scene, Oubaas could deliver dialogue that is riddled with idiomatic expressions and figures of speech. In this context it would be difficult to translate these expressions. A literal translation of Oubaas's dialogue will not make sense to the Deaf or hearing viewer. It is however, necessary that subtitles convey precise meaning. Therefore the subtitler must edit speech and provide similar-type expressions by paying attention to technical aspects such as punctuation, diction, choice of words, and other nuances translated into the subtitled language as close and accurate as possible.

Deaf viewers can be at a disadvantage when there are too many shot changes and different camera angles without giving Deaf viewers enough time to read the subtitles and fully access the content of the scene as it unfolds. In the following scenes, from episode 255 of *7de Laan*, viewers are aware that a robbery is taking place particularly when the robbers storm into the restaurant and proceed to move quickly from table to table:

<i>7de Laan</i>	Subtitles in English
SELLO OP, UIT. KELNER NADER, MAAK WYNGLASE VOL.	
<u>THABILE</u>	
Thank you.	
KYK VERSKRIK OP AS GEWAPENDE ROWERS MET BALAKLAWAS INSTORM.	
<u>ROWER</u>	<u>ROBBER</u>
(SKREE)	
Nobody move.	Nobody moves.
GILLETJIES. ALMAL VRIES.	Everything on the tables.
<u>ROWER</u>	Cash, jewellery, cell phones.
Everything on the tables. Cash, jewellery, cell phones. And then get down on the floor. Come on. Everybody. Move, move, move.	Don't argue with me, lady.
ALMAL SIT VERSKRIK ITEMS OP TAFELS. ANDER ROWERS BEWEEG HAASTIG ROND, MAAK SISTEMATIES BYMEKAAR. THABILE SIT VERSKRIK.	I want everything. Money, jewellery.
<u>ROWER</u>	
(AGGRESSIEF)	
Come on. Get a move on.	
<u>THABILE</u>	
What do you guys think...	
THABILE LOER IN RIGTING VAN TOILETTE, HAAL OORBELLE, HORLOSIE AF.	
<u>ROWER</u>	
(SKREE)	
Don't argue with me, lady. I want everything. Money, jewelery. And quickly. I haven't got all night.	
HY RUK HALSSNOER VAN HAAR NEK AF. THABILE Vlieg OP.	

<u>THABILE</u> (WOEDEND) Hey don't you... ROWER KLAP HAAR DAT SY TREK. ALMAL GIL. THABILE LÊ BEWEND, VERSKRIK.	<u>THABILE</u> What do you think you are doing?
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HANDELSFLITSE

RESTAURANT

NAG BINNE (19:00)

<i>7de Laan</i>	Subtitles in English
VOORSETTING. THABILE HAAL SENUWEEAGTIG RINGE AF, GEE VIR ROWER. SELLO IN, STEEK VERSKRIK VAS. TERSELDERTYD STORM SEKURITEITSWAG MET REWOLWER IN. <u>SEKURITEITSWAG</u> Everybody, freeze. ROWER GRYP VIR THABILE, DRUK REWOLWER TEEN HAAR KOP. ALMAL GIL. <u>ROWER</u> (BRUTAAL) Stay where you are or I'll blow her head off. <u>SELLO</u> (PANIEKERIG) Hey guys. Hang on. Let's all be cool. (AAN WAG) Hold it. Just drop your gun. WAG PLAAS WAPEN OP VLOER. <u>ROWER</u> Who the hell are you. <u>SELLO</u> (PLEIT) I'm her husband. Please don't hurt her.	<u>ROBBER</u> I said, everything. <u>SECURITY GUARD</u> Freeze! <u>ROBBER</u> One step closer and I'll blow her head off! <u>SELLO</u> Please. Let's all be cool. Please put the gun down. Gun down. <u>ROBBER & SELLO</u> - Who are you? - Her husband. Please don't hurt her.

