Ofcom
OFFICE OF COMMUNICATIONS

Subtitling – An Issue of Speed?

Publication date: 6 January 2005

Contents

Section 1

Executive summary

- This research set out to evaluate deaf people's experiences of subtitling, looking specifically at how comprehension and enjoyment of different types of programmes are affected by the speed of the words on screen. The sample of respondents consisted of a range of moderately, severely and profoundly deaf subtitle users and included people from across a wide range of literacy levels.

- There are a number of interacting variables which make the issue of speed extremely complex. Degree of deafness, age, reliance on subtitles, and literacy level all play a part. For people who utilise more than one sensory input, subtitles are often used as a useful reference point if they miss a word, so speed is not such a critical factor. For those who rely more heavily on subtitles, speed is much more of an issue because if they cannot read them fast enough they will literally lose the plot.

Standards

- Almost all subtitle users are extremely appreciative and grateful for subtitles. They believe UK subtitles in general are of a high quality and expect them to remain at the same standard or improve in the future.

- The majority expect subtitles to remain at the same standard or improve still further in the future.

- There was widespread concern that faster speeds would mean lower quality.

Editing and Speed

- There is considerable sensitivity and antagonism towards the idea of editing, especially amongst the profoundly deaf who want access to the same information as hearing viewers. But the benefits of editing, especially to the wider deaf audience, are appreciated when considered more fully.

- When prompted to comment about a potential increase in subtitling speed, the majority of respondents reacted negatively believing that there was no advantage in increasing subtitle speed. It was considered that faster subtitles would reduce many deaf people's enjoyment of television and alienate those with lower literacy skills.

- But, speed is not a top-of-mind concern for most subtitle users.

- Spontaneous issues raised are more to do with presentational style. Specific concerns include the quality of the editing, spelling, positioning, speaker identification and the need for the subtitles to faithfully mirror the action.

- Where subtitle users do have an issue with speed, it is more frequently to do with subtitles being too fast rather than too slow.

- But, under observation, respondents did not easily distinguish between the different subtitling speeds of the programme clips shown to them, especially between 160 and 180 words per minute. Above 180wpm respondents were more likely to find the subtitles too fast, and more difficult to follow.

- There is an important distinction between being able to follow fast subtitles and being comfortable with fast subtitles. When viewing the programme clips, nearly 90% of all groups, regardless of age, degree of hearing loss or literacy level, were able to read all or nearly all of the subtitles. However, almost 40% thought that current subtitling as depicted by these examples, were too fast.

- If forced to choose between whether the speed of each clip was too fast or too slow, viewers across all groups were significantly more likely to believe that the speed of the clip was “a bit too fast”.

Factors affecting ability to cope with faster speeds

- The most important defining criterion of subtitle users is first language: signing versus oral. In general, British Sign Language users find subtitles faster and more difficult than deaf people with oral English. Profoundly deaf users tend to have the most problems with fast or complex subtitles.

- Among the over 45s, especially those who had been using subtitles for 5 years or longer, almost all felt their ability to speed read quickly had improved. Those who rarely watched television or who had only recently become deaf were the most likely to find subtitles problematic.

- Those aged 54 or younger, seem to cope better with faster speeds, as do those who use computers regularly and those of a higher literacy level.

- The higher the quality of the subtitles, e.g. speaker identification, consistency, the easier it is to follow fast subtitles.

- Any format or programme that is familiar to the viewer causes fewer problems with speed. People who watch soaps, for example, know the characters well and anticipate the dialogue and action easily. But familiarity with genre format will vary from viewer to viewer, so the possibility of having faster speeds for selected programme types was deemed unworkable.

- Most users feel that ‘words per minute’ is not the most appropriate means of evaluating subtitling speed, although they acknowledge that there must be guidelines for organisations to work within. They point out that programmes are so individual in terms of bursts of dialogue followed by periods of silence, or complex multi-speaker scenes followed by simple monologues that such guidelines do not account for the differences in viewing experiences. Any increase in subtitle speed must take account of such factors so that bursts of dialogue are made manageable, and other issues such as spelling, matching the action and consistency are also addressed.

- The majority of deaf viewers would like subtitle speed to stay the same, but there is little evidence that they would be able to accurately identify the difference between 160wpm and 180wpm. There remains the issue, however, that while many people may be able to read faster subtitles, they do

not necessarily want very fast subtitles on a day-to-day basis when they are watching television for leisure reasons.

Recommendations

- It is recommended that if an increase in speed is proposed that it is done so in conjunction with broadcasters' reaffirming their commitment to the quality and style of presentation, which are the subtitle issues that are of most concern to deaf viewers.

- Whilst any increase in speed potentially will alienate a proportion of deaf viewers, this research suggests that subtitling speed should not normally exceed a threshold of 180 words per minute, or three lines of text on screen. To do so could make following subtitles more difficult for a significantly increased section of the deaf and hard of hearing audience.

Section 2

Background

Since their introduction in the early 1980s, subtitles have revolutionised access to television for deaf viewers. Having become an integral part of their viewing experience, subtitles remain an important and emotive aspect of deaf people's perception of television.

Ofcom's Code on Television Access Services (published in accordance with section 303 of the Communications Act 2003) will lead to a significant expansion of subtitling over the next ten years, and extends requirements for the first time to many cable and satellite channels. The standards for subtitling in the UK remain those laid down in the Independent Television Commission's (ITC) 1999 Guidelines[1], although Ofcom has indicated that it expects to review these standards, together with the substantive obligations in the Code, during 2005-2006.

