

# Making film and television accessible to the blind and visually impaired

Research into the function of sound in audio description

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## Summary

Audio description (AD) is a way of making audiovisual products such as film and television shows accessible for the blind and visually impaired. During the pauses in the audio track, a voice-over describes the visual elements in the film.

In the Netherlands, audio description is a completely new discipline in a film's postproduction process. This means that very little information is currently available on the subject. Dutch audio described films (such as *Blind* and *Zwartboek*) are usually produced in collaboration with British companies, because the technique is much more widespread in the UK.

Among the AD productions that have appeared in the UK we can see clear differences in quality, in particular concerning sound quality. After analysing the current production process, certain techniques have been developed to improve audio description on the sound level. These improvements have been made in the area of voice-overs, recording technique, and mixing technique.

The implementation of these sound-related techniques has led to the following conclusions:

- Making the best possible quality voice recording using high-quality recording equipment will result in an AD track that is equal to the original soundtrack in quality
- By making volume adjustments to the separate stems when mixing the AD soundtrack, the function of the different sound layers in relation to AD is optimally employed
- Due to its spatial reproduction, surround sound is more suitable to render sound layers important to AD, such as ambience and sound effects.

In the meantime, the knowledge and financial means to provide Dutch films with audio description have become available. Now it is a question of familiarizing producers and directors with this technique that makes their films accessible to the blind and visually impaired.

As soon as TV shows in The Netherlands are audio described, the production process will have to be adapted to this new situation. Further research can provide an insight into what this specific production process could look like.

# 1 Introduction

Audio description (AD) is a technique that makes film and television accessible to the blind and visually impaired. This image description technique has become widespread in France, Germany and particularly in the UK and the US. A second audio track is added to the original soundtrack of the film. During the pauses in dialogue a voice-over describes the visual elements of the film, such as location, characters, facial expressions, movement, landscapes, settings and clothing. This allows the blind and visually impaired to enjoy audiovisual productions in the same way as an ordinary audience.

## 1.1 Terminology

The term audio description stands for the technique that makes film and TV accessible for the blind and visually impaired. The Dutch term 'audiodescriptie' is derived from the original English term.

In fact, audio description is as old as the seeing man telling the blind man about visual events in the world around them. The term audio description got its specific meaning when Margeret and Cody Pfanstiehl founded the Audio Description Service. This organisation occupied itself with the production of audio described plays in the US. During performances, a speaker would describe all visual aspects of the show. These performances were specifically aimed at a visually impaired audience.

When the idea crossed the pond to the UK, and later France, this form of accessibility quickly improved, with the Theatre Royal in Windsor being the first in the UK to use an infrared transmitter system to send the commentary straight to the listener<sup>[Lodge:2000]</sup>.

In the meantime, cinemas in the UK had started using live script readers<sup>1</sup>. The switch to transmitters was soon made, so it was no longer necessary to organise special screenings for the visually impaired.

Contrary to the UK, it is standard practice in the US to distinguish between the terms audio description and video description. The AFB (American Foundation for the Blind) says the following about the subject: (...) *any formal presentation of described information is known by the term "audio description." Audio description (...) has been used to make live theater, film presentations, dance performances, art exhibits, parades, and other events accessible to people with visual impairments. The term "video description" is reserved for description of videotapes or television programs.*

In the Netherlands, the term 'audiodescriptie' was introduced with the release of the film *Blind*. The term is often found confusing, because it can be interpreted as the 'description of audio', while it is actually the description of images or film. However, because the word 'descriptie', which means 'description without interpretation', conveys exactly what audio description is about, this remains the most logical term to use.

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<sup>1</sup> Person who reads out the AD script in the cinema

## **1.2 Motivation**

In the Netherlands, audio description is a completely new discipline in a film's postproduction process. With the release of *Blind*, the first Dutch film provided with a soundtrack including AD, the technique has garnered public attention.

With the introduction of AD, there is a rising demand for professionals familiar with the technique. But there are currently very few people with professional knowledge of AD in the Netherlands. This is further illustrated by the fact that most activities related to Dutch AD productions have been outsourced to British companies.

As mentioned earlier, audio description is more widespread in other countries, but even there it is still a relatively new technique that is still in full development. The AD productions that have previously been released in the UK (see enclosure III) differ greatly in quality, especially on the level of sound quality.

## **1.3 Objective**

The objective of this practical research is to improve the knowledge of audio description in the Netherlands, so the technique can be perfected on the sound level.

## **1.4 Research method**

In the first research phase, information for the study was gathered by means of document analysis, meaning the consultation of several sources. With the help of this information, the feasibility of the intended objective could also be assessed.

In order to map out the production process of AD soundtracks, research in the form of professional visits to specialized London companies was conducted.

After analysing the current production process, certain techniques were developed to improve AD on the sound level. This knowledge was used to produce the AD soundtrack of *Zwartboek* (international title: *Black Book*) and the sound mix of the AD soundtrack of the *Blind* DVD.

The empirical part of the research contained an evaluation of the production process and the application of the adjusted production techniques, supplemented with the comments of users that have experienced and rated the abovementioned Dutch AD productions.

Because the research data were also partly subjective, the research also took the following elements into account<sup>[Harinck:2006]</sup>:

- Empirical research
- Methodical and systematic method
- Provability
- Conclusions carefully related to obtained data

### **1.5 Central question**

- Which adjustments to the production process would be able to improve audio description on the sound level?

#### Research questions

- Is the hearing of the blind and visually impaired significantly different to that of people who are not visually impaired?
- What are the applications of audio description?
- What does the current audio description production process look like and what role does sound play in it?
- Why are the current productions so different in sound quality?
- What is the function of separate sound layers of a soundtrack in relation to audio description?
- What sound characteristics should the audio description voice-over have and how can these be achieved?
- How do the blind and visually impaired experience audio description?



## 2 Profiling the target audience

### 2.1 Types of visual impairments

#### Blindness

Visually impaired people have a limited sharpness of sight or a limited range of vision. In this category, you will find the following subcategories:

- Visually impaired
- Severely visually impaired
- Socially blind
- Blind
- Completely blind

People who are completely blind are not sensitive to light. Some blind people can distinguish between light and darkness. Apart from that, there are also blind people who have a remainder of vision, but who orient themselves non-visually. In the visually impaired category, a distinction can be made between the severely visually impaired (people who orient themselves visually, but who are dependent on Braille) and the visually impaired (who orient themselves visually and can read visual writing). The norms and descriptions differ in every country<sup>[<http://nl.wikipedia.org/wiki/Blindheid>]</sup>.

#### Social blindness

We talk about social blindness when the sharpness of sight is 1/30 of the average or when a person has a range of vision of less than 10%. The former is already the case when vision is lost in the macula, the part of the retina with the sharpest vision. Social blindness means that you cannot perform normal professional activities. In less severe cases we talk about visual impairment, and a relatively normal social life is often still possible.

It should be noted that the personality of blind people is much less affected than that of deaf people, who tend to be socially isolated. Society is also more tolerant towards the blind. The deaf are usually conceived as difficult.

#### Visual impairment

We talk about visual impairment when the viewing ability is severely reduced. In some cases glasses can help, but the sharpness of sight remains reduced. There are legal norms that determine whether someone is visually impaired. If someone has a sharpness of sight of maximum 30% or if someone has a very limited range of vision, this person is considered visually impaired. Sharpness of sight of less than 30% means that the visually impaired person can only see something when it is at a distance of 30 metres, while somebody with a regular sharpness of sight would already be able to see this object at a distance of 100 metres.

#### 2.1.2 Numbers and statistics

There are currently 320,000 blind and visually impaired people in the Netherlands, 45,000 of which are blind. A study by Vision 2020 Netherlands shows that twice as many women as men are visually impaired. About 85% of people that are visually impaired are 50 years of age or older. The most common causes of visual impairment and blindness are glasses with the wrong correction, damage to the retina, eye diseases linked to diabetes and glaucoma (damage to the optic nerve by increased intraocular pressure). The number of blind and visually impaired people in the Netherlands is expected to rise to 440,000 by 2020<sup>[[oogfonds:2006](#)]</sup>.

Detailed data is not available for Belgium, but an estimate based on the results of several studies shows that there about 13,000 blind people and 115,000 visually impaired people in Flanders<sup>[Visueel gehandicaptten – Doelgroeponderzoek:1997]</sup>.

## **2.2 Hearing ability of visually impaired people**

The hearing of visually impaired people is not better than that of others, but is used more optimally and is more trained, because the lack of visual information has to be compensated as much as possible.