SELLO WIL NADER, ROWER PLUK THABILE STYWER VAS. <u>ROWER</u> One step closer and she's history. And I mean it. <u>SELLO</u> (KALM, PLEITEND) I believe you. Listen, you can take everything. Here's my watch. And my cell phone. And my wallet. Just let her go. SELLO GOOI ALLES OP TAFEL. ANDER ROWER GRYP DIT. <u>ROWER</u> Let's go. ROWER STAMP THABILE DAT SY TREK, STORM UIT. THABILE VAL IN SELLO SE ARMS.	<u>ROBBER & SELLO</u> One step closer and she's history. - I mean it! - I believe you. <u>SELLO</u> Take everything. My watch, my cell. My wallet. Just don't hurt her. <u>2nd ROBBER</u> Let's go!
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(Danie Odendaal Produksies, 2001:32).

In the first scene, the action is fast-paced as the robbers move around quickly to get what ever they can. Additional subtitles could indicate that the people in the restaurant do react to the robbers' demands by screaming and huddling together. In the second scene, when the principle robber grabs Thabile not only does he put his gun to her head but he also yells for Sello not to move closer. This scene could have become difficult to follow if for example, there were too many shot changes, between the robber and Sello, that did not give Deaf viewers sufficient time to follow the subtitles while simultaneously trying to watch the action on-screen. Should a shot have been fired in the room without a zoom-in, it would have also been difficult to identify who was shot. Therefore, any sound effect that becomes apparent in the subsequent action must be subtitled in order for the Deaf viewer to access the full content of the scene.

The informing principle behind these examples is important but it is equally important not to detract hearing viewers from their viewing experience. Therefore, subtitles should indicate that there is expressive dialogue being delivered, that this dialogue has been edited, that characters do deliver dialogue in different languages, and that there is interaction between characters as shown by shot-changes. Deaf viewers need to comprehend what is going on in the scene and programme as a whole.

4.4.3. Sound effects

In the following scene of episode 255 of *7de Laan*, Leon pauses several times. He does seem disorientated and Deaf viewers may be unsure of what is happening as there are no subtitles. Leon checks his answering machine but nothing happens. He pauses momentarily and the close-up on his face shows doubt. Unless the Deaf viewer is aware of Leon's deteriorating condition, without subtitles there is no indication as to why Leon is stopping; is he listening intently for a noise off-camera?

LEON LOFT	NAG BINNE (21:00)
<i>7de Laan</i>	
LEON IN VAN AGTER MET BAGASIE. SIT DIT NEER, TEL SLEUTELS OP, SIT ANTWOORDMASJEN AAN, WIL LAMPE AFSKAKEL, STOP, STAAN ROERLOOS. GAAN SIT OP BANK, STAAR VOOR HOM UIT, DUIDELIK GEDISORIËNTEERD.	
SLOTTITELS	

(Danie Odendaal Produksies, 2001:40).

The credits follow as there are no other scenes after this one. If there are no subtitles or if there is no explanation as to what is happening in this scene, a Deaf viewer may experience "false alarm" (as discussed in 2.5.5). When there is silence an explanatory subtitle should be used, for example: [LONG PAUSE]. Deaf viewers will not feel frustrated in thinking they have missed out information.

Clearly, not every sound effect needs to be subtitled as evidenced in the following scene of episode 257 of *7de Laan*. From the context, the Deaf viewer will gather that Amanda has been disturbed by a noise as she emerges from under the covers and answers her telephone:

OPPIEKOFFIE

DAG BINNE (09:30)

WILMIEN STAAR WEER NA FOON. BESLUIT.
HAAL PAPIERTJIE UIT SAK, SKAKEL.

FIDJI/OPPIEKOFFIE

DAG BINNE (09:30)

<i>7de Laan</i>	Subtitles in English
FOON LUI. AMANDA TEL OP, DEUR DIE SLAAP.	
<u>AMANDA</u>	
Hallo...	
<u>WILMIEN</u>	<u>WILMIEN</u>
Hallo Ma, dis ek.	Hallo [<i>sic</i>], Mom. It's me.
<u>AMANDA</u>	<u>AMANDA</u>
(VERBAAS)	Wilmien.
Wilmien.	
<u>WILMIEN</u>	<u>WILMIEN</u>
(PROBEER LIG HOU)	
Skyn die son lekker in Fidji.	Is the sun shining in Fiji?
<u>AMANDA</u>	<u>AMANDA</u>
Die son. Wat praat jy. Dis net voor middernag.	The sun? It's in the middle of the night.
<u>WILMIEN</u>	<u>WILMIEN</u>
Sorrie. Ek het skoon vergeet.	Sorry. I forgot.
STILTE.	
<u>AMANDA</u>	<u>AMANDA</u>
Dis niks. Ek's bly om van jou te hoor. Ek het al gewonder of jy okei is.	It's nothing. I'm glad.