Because the blind and visually impaired deduce a lot more information from surrounding sounds in their daily life, they are more capable of recognizing sounds in a noisy environment generally speaking. Orientation and sound localization<sup>2</sup> is essential for these people. In general, you could say that elements such as perception of volume and of the sharpness of the time interval are naturally more developed in the blind and visually impaired<sup>[Sliss 1996]</sup>. Blind and visually impaired people are usually also capable of determining certain character traits by the sound of someone's voice.

### **2.3.1 Users of audio description**

The composition of the user group that AD is aimed at is very diverse. Just like other film and TV users, they have different interests, preferences, and a varying amount of free time. They represent all layers of the population with the accompanying differences in age, education, income, ethnicity, etc. On top of that, the group of visually impaired people consists of people with a varying degree of visual impairment, ranging from people who only have trouble reading screen titles or subtitles, to those who cannot see anything at all. A large group does, in fact, use the screen as a reference, and this should be taken into account in the AD soundtrack<sup>[Packer:1997]</sup>.

Because film and television, as well as other visual media such as the Internet, take up a prominent place in today's society, most blind and visually impaired people already make use of them. But in practice, it is usually necessary for a friend or family member to explain what is happening on screen.

### **2.3.2 Potential users**

Apart from the user group consisting of visually impaired people, there is still a large group of people that could make use of AD. Because there are plenty of non-visually impaired people that do not want to be bound to a TV screen. A study on our TV-watching habits<sup>[ITC:1995]</sup> consisting of interviews with more than a 1000 participants showed that 39% of viewers often or regularly 'watch' TV while doing other things (cooking, eating, reading the paper, ironing, knitting, etc.).

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<sup>2</sup> Sound localization is the ability of a man or woman to not only identify the strength of a sound, but also the direction which it is coming from <sup>[<http://nl.wikipedia.org/wiki/Richtinghoren>]</sup>

## 3 Applications

Audio description is used in combination with several image and sound mediums. This chapter discusses the application possibilities for each medium and elaborates on the underlying technique.

### 3.1 Cinema

The AD system for cinema offers the blind and visually impaired the possibility to enjoy a cinematic release together with the rest of the audience. With the help of a wireless transmitter the listener receives the audio description in a special headset that is provided before the film begins. This means that the AD user listens to the sound from the film itself and only receives the AD through the headset.

Since the 28<sup>th</sup> of February 2007, City/Movies Utrecht, part of the Wolff cinema group, is the first Dutch cinema to offer this service. By now, the number of cinemas that is suitable for AD has been expanded to four, with the intention to equip more cinemas with the required technology in the near future.

In the UK, there are currently two hundred cinemas equipped with AD technology. Eighty cinemas use the Dolby ScreenTalk system. The other hundred and twenty use the DTS<sup>3</sup> offshoot DTS-CSS.

#### 3.1.2 Dolby ScreenTalk

The AD track is an addition to the original movie soundtrack, and is not included on the actual film reel because the regular audience should not hear the description. In order to have the AD track roll synchronously with the film soundtrack, Dolby has developed a special system: Dolby ScreenTalk.

The Dolby ScreenTalk system is connected to a PC running Linux-based Dolby software. The AD track is loaded onto the PC's hard drive. The AD track has to be in the TAR format (further explained in chapter 4.1.8 on p. 19) and can be provided on CD-ROM. Aided by the time code information from the Dolby Digital film soundtrack the ScreenTalk system is synchronized with the original film soundtrack. The ScreenTalk system is directly connected to the cinema's transmitter system. On top of that, the system can also project subtitles for the deaf and hearing impaired, using different colours for each character in a dialogue.

The price of Dolby ScreenTalk is situated around € 3500, without VAT. The price of the PC and the transmitter system are not included.

#### 3.1.3 Digital Cinema

Digital Cinema, the system that employs digital projection and better sound quality in the cinema, will eventually replace analogue 35 mm film. This will also make the use of ScreenTalk redundant. Just like other digital systems, Dolby's Digital Cinema system is equipped with at least eight separate audio channels. Apart from the six channels required for the 5.1 soundtrack, there are two channels that can be used freely. This means that one of these tracks can be used to send the AD track to the wireless transmitter system.

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<sup>3</sup> Digital Theater System, system for digital multi-channel sound and Dolby's counterpart. More information can be found on <http://www.dts.com/digitalcinema/dtsaccess/dtscss.php>

### 3.1.4 Transmitter systems and listening

Dutch cinemas use Sennheiser transmitter systems. The receivers are of the EK 1038 (Tourguide Receiver) type. The receiver is equipped with a single control knob, which switches on the device as well as regulating the listening volume. This is a high-quality system, especially when compared to systems of lesser quality such as Williams Sound that are commonly used in the UK.

Headphones of the Guideport GP 03-M type are used for listening to the AD. The model, which can be placed behind the left or right ear, is a lightweight cup that is clasped against the ear, yet does not completely seal it off, so the sound of the film can still be heard. The fact that the headphones are open does, however, have one disadvantage. Because the listener can determine the volume of the AD him/herself, the AD can often be heard by other cinemagoers. This gives the impression that people in the audience are whispering, which can be rather disruptive. The problem occurs because the AD track has a constant volume. The balance with the other audio is made by the listener him/herself, meaning that when a loud passage is followed by a quieter scene, crosstalk often ensues.

To solve this problem, the AD track should be adjusted more optimally to the film's volume, so that the voice over's description becomes louder during loud scenes. This way, the user will not have to adjust the volume the entire time. This means that the AD track should be mixed beforehand. This would also make it possible to limit the receiver's maximum volume, reducing the risk of crosstalk.

Another solution would be the use of closed headphones, which would render the original film sound track as well as the AD. The disadvantage of this would be that the listener is completely sealed off from the outside world, meaning that he would not be able to experience the cinema's surround sound. For this last problem, systems such as Dolby Headphone technology<sup>4</sup> could offer a solution, but this will undoubtedly bring about a large number of additional costs.

## 3.2 DVD

DVDs provided with an AD soundtrack make it possible for the blind and visually impaired to watch films in their own home. RNIB has previously released VHS tapes with AD, but the digital DVD technology has made it possible to add the AD sound track as an option on a regular DVD. Just like language options and commentary tracks, the AD track can be selected from the menu or when playing the movie.

It is remarkable that most English-language DVDs have a stereo *Audio Described Soundtrack* instead of a 5.1 version. This could be for production reasons (see chapter 4.1.6 on p. 18) or because of a lack of space on the DVD. The different audio formats and bonus material are commercially more interesting and often do not leave enough space for a 5.1 AD track. This is somewhat of a missed opportunity, as the blind and hearing impaired are entirely dependent on the audio aspect of a film. Multi-channel sound adds to a more intense movie experience and is more suitable to render determination of location and surrounding sounds.

Up to now, the AD soundtrack in the Netherlands has always been released in Dolby Digital 5.1. A positive evolution which should be upheld.

In the near future, the successors of DVD such as Blu-ray and HD DVD will also contain audio description, which solves the problem of lack of space, as these new mediums have much more storage capacity.

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<sup>4</sup> Dolby Headphone Technology produces a multi-channel sound experience for each type of headphones.

### 3.2.2 Spoken menus

To make these DVDs more user-friendly, more and more DVDs are provided with spoken menus. This helps the user to set up the different options and start the film.

The DVD of Blind goes even further and starts the film with AD automatically. At the beginning of the film there is an on-screen message saying that you have to press a function button on your remote control to hear the regular sound track.

### 3.3 Television

The first TV programmes with AD were broadcast in 1982 by the Japanese commercial channel NTV. The descriptions were added to the programme's regular sound, so all viewers heard the AD. Therefore, this open system was not suitable for primetime broadcasts. In the US, where the evolution of audio described television shows really took place, the Descriptive Video Service (DVS), part of the WGBH, Boston, has been making productions since 1990<sup>[Lodge:2000]</sup>. This service, which is mostly financed with donations and funds, produces six to ten hours of AD television a week, which can be viewed by 50% of American households with the Public Broadcast Service network. These broadcasts are possible because American cable TV disposes of an extra audio canal, called the Secondary Audio Programme<sup>[Cronin:1990]</sup>. The only problem is that the sound quality is not ideal, as the channel was not originally intended for this purpose.

In 1991 the Independent Film Commission (ITC) founded the Audetel consortium to study the possibilities of providing AD for European television programmes. In the first years, Audetel mainly occupied itself with developing and improving description styles for different kinds of programmes. At the same time, digital technology was developed to distribute the AD voice through the television network. When researching the target audience, special attention was given to an older audience, to make sure that the system also worked for people who were hard of hearing. Later on, Audetel was also closely involved in the development of a special computer-based software system that would greatly simplify the production process<sup>[Lodge:1992]</sup>.

At the moment, there is a law in the UK stating that 9% of primetime television has to be suited to the blind and visually impaired<sup>[RNIB:2005]</sup>. To receive AD broadcasts you should, however, dispose of a 'set-top box', which is delivered with every cable subscription in the UK. Apart from the Digital Video Broadcast (DVB) signal that is offered for free in the UK (comparable to the KPN's Digitenne in the Netherlands), the most common subscription is SKY. This will give you access to nearly all channels offering AD. AD can also be received by Astra satellite in combination with the right subscription. You can select the different audio tracks, including that with AD, using the set-top box's remote control.

In the Netherlands, TV programmes are not provided with AD yet. Most TV makers have not even heard of the term. Now AD has been introduced in a number of Dutch cinemas, we are one step closer to AD for Dutch TV. But making Dutch TV programmes suitable for the visually impaired requires government support and the close participation of several lobbies. Accessibility of television has been on the European agenda since 1997. The EU TV Without Frontiers Directive indicates that member states should make an effort to make television accessible to everyone. Recently online television has been added to that<sup>[European Commission:1997]</sup>.

Technically speaking, it is possible to broadcast described television programmes in the Netherlands, especially with the introduction of digital (cable) television and online television.

### **3.4 Audio film**

With the rise of a new audio culture<sup>5</sup>, audio storytelling is making a comeback. But not in the form of a radio broadcast at a set time, but as a CD available in the bookstore or as a podcast that can be downloaded<sup>[Frankenhuyzen:2006]</sup>.

Because of its auditory character, an AD soundtrack shows a lot of similarities with audio storytelling and is therefore ideal to listen to in the car or the train. This means that AD has the potential to reach a much wider audience than just the visually impaired.

An audio CD of Zwartboek is currently being made. This will be the first Dutch audio film.

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<sup>5</sup> Represented by the use of mp3s, online music stores, iPods, and websites such as MySpace and YouTube.

## 4 Production process

### 4.1 Production process in the UK

The ITC has composed a 7-step plan for creating audio description<sup>[Lodge:2000]</sup>. It is aimed at AD for television programmes, but can also generally be applied to film productions:

- Step 1 Choice based on the suitability of the programme genre
- Step 2 Watch the programme
- Step 3 Work out the script
- Step 4 Judge the script
- Step 5 Adjusting the sound level of the programme
- Step 6 Recording the voice-over
- Step 7 Judging the recording (screening)

During the professional visits to the IFTC and Red Bee Media in London, I got a good idea of the complete production process of AD. The different production methods are listed schematically in the diagram below.

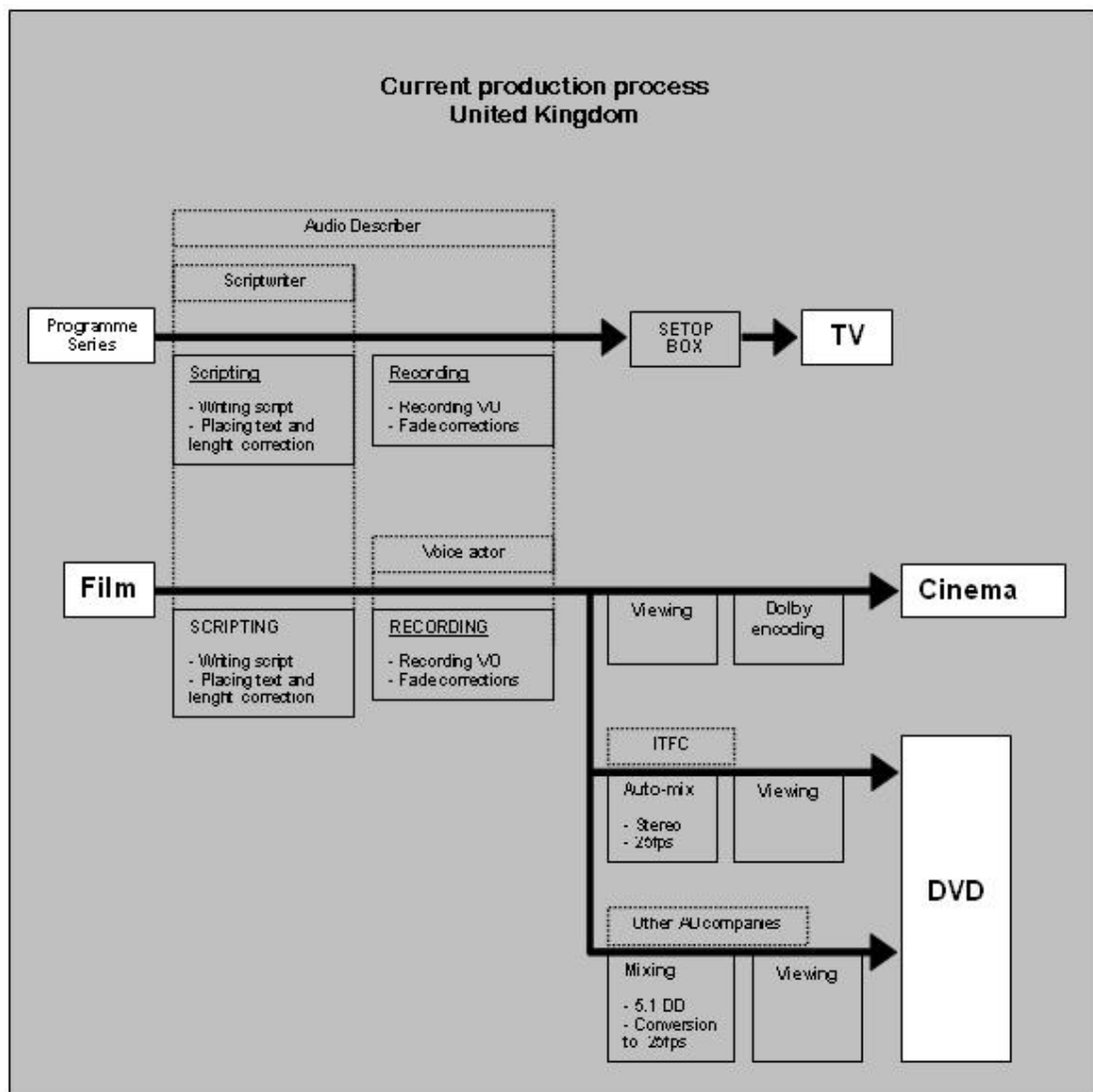


Figure 1: Schematic illustration of the current AD production process in the UK

### 4.1.2 Audio Describer

In the UK, AD is done by what we call Audio Describers. These people have been especially trained and are specialized in describing films and TV shows. The audio describer is responsible for the complete production process. Apart from writing an AD script, he also determines the place and the length of the text, makes the audio recordings, using his own voice in most cases.

Apart from Audio Describers, the AD departments of several postproduction companies in London also employ plenty of scriptwriters, who are charged with the writing of AD scripts. It sometimes happens that the voice-over recordings are made with professional voice actors.

### 4.1.3 Audio description software

To make the production process as efficient and low-cost as possible, software systems that have been especially developed for AD are used in the UK. This software makes it possible to load the image and indicate where you want to place the AD per scene. Every selection is linked to its own text window where the description that fits the action on screen can be entered. A timer bar at the bottom of the screen indicates how much text approximately fits in the selection. As soon as the maximum amount of characters is reached, the timer bar will turn red. It is always possible to play the selection (with an adjustable pre-roll), so that you can try out text simply by reading it out loud.

Apart from text editing, the software can also be used for voice recording. The system is designed in a way that all data that already has been entered can be loaded in the recording programme. Thanks to the time code information, all selections appear in the right place immediately and can be recorded piece by piece. When recording a selection you will hear a beep preceding it, just as with ADR<sup>6</sup> recordings. The programme will automatically start recording at the beginning of a selection (similar to the punch record function in a lot of sequence programmes).

What is important in the production of AD for television programmes is the built-in fade function. This muffles the original sound of the programme where AD is added. All separate audio files are exported as Broadcast Wave Format files (.BWF). The time code information and a fade-in and fade-out are enclosed in the audio file. The set-top box in the user's living room can determine the balance between the programme sound and the AD with the help of these fade files.

There are currently two software programmes for AD, which work almost exactly the same way.

#### *Softel ADePT*

The Softel software is used by ITFC, a company that specializes in AD for film and DVD. With more than one hundred films a year, it is the biggest supplier of AD in the UK. AdePT was the first software programme on the market, meaning it looks slightly old-fashioned, but it works perfectly and is very user-friendly.

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<sup>6</sup> Automated Dialogue Replacement or Alternative Dialogue Recording is part of a film's audio postproduction. Dialogues are re-recorded and replace the original on-set sound.