In the following scene of episode 257 of *7de Laan*, Hilda keeps herself busy when there is a knock at the door. Although the sound of knocking could be subtitled for the Deaf viewer in this scene, it will be more important for Deaf viewers to watch Francois as he moves about trying to figure out what Hilda is preparing:

HILDA WOONSTEL	DAG BINNE (17:00)
7de Laan	Subtitles in English
HILDA NEURIE TERWYL SY WERK. KLOP AAN DIE DEUR. <u>HILDA</u> Kom binne. FRANCOIS IN. <u>HILDA</u> Wat soek jy hier. Kom jy spioeneer. <u>FRANCOIS</u> Ek. Vir wat sal ek... HILDA WAG. <u>FRANCOIS</u> (TRAP KLEI) Daar's 'n gaslek iewers en ek moet kom seker maak dis nie dalk hier nie. <u>HILDA</u> Ek sou dit lankal agtergekom het. <u>FRANCOIS</u> Gas is 'n snaakse ding. Mens moet 'n neus daarvoor hê. <u>HILDA</u> Nou maar snuif en kry klaar.	<u>HILDA</u> Come in. <u>HILDA</u> What are you doing here? Spying? <u>FRANCOIS</u> Me? Why would I? <u>FRANCOIS</u> A gas leak. I'm just checking if it's here. <u>HILDA</u> I'd have known. <u>FRANCOIS</u> One must have a nose for gas. <u>HILDA</u> So sniff. Get it over with.

FRANCOIS SLUIP ROND EN SNUIF DIE LUG. HILDA KOOK VOORT. FRANCOIS RUIK AAN BAK MET PIESANGPUREE IN.	
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(Danie Odendaal Produksies, 2001:25).

In this final example, from a scene of episode 257 of *7de Laan*, Thabile is rather shaken by the robbery. Her body language indicates that she is nervous and easily frightened by the smallest noise. Like the previous example, there is a knock at the door. The impact of this knock, however, adds to the suspense as well as to the direct action that follows:

CHARMAINE HUIS		NAG BINNE (18:30)	
<i>7de Laan</i>		Subtitles in English	
KLOP AAN DIE DEUR. THABILE SKRIK.			
<u>SELLO</u>		<u>SELLO</u>	
Hey, girls. Open up. It's Sello.		Hey girls. Open up. It's Sello.	
CHARMAINE MAAK OOP. SELLO IN OOR NA THABILE, SOEN HAAR.			

(Danie Odendaal Produksies, 2001:28).

Although there is an anti-climax once Thabile is relieved to know who it is, it is necessary to indicate that someone is off-camera and knocking at the door. In order to continue the element of suspense it is not necessary to indicate who is speaking off-camera right away. The central concern here is to make subtitles as unobtrusive as possible because sound effects are not visible from the action on-screen and need to be subtitled for Deaf viewers.

Additional subtitles could allow Deaf viewers to have greater access to the content of *7de Laan* as seen in the examples presented above. In order to determine how Deaf and hard-of-hearing viewers could better access the content of programmes such as *7de Laan*, consideration was given to the appearance on screen (visibility of speaker) category, the comprehensiveness

of information category, and the sound effects category. All categories however will be discussed in following section with the purpose of presenting open subtitles specifically for Deaf and hard-of-hearing television viewers.

4.5. A model for optimising open subtitles for Deaf and hard-of-hearing television viewers in South Africa

4.5.1. Appearance on screen

- ◆ Positioning of subtitles: towards the bottom of the screen; subtitles should either be consistently left-aligned or centred in order not to detract from the focus. Hearing respondents that participated in the focus group discussions (when the SABC (2000) considered putting subtitles on *7de Laan*) suggested that if the subtitles were centred then they could “watch the actors’ faces and read the subtitles at the same time” (SABC, 2000) as, for them, it would be easier to focus on who is speaking. Deaf audiences need to co-ordinate the appearance of the subtitles with the source of the speaker. In other words, they want to know where the speaker is on-screen in relation to the subtitling.
- ◆ Text display: subtitles should be highly legible with clear lettering and clearly visible against all backgrounds. Subtitles should also be presented in a font which is easy to read in order for the Deaf viewer to know precisely who is speaking, whether there are speaker(s) off-screen, and when there is a speaker narrating off-camera.

Moreover, each subtitle “flash” should comprise a single complete sentence and subtitle text must also be distributed from line to line and page to page in “linguistic units” or “idea units”, “sense blocks” and/or “grammatical units”. In addition, the number of lines in any subtitle must be limited to two. The upper line and the lower line of a two-line subtitle should be equal in length and wherever two lines of unequal length are used, the upper line should be shorter in order to keep as much of the

image free as possible. The volume of information that is condensed and then subtitled should be presented within the number of lines proposed so as not to interrupt the viewing experience of both Deaf and hearing viewers.

- ◆ Display time and text characters: the subtitler will have to consider how long subtitles must stay on-screen in order to be read by different Deaf viewer groups as well as the character limit for each subtitle line. It is important to allow Deaf viewers to have adequate time to read subtitles while following other visual cues and action on-screen. Further research will need to be conducted in order to determine the display time and text characters for different Deaf viewer audiences.

4.5.2. Comprehensiveness of information

The comprehensiveness of information will, among other things, be determined by the volume of information that is condensed in relation to the 'types' of programmes that are watched by different audience groups. The comprehensiveness of information will, therefore, largely be influenced by the extent of editing of information that is presented, in the case of this study, to the Deaf viewer.

Even though the text may be condensed, subtitles should be precise and convey information which will be easily read by Deaf viewers. A greater emphasis should, thus, be placed on the meaning and content that is conveyed due to the fact that the Deaf do not have access to the soundtrack. For this purpose it will be necessary to insert additional subtitles. Each subtitle should therefore be semantically self-contained, all idiomatic and cultural nuances should be considered, and the language in which subtitles are presented should be grammatically correct.

4.5.3. Reading speed

Within the Deaf community itself there are sub-categories, such as the prelingually Deaf, postlingually Deaf, and the hard of hearing with a wide range of reading proficiency. Therefore, it is plausible that reading speeds will differ and that viewer reading habits and speeds will need to be observed and identified for each viewer group.

There are certain features considered to have a marked effect on reading (as discussed in 2.5.3). The reading speed of the intended audience has to be taken into consideration in relation to aspects such as the speed at which subtitles are displayed, the time at which subtitles appear after the onset of speech, the number of shot changes occurring with a subtitle, and the extent of editing. Reading speed will also be influenced by whether a speaker is on- or off-screen, and the subject matter of a programme.

Not only is it difficult to identify the reading speeds for Deaf viewers but hearing loss is "an effective predictor of reading ability" (de Linde & Kay, 1999:12). Although research has been conducted⁴⁹ "deaf people do not read written text as quickly as hearing people" therefore a longer subtitle display time is often needed (de Linde & Kay, 1999:12).

According to de Linde and Kay (1999:12) Deaf people are at a disadvantage as their reading levels are "lower than average" and their "breadth of knowledge is also restricted by a limited access to information throughout their education". Kyle and Pollen (1985) propose that Deaf people's reading speeds "vary according to the quantity and complexity of linguistic information in subtitles" as well as "the type of visual information on screen at any moment" (de Linde & Kay, 1999:6). Therefore, further research will need to be conducted in order to test reading proficiency and, put in place subtitled programmes that allow for adequate reading time.

⁴⁹ See, for example: *A proposed set of subtitling standards in Europe* (Karamitroglou, 1997); and *Viewer reaction to different television captioning speeds* (Jensema, 1998).

The objective is not to alienate the hearing audience but to present information in a timely manner in order for it to be read and comprehended by Deaf viewers. Thus, it is important to allow the viewer time to “read each subtitle and to watch the associated picture” (ITC, 1999:13). Further research will need to be conducted in order to investigate the correlation between the different reading speeds and the Deaf viewer’s ability to process and comprehend the volume of information that is presented to them, through open subtitles, along with the visual demands of the programme.