#### *Starfish Isis AD 6*

Starfish software is used by Red Bee Media, which specializes in AD for television and is the supplier of all AD for the BBC.

The programme has a more modern layout than Softel and is part of a subtitling software system. Its functions are slightly more limited, e.g. there is no timer bar indicating how much text fits in a created selection.

#### **4.1.4 Scripting**

The quality of AD depends greatly on the script. Because time between dialogues is often limited, the scriptwriter has to consider carefully what to describe and what not. Writing an AD script is particularly tricky if you consider that the target audience is very diverse. In general, users want to receive as much information as possible. But experience has shown that young users often prefer short, to-the-point information, while older people prefer a more describing form<sup>[RNIB:2005]</sup>.

Organisations such as ITC and RNIB are closely involved in improving AD. They develop guidelines for AD productions (for a complete overview of recommendations for AD productions, see enclosure II) and regularly perform studies regarding user experiences. Discussing and analysing all these script-related skills is not part of this project's research field, but information on the subject can be found in several publications of the ITC and RNIB (see the list of references). In any case, AD is still evolving on all levels, and more research is required.

An important evolution that has presented itself in the past years is the amount of text used. In the early years, the audio describer always tried to insert the maximum amount of information in between the dialogue. This often led to an overload of information – this is still common in North American AD productions. In the UK, the amount of text has been consciously sized down, so the voice-over can read out the AD texts at a calm pace. This makes the AD track much more enjoyable to listen to, while also making it easier to follow the film or programme.

#### **4.1.5 Recording**

The AD departments at ITFC and Red Bee dispose of several vocal booths in which the recordings are made (see figure 2). As said before, the audio describers often write the texts themselves, and use their own voice for the recording. A describer should therefore have knowledge of sound and recording techniques. In reality, this knowledge is often minimal. All describers in the department use the same set-up without ever making any changes to it. But of course the settings for gain, equalizing and compression can be adjusted. Men and women, young and old, each with their own vocal characteristics, use the same set-up, which is not ideal for the sound quality of the recording.



Figure 2: Vocal Booth at Red Bee Media

#### 4.1.6 Mixing

It is important that a description between the dialogues is clearly audible and not drowned out by other sounds. The balance between the original sound and the added AD should therefore be adjusted to each other.

Because cinemas use transmitters with headphones in combination with the auditorium's sound system, the AD track is adjusted so that the level of the voice is constant. With the help of the volume control, the user defines the balance himself. The sound of the voice is not equalized or compressed – just as during recording.

Television programmes use the previously mentioned fade files enclosed in the AD audio files (see figure 3). The settings for the fades (volume, attack and release) can be adjusted, but this is hardly ever done in reality. To save time, standard settings that make sure every description is clearly audible in every situation are used. As a consequence, you will hear other sound elements fading in and out constantly in loud scenes. In long continuous sections the essential information from the soundtrack is even lost.

It is understandable that this technique is commonly used for television programmes, because the budget for TV is much lower than for film, just as for ordinary sound postproduction. However, ITFC uses this technique in the mixing process of DVD releases of films. They have even developed software that automates the mixing process. The result is a stereo file that is checked for audibility of the descriptions – if there is enough time. The fact that the final AD track is edited into a stereo file means that the software is not capable of creating 5.1 files. ITFC says it is considering the development of a new version that supports 5.1 audio, but also indicates that this is not a priority.

Other companies currently producing AD tracks for DVDs in the UK do provide the AD soundtrack in Dolby Digital (5.1), because they make a special AD mix. But on the sound level this mix is still a lot like a TV mix. Contrary to ITFC AD tracks, the added value of the additional audio tracks that provide a more intense film experience remains intact.

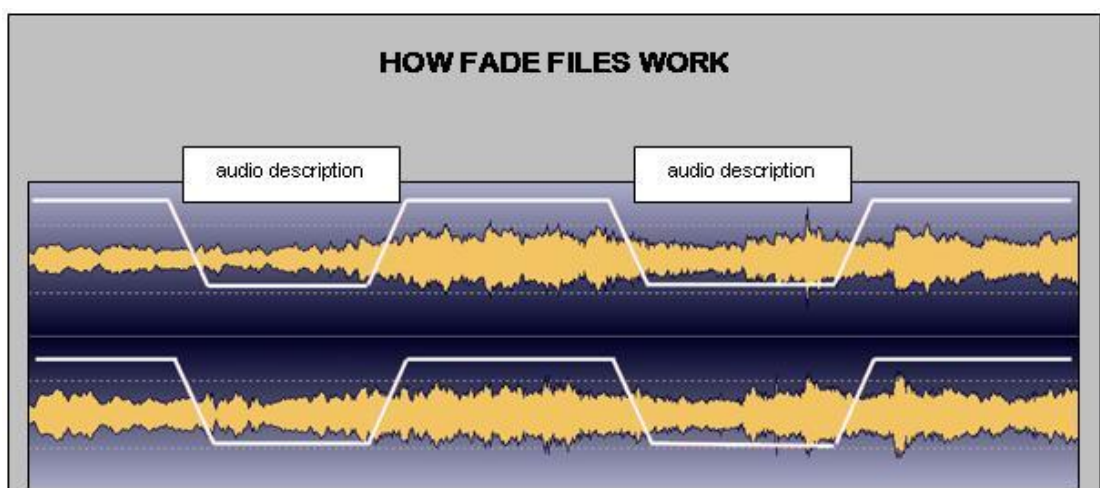


Figure 3: The white lines reflect the volume progress of the original (stereo) programme sound. Where AD is inserted, the original programme sound is muffled.

#### 4.1.7 Screening

As soon as the AD track is ready, it is rated and judged. For films, the screening is attended by all concerned parties, i.e.:

- Audio describer
- Head of the AD department
- Film producer
- Representative of the RNIB

This screening is less important for TV productions and the AD track is usually checked by a fellow describer.

During the screening, the judgment is usually made on the basis of the AD soundtrack combined with the image, meaning that the TV is on during the screening. This is actually quite strange if you consider that it is essential to take the visual impairments of the user group into account. There is a chance that certain information is deducted from the images, undermining the objectivity of the judgment.

Of course, this problem is easily solved by turning off the screen, but in reality this is rarely or never done. To get an impression of how the visually impaired with a range of eye disorders experience the AD production, the ITC recommends the use of simspecs (see figure 4).

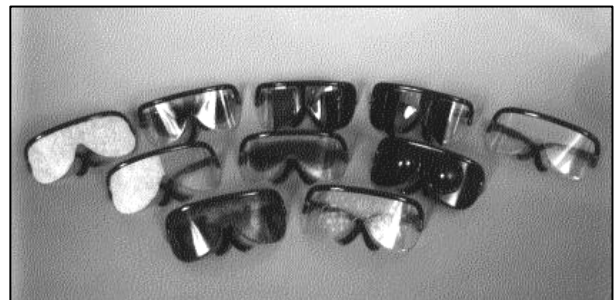


Figure 4: Various types of simspecs

#### 4.1.8 Dolby ST Media Master

Before the AD track can be played in the cinema with the Dolby ScreenTalk system, the files have to be converted to a readable format. It is possible to send the AD track to Dolby to convert the files, but postproduction companies can also do this themselves. Dolby Laboratories has developed a software application for this purpose: Dolby ST Media Master. This programme archives the separate audio files as a TAR file so it can be read by the ScreenTalk system. There are no licence agreements for the use of this Dolby software and sound playback on the ScreenTalk system. This means that AD tracks for cinema can be produced without the interference of Dolby.

#### 4.2 Production process in the Netherlands

The production process of AD soundtracks was first conducted in the Netherlands for the releases of *Blind* and *Zwartboek*. Because the AD production of *Blind* and *Zwartboek* took place in the time frame of my research, I was closely involved in the production process of both films (see figure 5 for a detailed diagram).

Because there is not enough knowledge in the field of AD scripts in the Netherlands, this job was outsourced to several UK companies.

Both the scripts of *Blind* and of *Zwartboek* were made by ITFC. The descriptions were exported with the accompanying time code from AdePT to a text document in order to send it to the Netherlands. The English AD script was then translated into Dutch (see enclosure I for an example). After the translation, plenty of changes had to be made because the English audio describers had often not understood the events in the

Dutch-language films. It also became apparent that English is much more compact than Dutch. During recording, it often happened that the translated English descriptions did not fit into the breaks between dialogues. A lot of changes to the script therefore had to be made during recording.

Contrary to the recording methods used in the UK, the voice-over recordings in the Netherlands were made with voice actors in sound studios specialized in film sound postproduction. On top of his recording task, the sound technician also played the role of vocal coach.

To make the resulting AD track suitable for Dolby ScreenTalk, the audio files were sent to the UK where they were converted with Dolby Media Master ST software by Dolby. This had to be done in the UK because the software was not yet available in the Netherlands. After I visited the Dolby Laboratories Factory in Wootton Bassett, I received a copy of the software programme, so in the future it will not be necessary to send the AD track to the UK to have it encoded.

Apart from the AD track intended for the cinema, an AD soundtrack for DVD has been made for both films. In chapter 5 you can read how they were produced and how they differ from UK productions.

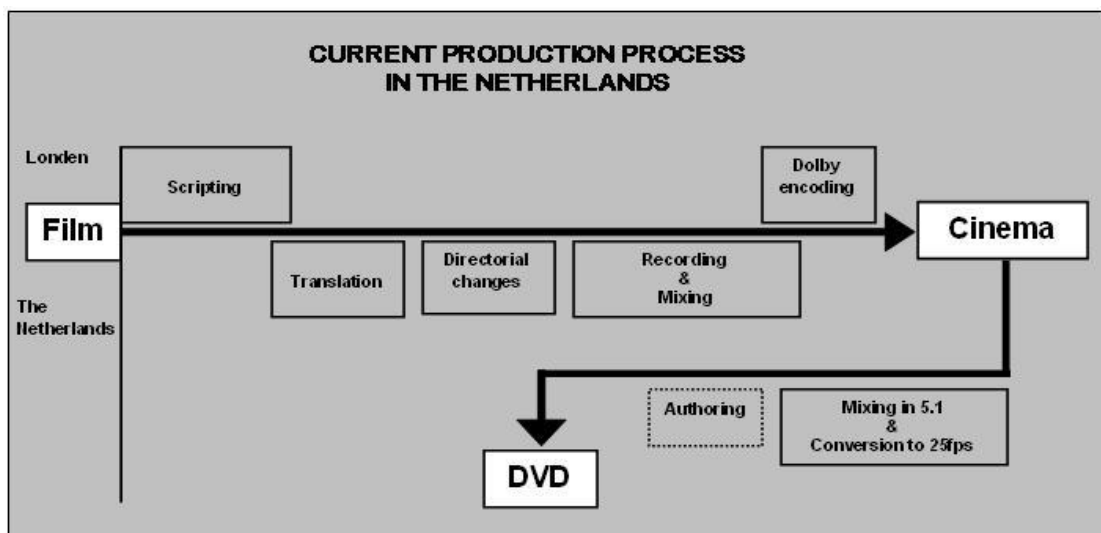


Figure 5: Diagram of the current production process in the Netherlands

### 4.3 Funding possibilities from the Netherlands Film Fund

Since the production of *Blind*, AD productions are funded by the Netherlands Film Fund. Film producers can include audio description as a separate cost in their budget. If the Film Fund decides to grant subsidies, the complete AD production is financed. In the case of *Blind*, the cost of AD was about € 3000. Since then, the Film Fund has informed the Nederlandse Vereniging van Speelfilmproducenten (NVS – Dutch Association for Film Producers) about the funding possibilities and will take further action to make filmmakers aware of AD.

## 5 Sound-related production techniques

After analysing the current production process, techniques have been developed to improve AD on the sound level. This knowledge was used for the production of the Zwartboek AD track (for cinema and DVD) and the sound mix of the AD soundtrack of the Blind DVD. This chapter will discuss the different types of sound-related production techniques that have been developed, leading to the improvement of AD sound quality.

### 5.1 The voice-over

The voice that reads out the description is essential to a good AD track. The blind and visually impaired attach a great deal of importance to the sound of person's voice. When a voice-over is not pleasant to listen to, this can be experienced as bothersome, which will distract the listener from the movie. The regular audience, which disposes of visual as well as auditory information, will not be as disturbed by a slip or a less audible fragment, because this is corrected by the visual information. The blind and visually impaired, however, are completely dependent on a consistent quality of the soundtrack and the accompanying voice-over.

Just like with normal film and television and television productions, choosing the right voice is essential. The timbre of the describer's voice should fit the film genre and should represent the specific character of the movie. Therefore, good voice casting is essential for AD. The choice of voice can make or break the production.

#### 5.1.2 Voice use

Apart from the voice timbre (voice casting) the way the voice is used (intonation, degree of empathy) is important to achieve a pleasant listening experience for the user. When recording Zwartboek (narrated by Derek de Lint), a lot of attention was given to finding the right use of voice. The extent of audible empathy was also experimented with. The question here was how involved the voice-over should be in the film. Good AD should fit the nature of the film and is discreet and neutral. But the describer should avoid sounding lifeless and monotone. For example, when a scene in a thriller is full of suspense, it is a good idea to reflect that tension in the description. If the film is working towards a climax of some sort, raising the voice slightly works well to convey this moment. Of course it is not the intention to make AD melodramatic; using an upbeat voice for comedy is allowed, but the describer will never laugh about what is happening on screen.

Another essential part is timing. It is best to describe situations before they actually happen on screen. This makes it easier to follow the film, because the listener does not have to think about what possibly could have happened on screen. In certain situations it works better to describe the action after it has taken place. When something unexpected happens, this is usually accentuated with sound – a technique often used in horror movies. The audience gets a shock from the impact of dead silence followed by loud noise. By not describing this moment beforehand the experience of the AD user is about the same.

When a professional voice actor is used for the production of AD, this certainly adds value. These people specialize in using their voice for professional means and are familiar with recording techniques. Voice actors are easy to direct and can make subtle changes to the sound of their voice when directed to do so. Because they control their voice so well, they can deliver consistent quality during an entire recording session.

### 5.1.3 Voice recording

The current quality of Dutch voice recordings for AD is much higher than UK recordings. For Dutch productions the recording sessions are made in sound studios specializing in sound postproduction. This means that these recordings are made with high-quality equipment superior to that used by AD companies in London. A big difference is that these recordings are made by professional sound technicians who attach a lot of importance to the optimal registration of the voice. The recording session is slightly less efficient though, because the recording software (ProTools HD) is not specifically aimed at making AD recordings, as opposed to programmes such as Softel and Starfish. On the other hand, the editing options for recording and mixing are much more varied in ProTools, meaning that the quality of the delivered product is higher. And even though special AD software is completely automated in order to make a recording as swiftly as possible, an experienced ProTools user will not need that much more time to make a recording.

## 5.2 Mixing techniques

The AD soundtracks on the DVDs of Zwartboek and Blind have been mixed in 5.1. For the mixing of Zwartboek, the six separate channels (left, right, center, sub, surround left and surround right) were handled separately from each other. The original soundtrack has not been muffled in its entirety in places with audio description – as is often done in the UK – but each channel's volume has been set independently from each other. It would often do to just muffle the left and right channel so the AD track (on the center channel) would remain audible. When the original sound on the center channel would disturb the AD, the volume of this channel could also be adjusted without this influencing the volume of the AD. The surround channels could often be left at their original volume, leaving the information on space and place intact.

A different method was used when mixing the AD soundtrack of the Blind DVD. This method is based on the function of the different sound layers of the film soundtrack in relation to AD.

### 5.2.2 Function of different sound layers

The soundtrack of a film comprises the following:

- Dialogue
- ADR
- Ambience
- Foley
- Sound Effects
- Music

#### Dialogue and ADR

The most important sound layer of the soundtrack is the dialogue. All spoken text is abstracted from the on-set sound, forming the dialogue layer. In certain situations the dialogue is replaced by newly recorded texts: ADR. To make things easier, we have considered the ADR layer as dialogue in this explanation.

Together with the image descriptions, the dialogue forms the basis for AD. The dialogue between characters often moves on the story. The voice of a character can also help determine the personality of that character, as well as the space the character is in. The AD track completes this information. Dialogue always prevails over other sound – just like on the original soundtrack. The AD track is always subordinate to the dialogue.

### Ambience

The setting of a scene is often built up in different layers of surrounding sounds. The ambience gives a clear idea of different locations that appear in the film. Even without visual information, it is possible to derive whether the scene is set inside, outside, at the beach or in the middle of the city. To convey the surroundings as realistically as possible, this sound layer is often divided over several sound channels. This makes this sound layer an essential part of AD.

### Foley

All sounds indicating human movement fall in the Foley category. Examples are footsteps, clothing, but also sound produced by the use of objects. Foley is usually added to enrich the soundtrack, providing that typical movie sound. Foley sounds give the AD user additional information about what is happening on screen. These sounds make it possible to reduce the number of AD descriptions, preventing a text overload. For example, the sound of footsteps moving further and further away followed by the slamming of a door usually speaks for itself.