4.5.4. Sound effects

Any relevant sound effect, dialogue off-screen or other off-camera voices not immediately obvious from the visual action, should be subtitled. Sound effects that become apparent in the subsequent action or expressive dialogue that is critical to the meaning of the scene should also be subtitled. Sound effects should be subtitled where relevant and not where they would, for example, detract from the character’s dialogue or character interaction that is central to the scene.

4.5.5. Synchronisation and time

Subtitles must remain on screen long enough to be read by the intended audience who will also be trying to take in other visual information. When there is silence, an explanatory subtitle should be used so that Deaf viewers do not experience frustration in thinking they have missed out on what is going on.

The duration of subtitles should also adhere to a regular viewer reading rhythm and subtitles should match the pace of speaking as closely as possible. A longer subtitle display time may be needed for viewers who do not read written text as quickly as the average viewer, such as second language speakers, semi-literate viewers and the Deaf and hard-of-hearing. Subtitle lead times should therefore remain consistent throughout the programme.

4.6. Conclusion

Looking at the future, closed subtitling as proposed by Gottlieb (1998) and Ivarsson and Carroll (1998a) may one day allow viewers to choose their own subtitling style. Notwithstanding the "learning effects", viewers, when presented with subtitles, will "get experience in reading" as well as acquire new vocabulary (Koolstra, *et al.*, 2002:339-343). In different subtitling styles other languages and cultures will also be accessible to viewers.

In summary, subtitles should be highly legible and allow for Deaf viewers to identify speakers. The normally accepted position for subtitles is towards the bottom of the screen or centred. Deaf and hard-of-hearing viewers must also receive certain essential information which hearing viewers pick up aurally. As the Deaf and hard of hearing do not have access to the soundtrack of a programme, any relevant sound effect or dialogue off-screen and not immediately obvious from the visual action should be subtitled. The display time to read each subtitle and to watch the associated picture must also be sufficient. The reading speeds however of Deaf and hard-of-hearing viewers will have to be calculated in order to establish an accepted subtitle rate and lead time for this viewer group.

In future, specific subtitling needs will be better addressed once subtitling is more established across SABC TV. Deaf viewers will have improved access to the content of programmes once programmes are adequately subtitled. It will also be important to standardise and apply subtitling guidelines for subtitling programmes consistently. Therefore, it is important that further research be conducted in order to determine additional parameters (also evident in closed subtitling) that may be applied to open subtitling. This should be done, not only to ensure that Deaf and hard-of-hearing viewers in South Africa have optimal viewing and improved access to information but also to allow for the possibility of other television viewers to be better informed.

CHAPTER 5: CONCLUSION AND AVENUES FOR FURTHER RESEARCH

5.1. Introduction

...through subtitles, the deaf can actively follow any kind of television program [sic], they can make proper remarks and discuss with hearing people about what they have watched together, being able to judge the quality of the selected programs with competence and full knowledge (VOICE, 2000/2001).

Dias (2001:4-5) found that "the most popular hobby or social activity amongst the deaf community is watching television" and it was recommended that South Africa's public service broadcaster, the SABC, "attempt to make this activity as deaf friendly as possible". In addition, the survey found that Deaf programming could be achieved by means of signing programmes and subtitling programmes for Deaf and hard-of-hearing viewers. Kruger, *et al.* (2000:88/89) propose that the "large-scale introduction of subtitling" would not only make a significant contribution in providing programmes that are entertaining to Deaf viewers but also provide increased access to information.

Subtitling is viewed as one of the principal means through which the Deaf and hard of hearing are able to access information, which is presented on screen. Deaf and hard-of-hearing individuals rely greatly on programmes that are subtitled in order to acquire information or entertainment (in addition to programmes that are signed). Therefore, in order to accommodate the Deaf and hard-of-hearing viewer, research was conducted for the purpose of finding ways of how this viewer group can access any type of information, for example, through the optimal use of open subtitles. The aims set out in Chapter 1 were thus achieved as follows:

5.2. Chapter 2: Subtitling parameters

The aim of Chapter 2 was to determine the parameters for open and closed subtitling. For this purpose, subtitling and terms relating to subtitling, such as open and closed subtitling and subtitling parameters were defined and

discussed. For the purposes of this study, this discussion provided for the following working definition for subtitling:

Subtitling is dialogue which is transferred into visible text. This text is representative of what is being said on screen and appears for everybody to see. It is, thus, intended for the Deaf as well as the hearing television viewer.