### Sound Effects

All other sounds added to the movie later belong to the SFX layer. Sound effects are usually placed throughout the entire space with the help of the surround channels to make the film more spectacular. Just like the Foley layer, the SFX layer provides a lot of additional information about what is happening on screen.

### Music

Film music can help convey emotions in certain scenes, making it a perfect tool to emotionally involve the viewer in the film. In many film productions the music is an essential part of the soundtrack, playing a prominent role in the final mix. The music layer is often more dominant than other layers (except for the dialogue). Even though music is essential to the film experience because of its ability to convey emotion, it remains the most abstract audio layer of all and is therefore less essential to AD.

## **5.2.3 Mixing separate stems**

The possible influence of different sound layers on AD led me to decide to use separate stems (i.e. different sound layers) when mixing the AD soundtrack for the Blind DVD. This method can be compared to a re-recording mixer, who mixes the complete soundtrack by determining the balance between the separate sound layers.

When mixing, it was the intention to leave the original soundtrack as untouched as possible, and to adjust the balance between the separate sound layers in places where the description was not clearly audible.

As in most films, the music in Blind often plays a prominent role. When the audibility of the AD track was diminished, this was usually caused by the music. The problem could be solved by turning down the volume of the music alone. An added benefit is that this automatically leaves more space for the other sound layers: Ambience, Foley and SFX, which all contribute to a good AD track. Because not all sound layers are muffled to make the description more audible, you avoid the disruptive effect of the sound fading in and out constantly.

This approach helps you to work as accurately as when mixing the original soundtrack. When a certain sound effect rendered the description inaudible, the desired effect could be achieved by entering a small dip in volume of a certain sound layer. It also allowed me to tune the volume of the voice-over to that of dialogue in a safe way. This made

the voice-over sound more involved in what was happening on screen. This adjustment was required because the original empathy of the recorded voice was limited.

To check whether this approach actually led to a better result, I mixed several excerpts from the movie using the methods commonly applied. Then I judged several excerpts (using just my ears and no screen). It soon became apparent that the soundtrack made with the separate stems sounded most like a consistent whole, making it the most pleasant to listen to.

I have said before that the use of multi-channel sound leads to a more intense film experience, and this is also the reason why it has been used in the cinema for years and now also on a large scale in people's homes thanks to the introduction of the DVD. In the excerpts from *Blind* the versions in surround were more convincing than the stereo versions. As expected, the surround mix that was created from separate stems left the most space for ambience and SFX, but as these sound layers typify the *Blind* soundtrack, this difference was quite subtle. However, it is safe to say that the effect will be much more noticeable with soundtracks of a different type.

### **5.3 User experiences**

On the 13th of June the audio described version of *Zwartboek* premiered before a large audience of blind and visually impaired people. Directly after the screening, a Q&A session with the audience took place, focusing on the opinion of the AD user.

This revealed the following:

- The general atmosphere was one of enthusiasm and appreciation. One very satisfied member of the audience: "I haven't been to the cinema in 25 years, so thank you guys!" Followed by applause in the auditorium.
- Derek de Lint narrated the AD-track, while also playing a role in the movie. Because of the different sound of the two voices, this did not bother anyone. What is more, there were a lot of positive reactions to the timbre that was used for the descriptions and the voice use was also judged positively, more so than with *Blind*.
- The use of transmitter boxes was experienced as pleasant by almost all users
- Partners of visually impaired people have said that they are happy with the AD technique, as they now no longer have to explain to their partner what is happening on screen.
- Several people indicated that some descriptions were superfluous because the information was clear from the sound.
- The biggest point of criticism was that the German dialogue in the film was not described.

#### **5.3.2 Applying audio description to foreign languages and productions**

It was already clear at the moment of the voice recording that the lack of translation for the German dialogue would receive criticism. The producer and distributor had previously made the decision not to record the German dialogue in Dutch. In hindsight, this was not a good decision.

Because film excerpts featuring foreign languages are usually subtitled, it would be rather easy to add them to the AD track. When there are only a few short excerpts in a different language, it would suffice to have the AD voice read out the subtitles as a dialogue (making use of a special voice, imitating that of the character in question). If



the excerpts are longer or if there are several characters speaking, it is a good idea to make use of several voice actors.

The same technique is used in the UK for foreign-language films. The recording is made with several voice actors. This approach has a lot of similarities with the dubbing production process, with the difference that only the subtitles are read out for the audio description, and that the original dialogue can still be heard in the background.

## 6 Conclusions

Looking back on the research, you can conclude that a high-quality production process was used from the moment AD was introduced in the Netherlands. The developed recording and mixing techniques are aimed at optimising the user experience for every form of AD - cinema, DVD, and in the near future, TV.

The hearing of visually impaired people is not better than that of other people, but it is used more optimally and is more trained. Auditory information obtained from surrounding sounds and the nature of the human voice compensate the lack of visual information as much as possible. This informative character of sound is essential for the blind and visually impaired to function in society. By taking this fact into account and applying it to the AD production process, the technique will fit the user's sensory perception more closely.

Analysis of the current production process has led to the development of several sound-related production techniques that improve the AD track on the sound level. These improvements are the result of changes made in the use of voice-over, recording technique and mixing technique. An important part of a good AD track is the voice that reads out the descriptions. The blind and visually impaired attach a great deal of attention to someone's voice. If a voice-over is not pleasant to listen to, this can be very disruptive and will lead the user to be distracted from the film. Recording the voice with the assistance of a sound technician, who will aim for the best sound registration of the voice using high-quality recording equipment will result in an AD track that is equal in quality to the original soundtrack. The balance between the original sound and the AD track can best be obtained by using the separate sound layers related to AD when mixing. The mixing process is performed by making adjustments to the separate stems, and not by tampering with volume of the original soundtrack in its entirety on the AD track. On top of that, the use of multi-channel sound makes for a more intense movie experience, especially for the blind and visually impaired, because the information related to setting and determination of location in space is conveyed more optimally than with stereo sound.

A point that is currently neglected in the Dutch production process is the final rating of the AD production by the concerned parties. More attention should be given to this in the future.

The current production process in the Netherlands is different to that in the UK on the sound level. Because AD is not – or no longer – subsidized in the UK, film producers have to pay for AD themselves. The technique used by AD companies in the UK is less labour-intensive and, therefore, cheaper, but the quality is significantly lower. This is not really a problem for television programmes, because the budgets are lower than for film. But producing AD for films with the same technique devaluates the original film soundtrack.

## **6.1 Recommendations**

- We now dispose of the knowledge and financial means to provide Dutch film productions with audio description. But directors and producers still are not sufficiently aware of the technique. The lobbies for the blind and visually impaired could play a role in increasing the number of AD productions in the Netherlands by raising awareness of AD among the abovementioned parties.
- In order not to be dependant on foreign companies for the production of audio description, Dutch subtitling companies should move into writing AD scripts. This would also save on the cost of translating the English scripts.
- Because the largest part of films on offer in the Netherlands is spoken in English, the technique of applying audio description to foreign productions is a good way to make these English-language films accessible to the blind and visually impaired. In subsequent studies on the improvement of the quality of audio description, this technique and the accompanying production process could be researched.
- As soon as TV programmes in the Netherlands are provided with AD, the production process will have to be adjusted to this. Further research can provide an insight into the further development of this particular production process.

## Acknowledgements

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## References

### Bibliography

- Benecke, B., Dosch, E. (1999). *Wenn aus Bildern Worte Werden*. Munich: BR.
- Cronin, B. J. (1990) *Utilizing the SAP Channel to Serve Visually Impaired Persons*. Proceedings NAB Engineering Conference, 1990, pp 225-227
- Europese Commissie (1997). *The Television Without Frontiers Directive*. [http://ec.europa.eu/avpolicy/reg/index\\_en.htm](http://ec.europa.eu/avpolicy/reg/index_en.htm) (12-08-2007)
- Frankenhuyzen, I. van. (2006). *Uit de grindbak*. NRC next, 26 mei 2006.
- Harinck, F. (2006). *Basisprincipes praktijkonderzoek*. Antwerpen – Apeldoorn: Garant.
- Independent Television Commission. (1995). *Television: The Public's View*. ITC Monograph.
- Lodge, N. the Independent Television Commission. (2000). *ITC Guidance On Standards for Audio Description*. [http://www.ofcom.org.uk/static/archive/itc/itc\\_publications/codes\\_guidance/audio\\_description/index.asp.html](http://www.ofcom.org.uk/static/archive/itc/itc_publications/codes_guidance/audio_description/index.asp.html). (03-02-2007).
- Lodge, N. K., Slater, J. N. (1992) *Helping Blind People to Watch Television – the AUDETEL Project*. Proceedings International Broadcast Convention, IEE conference 358, Amsterdam, juli 1992, pp 86-91
- Packer, J., Kirchner, C. (1997). *Who's watching? A profile of the blind and visually impaired audience for television and video*. New York: American Foundation for the Blind.
- RNIB. *Audio Description for Children*. [http://www.rnib.org.uk/xpedio/groups/public/documents/publicwebsite/public\\_ADforchildren.doc](http://www.rnib.org.uk/xpedio/groups/public/documents/publicwebsite/public_ADforchildren.doc) (11-04-2007).
- RNIB. (2005) *User feedback on audio description and the case for increasing audio description targets*. [http://www.rnib.org.uk/xpedio/groups/public/documents/publicwebsite/public\\_userfeedback.doc](http://www.rnib.org.uk/xpedio/groups/public/documents/publicwebsite/public_userfeedback.doc) (03-07-2007).
- Scheifes, J.W.M.C. (2005). *De opbouw van een rapport*. Reijen: Scheifes bv.
- Schmeidler, E., Kirchner, C. (2001). *Adding Audio Description: Does It Make a Difference?*. JNIB. 95, nummer 4.
- Sliss, I.H. (1996) *Audiologie, horen in een wereld van geluid*. Coutinho, Bussum
- Vlaams Parlement (1997) *Visueel gehandicapten – Doelgroeponderzoek* <http://jisp.vlaamsparlement.be/docs/bva/atomiseringsen/ato1997-1998/nr5/martens/005.pdf> (01-10-1997).

### People, companies and Institutions

- |                                 |  |
|---------------------------------|--|
| - AFB                           |  |
| - A Film                        | Ruben Dehouck  |
| - Bartiméus                     |  |
| - Buena Vista - Disney          | Ruud Kok   |
| - City Movies, Utrecht          |  |
| - Dolby Laboratories            | Mark Beverley  |
| - Fu Works                      | San Fu Malta, producent Zwartboek  |
| - Giel van Geloven Sound Design | Giel van Geloven, AD-recorder, Blind   |
| - ITFC                          | Claude Le Guyader, production manager<br>James O'Hara, afdelingshoofd AD<br>John Wolskel, audiodescriber Zwartboek |
| - Nederlands Fonds voor de Film |  |
| - Phanta Vision                 | Marijn de Vries, AD productie Blind  |
| - Red Bee Media Limited         | Jodie Raitt, AD department   |
| - RNIB                          | Joan Greening, afdeling Audio Description  |
| - Stichting Oogfonds Nederland  |  |
| - Viziris                       |  |
| - Warnier Studio                | Arno Willemstein, AD-recorder Zwartboek  |

**Audio and video material**

- *Bind, een hoorspel* (2006). TROS. regie: Meindert de Goede.  
naar Bint. F. Bordewijk (1934).
- *Borat: Cultural Learnings of America for Make Benefit Glorious Nation of Kazakhstan* (2007).  
Twentieth Century Fox. regie: Larry Charles.  
English Audio Description 5.1.
- *Cars* (2006). Disney/Pixar. regie: John Lasseter.  
Dolby Surround 2.0: Audio Described English.
- *The Devil Wears Prada* (2007). Twentieth Century Fox. regie: David Frankel.  
English Audio Description 5.1.
- *Jane Eyre* (2007). BBC. regie: Susanna White.  
Dolby Digital English Stereo Audio Navigation and Description.
- *The Hitchhiker's Guide to the Galaxy* (2006). Buena Vista. regie: Garth Jennings.  
2.0 Audio Described: English.
- *The Incredibles* (2005). Disney/Pixar. regie: Brad Bird.  
Dolby Digital 2.0: Audio Described English.
- *Kill Bill volume 2* (2005). Buena Vista. regie: Quentin Tarantino.  
Dolby Surround 2.0: Audio Described English.
- *The Last King of Scotland* (2007). Twentieth Century Fox. regie: Kevin Macdonald.  
English 5.1 Audio Description.
- *Sin City* (2006), Buena Vista. regie: Robert Rodriguez.  
Dolby Surround 2.0: Audio Described.
- *Zwartboek* (2007). A Film. regie: Paul Verhoeven.  
Audio Description 5.1.

## List of abbreviations

AD	Audiodescriptie / Audio Description
ADR	Automated Dialogue Replacement / Alternative Dialogue Recording
AFB	American Foundation for the Blind
AUDELTEL	audio description for television
DVS	Descriptive Video Service
DTS	Digital Theater Systems
DTS-CSS	DTS Cinema Subtitling System
ITC	Independent Television Commission
JVIB	Journal of Visual Impairment & Blindness
NVS	Dutch Association for Film Producers
RNIB	Royal National Institute of Blind People

## Enclosure I Excerpt from the Zwartboek AD script

DESCRIPTION: 1 TIMEIN: 09:59:46:00 DURATION: 01:00 TIMEOUT:  
09:59:47:00  
Black Book # 1  
Describer: John Wolskel

DESCRIPTION: 2 TIMEIN: 10:00:40:06 DURATION: 10:16 TIMEOUT:  
10:00:50:22  
Twee mannen op kamelen op een zongeblikerde weg in de heuvels.  
Een bus passeert hen in tegengestelde richting.  
Beeldtitel: Israel, October 1956.

DESCRIPTION: 3 TIMEIN: 10:00:59:09 DURATION: 03:22 TIMEOUT:  
10:01:03:06  
De bus rijdt tussen twee wachttorens door een compound binnen.

DESCRIPTION: 4 TIMEIN: 10:01:07:07 DURATION: 11:12 TIMEOUT:  
10:01:18:19  
Op de bus staat Holy Land Tours. De bus houdt stil bij een gebouw en de  
toeristen stappen uit. Een reisleidster praat door een microfoon.

DESCRIPTION: 5 TIMEIN: 10:01:28:23 DURATION: 04:12 TIMEOUT:  
10:01:33:10  
Onder de toeristen zijn George - een dominee - en een jonge vrouw.

DESCRIPTION: 6 TIMEIN: 10:01:39:00 DURATION: 04:08 TIMEOUT:  
10:01:43:08  
Ronnie slentert rond en fotografeert het uitzicht.

DESCRIPTION: 7 TIMEIN: 10:01:44:15 DURATION: 04:22 TIMEOUT:  
10:01:49:12  
Ze hoort kinderen zingen in een schoolgebouw en gaat een kijkje nemen.

DESCRIPTION: 8 TIMEIN: 10:01:56:02 DURATION: 05:06 TIMEOUT:  
10:02:01:08  
Ze ziet de onderwijzeres, achterin de twintig, met een doek in het haar  
en een blauwe jurk.

DESCRIPTION: 9 TIMEIN: 10:02:06:00 DURATION: 03:23 TIMEOUT:  
10:02:09:23  
Ronnie staat voor een open raam en maakt een foto van de klas.

DESCRIPTION: 10 TIMEIN: 10:03:18:23 DURATION: 06:03 TIMEOUT:  
10:03:25:01  
Rachel zwaait als de bus met Ronnie wegrijdt en kijkt hem een tijd lang  
na.

DESCRIPTION: 11 TIMEIN: 10:03:27:10 DURATION: 06:20 TIMEOUT:  
10:03:34:05  
Ze loopt in gedachten verzonken naar de rand van een meer. Rondom zijn  
steile, rotsige heuvels.

DESCRIPTION: 12 TIMEIN: 10:03:38:20 DURATION: 17:10 TIMEOUT:  
10:03:56:05  
Ze gaat aan de waterkant zitten, haar gezicht nat van tranen.  
Beeldtitel: Holland, september 1944  
Een zolderkamer met foto's van filmsterren aan de wand. Rachel ligt op  
bed, een bijbel in haar handen, en zingt mompelend.



## Enclosure II Recommendations of the RNIB

### **Audio Description Guidelines (for film, DVD and television)**

#### **What is Audio Description?**

Audio description (AD) is a service primarily aimed at blind or partially sighted people. AD weaves a condensed commentary around the soundtrack, exploiting pauses to explain on-screen action, describe characters, locations, costumes, body language and facial expressions to enhance meaning and enjoyment

There is a legal requirement in the UK for broadcasters to provide audio description of television programmes. In addition, the service is available in cinema and has recently also become available on DVDs. These guidelines aim to assist producers of audio description on these media, as well as on future broadcast media.