Subsequently, an overview of the international scene was given. This overview included examples of countries such as Australia, Canada, the UK, and the USA, that implement legislation that provides some structure for the volume of subtitling and subtitled programmes broadcast for Deaf and hard-of-hearing viewers in each country.

In this section, reference was also made to two guides for closed subtitling, namely the *ITC Guide on Standards for Subtitling* (1999) and the *BBC Subtitling Guide* (1998). These documents are examples of comprehensive guides for subtitling and provide structures for the way information is presented to Deaf audiences. The *ITC Guide* (1999) and *BBC Guide* (1998) were analysed in terms of the following categories:

- ◆ Appearance on screen
 - ◆ Speaker visibility
 - ◆ Positioning of subtitles
 - ◆ Text display
 - ◆ Display time and text characters
- ◆ Comprehensiveness of information
- ◆ Reading speed
- ◆ Sound effects
- ◆ Synchronisation and time

5.3. Chapter 3: The subtitling needs of South African Deaf and hard-of-hearing television viewers

The aim of Chapter 3 was to determine the subtitling needs of the Deaf and hard-of-hearing television viewers in South Africa. For this purpose, it was necessary to define the Deaf and hard-of-hearing television viewing

community. It was found that the Deaf community itself is made up of those members who are born deaf (prelingually Deaf) and those who lose their hearing later in life (postlingually Deaf). Therefore when this study referred to the Deaf and hard of hearing, it referred to a group of people who do not have access to the soundtrack of any programme because of various levels of hearing impairment and who may not comprehend language structures to the extent a hearing person would.

This chapter also looked at the 'types' of programmes and public service the SABC's Public Broadcasting Service channels (SABC1 and SABC2) are broadcasting and providing Deaf and hard-of-hearing television viewers. Findings were presented from a survey that was conducted by the SABC (Dias, 2001) as well as a survey conducted by Kruger, Verhoef and Kotze (2000).

The subtitling needs of Deaf and hard-of-hearing viewers were further determined by analysing responses given to open-ended questions, in a general questionnaire, for the informal survey compiled for this study. The subtitling needs identified in the survey by Dias (2001) and Kruger, *et al.* (2000) as well as in the informal survey used in this study include the following:

- ◆ Speaker visibility.
- ◆ The positioning of the subtitles.
- ◆ Adequate reading speeds.
- ◆ The comprehension of content.
- ◆ The volume of information translated.
- ◆ The languages into which the information will be translated.
- ◆ The extent of editing.
- ◆ The subtitling of music, sound effects and off-screen voices.
- ◆ Adequate subtitle rates and lead times.

The primary aim with the informal survey was to obtain information regarding the viewing needs of a sample of Deaf television viewers as well as to determine whether open subtitles make it possible for these Deaf respondents to access subtitled material (questions were related to the subtitles of SABC2's *7de Laan*).

5.4. Chapter 4: A model for optimising subtitling for Deaf and hard-of-hearing television viewers in South Africa

The aim of Chapter 4 was to propose a model for optimising subtitling in the broadcasting industry in South Africa for the benefit of Deaf and hard-of-hearing viewers within the limitations posed by open subtitles. This was achieved through a synthesis of the analysis of the parameters of open and closed subtitling and the subtitling needs of Deaf and hard-of-hearing television viewers. In addition, the subtitling needs of Deaf respondents of the informal survey were also incorporated into the categories that were identified after the analysis of the two guides.

5.5. Conclusion and avenues for further research

Subtitled programmes and subtitling as a mode of communication provides Deaf audiences with information which the hearing viewer picks up aurally. As subtitled television is a medium for accessing this information, the way in which information is presented to Deaf and hard-of-hearing viewers becomes important to consider.