#### **What to describe:**

- Characters
  1. Dress
  2. Physical attributes
  3. Facial expressions
  4. Body language
  5. Ethnic background – if relevant to the storyline
  6. Age
- Locations (including scene changes, whenever possible)
- Time of day, where appropriate
- On-screen action
- Sounds or sound effects which are not readily identifiable
- Subtitled captions
- Any on-screen signs/writing/hieroglyphics, which are relevant
- Opening Titles and/or End Credits [may be necessary to be selective]

#### **When to describe:**

- When there are breaks in dialogue
- Only encroach upon dialogue which is inconsequential or is being subtitled because of the use of a foreign language and, only then, to impart relevant information or to read the subtitle
- Over song lyrics during opening titles and end credits
- Over song lyrics during the film/programme if not relevant to the storyline.

#### **When NOT to describe:**

- Over mainstream dialogue
- Over sound effects, where they complement the film or the description
- Over obvious sound effects – i.e. “the door slams”
- Over critical background music

#### **Language:**

- Describe in the present tense. This includes the present continuous, which often allows a description to flow more naturally, so doesn't become stilted. It is also used to establish a character is still doing something throughout a scene which he/she was doing before the scene began
- Use the present participle, where appropriate at the beginning of a sentence or phrase. This adds to the variety
- As much as possible, use complete sentences
- Suit the vocabulary to the film/programme genre
- Suit the AD style to the film/programme genre

- A description should never be offensive, unless it is reading out an offensive subtitle or graphic (graffiti scrawled on a wall, for example)
- Where there is lots of space for description, be wary of filling every last second, lest the viewer become confused or has too much information to absorb – let the programme/film ‘breathe’
- Don’t shy away from describing a character as pretty, or handsome, where that prettiness or handsomeness is relevant to the story
- Adverbs can easily become a shorthand way of describing what is seen, but can too often be subjective. Use them with care
- Don’t shy away from using colours, which can often be augmented by qualifying adjectives ‘a frumpy grey suit’, ‘a garish red dress.’
- A wide vocabulary should be encouraged, particularly with reference to verbs. ‘*She scuttles into the room*’ rather than the simple fact ‘*She enters the room*’ creates a clearer image for the viewer
- Generally, do not use ‘filmic’ terms such as camera angles
- Avoid the term, “we see.”
- Language should be descriptive, accurate, easily understood, succinct and appropriate

**Points to consider:**

- Try to make descriptions flow
- Identify characters as soon as it’s practicable. This avoids continuous long-winded descriptions. Remember it may not be right to do so, if the plot dictates the character’s identity is to be revealed at a later date
- Be aware of when to use characters’ names and not ‘*she/he*’ to avoid confusing the audience
- It may be necessary to set up the next scene during the current description
- Where relevant, key back references can be included
- Wherever possible try to describe at the same time as the action occurs. This is particularly important with regard to comic situations, where the audience, sighted and visually impaired, should be able to laugh at the same time
- Whilst the voice should be neutral, it may be important to add emotion, excitement, lightness of touch at different points in different films to suit the mood and the plot development. The description should not, however become a performance in its own right
- It may be distracting in dance or fight scenes to describe every piece of action. Key moments and dynamics may suffice
- To differentiate between subtitles and description the describer should do this by either the use of their voice; by stating the obvious: i.e. ‘He says in Russian...’?; simply by: “A caption reads...”? or by using a second voice
- The description should not censor what is on screen
- The description should only provide information about what can be seen on the screen. Information that is not available to the sighted viewer should not be added.

ANNEX: Examples for each of these points \*THIS WILL BE NECESSARY FOR THOSE LESS FAMILIAR WITH THE SERVICE AND NOTING ILLUSTRATES THE POINTS YOU ARE TRYING TO MAKE AS WELL AS PIECES OF GOOD AND BAD DESCRIPTION

## Enclosure III Overview of available DVDs

### The Netherlands

Blind  
Zwartboek

### United Kingdom

13 Going on 30  
16 Blocks  
A Cock and Bull Story  
A Good Year  
A Lot Like Love  
A Scanner Darkly  
Aladdin  
Aladdin and the King of Thieves  
Alamo, The  
All the Kings Men  
Ant Bully  
Are we there yet?  
Aviator, The  
Bad Santa  
Being Julia  
Bewitched  
Bleak House (BBC TV Series)  
Borat  
Breakfast on Pluto  
Breaking and Entering  
Bride and Prejudice  
Bringing Down the House  
Brokeback Mountain  
Brother Bear  
Bruce Almighty  
Cars (Pixar animation)  
Casanova  
Casino Royale (James Bond)  
Charlie and the Chocolate Factory  
Chicago  
Chicken Little  
Chicken Run  
Christmas with the Kranks  
Chronicles of Narnia - The Lion, The Witch and The  
Wardrobe, The  
Cinderella (Disney) (Special Edition)  
Cinderella Man  
Click  
Closer  
Cold Creek Manor  
Cold Mountain  
Confetti  
Corporation, The (pre-2007 edition)  
Corpse Bride  
Crimson Tide  
Croupier, The  
Dancer in the Dark  
Dark Waters  
Deep Water (2007)  
Deja Vu  
Derailed  
Deuce Bigalow, European Gigolo  
Devil Wears Prada, The  
Die Hard with a Vengeance  
Dr Who Series  
Dr Who, Series Two (talking menus)  
Dukes of Hazzard, The  
East is East  
Eight Below  
Enduring Love  
Enemy at the Gates  
Enemy of the State  
Epic Movie  
Eragon  
Everything is Illuminated  
Festival  
Finding Neverland  
Firewall  
Five Children and It  
Flags of our Fathers  
Flightplan  
Forgotten, The  
Fountain, The  
Frida  
Gangster No 1  
Garden State  
Ghost Rider  
Girl with a Pearl Earring  
Goal!  
Goal 2  
Godsend  
Gridiron Gang  
Happy Feet  
Harry Potter and the Goblet of Fire  
Hellboy  
Hero  
Hills Have Eyes 2, The  
History Boys, The  
Hitch  
Hitchhiker's Guide to the Galaxy  
Hogfather, The  
Home on the Range  
Hours, The  
House of Mirth, The

I Bought a Vampire Motorcycle	Open Season
Ice Age 2	Passion of the Christ, The (original only - NOT 2007 special edition)
Incredibles, The	Peter Pan
Island, The	Pierrepont
Jane Eyre (2006) (with talking menus)	Pirates of the Caribbean 3
Jeepers Creepers 2	Pooh's Heffalump Movie
John Tucker Must Die	Poseidon, The
Jungle Book 2	Prestige, The
Just My Luck	Pretty Woman (2001 version)
Kill Bill Vol 2	Producers, The (2005)
King Arthur (Directors Cut)	Proof
Kinky Boots	Punisher, The
Kiss Kiss Bang Bang	Purely Belter
Kung Fu Hustle	Pursuit of Happyness, The
Lady and the Tramp	Queen, The
Lady in the Water	Raising Helen
Ladykillers, The	Ransom
Lake House, The	Rat Race
Lassie	Ray - The Ray Charles Story
Last King of Scotland, The	Red Road
Late Night Shopping	Rescuers, The
Layer Cake	Resident Evil, Apocalypse
Legend of Zorro, The	Rocky Balboa
Letters from Iwo Jima	Rogue Trader
Little Man	Rumour Has It
Little Miss Sunshine	Scary Movie 4
Lizzie McGuire	The Science of Sleep, The
London to Brighton	Sea Biscuit
Longest Yard, The	Sentinel, The
Lucky Break	Severence
Magdalen Sisters, The	Sexy Beast
Magic Roundabout	Shaggy Dog, The
March of the Penguins	Shall We Dance
Marie Antoinette	Shameless Series 2 (TV series)
Mary Poppins	Shameless Series 3 (TV series)
Matador, The	Shanghai Knights
Memoirs of a Geisha	Shawshank Redemption (10th anniversary special edition)
Millions	Sin City
Miss Potter	Sky High
Monster House	Sleeping Beauty
Monsters, Inc (not all versions)	Spiderman 2
Moulin Rouge	Stealth
Mrs Henderson Presents	Stomp the Yard
Mulan	Stormbreaker
Munich	Stranger than Fiction
Music and Lyrics	Superman Returns
Must Love Dogs	Syriana
My Super Ex-Girlfriend	Talladega Nights
National Treasure	Thank you for Smoking
Nectar	Thief Lord, The
Night at the Museum	Toy Story & Toy Story 2 (10th Anniversary 4 Disc version)
North Country	Toy Story 2 (new two disc version)
Notes on a Scandal	TransAmerica
Numberjacks	V for Vendetta
Omen, The (2006)	

Valiant	Wedding Planner, The
Veronica Guerin	White Chicks
Very Annie Mary	Wild, The
Venus	X Men 3 - The Last Stand
Village, The	X.X.X. 2, The Next Level
Volver	Young Adam
War Zone	Zoom