Subtitling is an additional mode of communication to sign interpreting and lip-reading and although both hearing and Deaf and hard-of-hearing people benefit from open subtitles, closed subtitles take the specific reading difficulties of the Deaf into consideration. Research will therefore need to be conducted in order to measure the extent to which Deaf and hard-of-hearing viewers, in fact, comprehend the content of a programme and follow the story because of subtitling. It will also be necessary to determine the reading speeds as well as the speed at which subtitles should be displayed, in an effort to allow adequate reading time.

In order to arrive at a basic model for optimising open subtitles for Deaf and hard-of-hearing television viewers in South Africa, overlapping categories from parameters for closed subtitling as well as the subtitling needs of Deaf

viewers had to be discussed and analysed. A summary of this model can therefore be represented as follows:

Category	Guidelines
<u>Appearance on screen</u>	
♦ Speaker visibility	• Indicate speakers when there is confusion by: - using colours. - inserting character-name labels. - labelling the source of the speaker. • Indicate an off-camera speaker by using arrows or symbols. • Indicate the way a character speaks by using brackets.
♦ Positioning of subtitles	• Indicate the source of individual speakers by indenting text dialogue. • Position subtitles at: - the bottom of screen. - centred. - left-aligned.
♦ Text display	• Present legible text with clear lettering. • Present text as a single complete sentence. • Limit the number of subtitle lines to two. • Display the upper line shorter than the lower line. • Use single quotes to indicate thoughts. • Use double quotes to indicate reproduced speech such as quotations from a book, background dialogue, radio announcements, loudspeakers, etc. • Use text in brackets to indicate whispered speech or asides.
♦ Display time and text characters	• Consider how long subtitles need to appear in order to be read by viewers. • Consider the character limit for each subtitle line.

<u>Comprehension of information</u>	• Consider the volume and quality of information that will be translated and condensed. • Construct adequate subtitles that will convey necessary information as well as precise meaning. • Co-ordinate speaker and text. • Edit text/speech. • Let subtitled text "appear segmented at the highest syntactic nodes possible" Karamitroglou (1997). • Allow a complete subtitle sentence to consist of "linguistic units" (ITC, 1999:8) or "idea units" (ITC, 1999:25). • Allow subtitles to be "semantically self-contained" and grammatically correct, and consider cultural nuances (Ivarsson & Carroll, 1998a).
<u>Reading speed</u>	• Present information in timely manner. • Consider: - the different viewer groups. - the different reading speeds. - subtitle rates. - lead times. - shot changes. - extent of editing. - visibility of speaker. - subject matter.
<u>Sound effects</u>	• Insert an explanatory subtitle when there are no subtitles as viewers may experience "false alarm" (ITC, 1999:16). • Subtitle any relevant: - sound effect. - dialogue off-screen. - voices off-camera not immediately obvious from the visual action (songs, radio announcements, etc.).
<u>Synchronisation and time</u>	• Allow subtitles to remain on-screen long enough to be read by different audience groups. • Allow subtitles to adhere to the regular viewer reading rhythm. • Allow lead times to remain consistent.

In countries, such as Australia, Canada, the UK, and the USA, most programmes will be subtitled by 2010 as these countries implemented legislation for the volume of subtitling programmes for Deaf viewers. In contrast, South Africa does not have legislation specifically for subtitling programmes for Deaf and hard-of-hearing audiences. Moreover, the number of subtitled programmes that are broadcast across SABC TV channels are not subtitled with the Deaf viewer in mind and are insufficient to cater for the programming needs of Deaf and hard-of-hearing audiences. The persistent lack of Deaf programming and provision for Deaf audiences will therefore need to be addressed. Further research will therefore have to be conducted in order to identify Deaf programming that will meet the viewing needs of the Deaf community in South Africa.

Finally, in defining target audiences, such as the Deaf and hard of hearing or those that are less literate, and identifying the subtitling needs of different viewer groups it is more likely that adequately subtitled programmes will promote literacy, will not alienate hearing viewers nor exclude other viewers such as people with learning disabilities, people that are learning a second language, or children that are starting to read, from watching the same programmes. It will also be a matter of educating the general viewer, following a standardised set of subtitling guidelines, and updating and implementing requirements for subtitling programmes in order for television viewers such as the Deaf and hard-of-hearing, to have optimal viewing as well as improved access to information thereby allowing these individuals to be better informed.

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