In setting standards, a balance has to be struck between cost; particularly for smaller broadcasters, and meeting the needs of a very diverse audience. The cost of subtitling a programme relates, in part, to the amount of editing required. Unedited subtitles are faster than edited ones. Reducing the amount of editing required, thereby increasing the speed of text on screen, might assist broadcast licensees to meet the new increased subtitling requirements. These and other issues will be looked at when the standards are reviewed.

Previous research carried out by the ITC has examined the differences between block and scrolling subtitles for live news programmes, and also investigated children's comprehension of subtitled programmes [2] [3]. More recently, the question of speed has come under scrutiny, with some deaf organisations claiming that current subtitles favour the slower reader. ITC guidelines state that while live news may be subtitled at 180 words per minute, pre-recorded programmes should be subtitled at no more than 140 words per minute [4] [5]. In practice, the average subtitle speed for pre-recorded programmes is commonly around 160 words per minute, suggesting that it is time the ITC's codes were revised.

But what does an increase in speed mean for the subtitle user? It is the case that these days most people are far more familiar with text on screen via a variety of sources, e.g. computers, email, Internet, banking facilities such as cash point machines, teletext etc. Additionally, subtitles have been around for the past twenty-three years and, therefore, it could be argued that users are much more accustomed to reading them. It is likely that this familiarity has assisted greater reading speeds, particularly as users are probably already coping with speeds of 160 words per minute on a regular basis.

In order to test out whether subtitle users could cope with higher speeds for pre-recorded programmes (excluding live news and children's programmes), the ITC brought together a consortium of interested parties. These included the Broadcasting

[1] ITC Guidance on Standards for Subtitling, February 1999
[2] Sancho, J. Good News for Deaf People 1996
[3] Sancho, J. Dial 888 1996
[4] Except as the guidelines state "in exceptional circumstances for example when using add-ons, the higher rate of 180wpm is permitted".
[5] ITC guidance on Standards for Subtitling, February 1999 p7

Standards Commission, which has a special interest in the needs and interests of minority groups, the BBC, ITV, Channel 4, Channel 5, Sky, the Royal National Institute for the Deaf (RNID), and Intelfax Limited and ITFC. Without the commitment and financial support of these organisations this work could not have been commissioned.

The consortium commissioned Ipsos UK to conduct the research, which took place between April and July 2003.

Section 3

Research objectives

The main objective of the research was to evaluate how acceptable increased subtitling speeds are for different types of deaf and hard-of-hearing viewers, and what factors are important.

Specifically, the research sought to:

- determine how the viewing experience is affected by subtitling speed and format
- assess subtitling speeds across the different programme genres for pre-recorded programming (excluding news and children's programmes)
- compare differences between moderately, severely and profoundly deaf subtitle users; those with mild hearing losses were excluded from the study.

Section 4

Methodology

The qualitative methodology incorporated 54 individual depth interviews and two mini-discussion groups of 5 participants each (see Appendix I for in-depth details of the methodologies and sample). This was supplemented by viewing diaries, desk analysis, and an online bulletin board. The research took place between April and July of 2003. The vast majority of the interviews took place in the home.

The interviews began with a general discussion about subtitles and users' views about them. It loosely followed a discussion guide (see Appendix II). Users were then presented with a choice of video tapes containing different programme clips and asked to select two programmes to watch from a range of different genres. Three different clips were selected from the same programme and subtitled at three different speeds. Each participant in the research, therefore, watched six clips. The subtitled clips were provided by the broadcast sponsors of the research – the BBC, ITV1, Channel 4, Five, Sky, Intelfax and the ITFC (see Appendix III) for full details of the programme clips used in the research).

Users were asked to evaluate each clip in terms of: a) how much of the subtitles they were able to read; and b) how comfortable they were with the speed.

Each participant in the research was given a show card (see Appendix IV) with a set of responses from which s/he chose one for each clip. An additional question about overall quality was added to 'disguise' the interest in speed. The speed of the subtitles was not brought up until some way through each interview to test how much of a spontaneous concern it was amongst users.

The clips ensured that the interviews were practically focussed on real examples of different subtitling speeds. They acted as both benchmarks and springboards for detailed discussion with users.

Section 5

Reading the television screen

Television subtitling is not a free-standing phenomenon, but rather something which exists within the context of a piece of action, dialogue or narrative. The words used in subtitles are rarely interpreted on their own (except perhaps in the case of discussion programmes or monologues), but 'scanned' together with the other available indicators on the screen.

Each new visual scene therefore is processed for information. This includes scanning for:

- expressions on faces
- what can be deciphered from lip-reading
- actions of main characters
- scene / setting
- background activity, peripheral characters

"It's like driving a car. There are things you are taking in through your peripheral vision that you're not fully aware of, but that you are taking in at some level."
Female, profoundly deaf, 16-34

For each block of subtitles, the entire screen - and what has happened on it while the subtitles have been present - is taken as whole. The visual events inform the viewer's interpretation of the subtitles and vice versa.

There is no set order in which viewers tackle deciphering all of the information. This happens at a subconscious level, within fractions of a second. It was difficult for participants in the qualitative research to explain how they went about it, but many described the following sequence:

- taking in something visual on the screen
- reading the subtitles
- flicking back up to the screen to help them understand what they have read.

Where this throws doubt or raises new interest they might:

- go back to a portion of the subtitles to re-interpret
- if time, go back to the screen.

"I sometimes miss the point of a sentence, then get a clue at the end of it and have to go back to the start and re-read it."
Male, moderately deaf, 55+

This process is repeated for each new block of subtitles. The balance between the amounts of information provided through the written word, via the subtitles, and visually, through the action, is critical. Views differ widely on where this balance lies. A rule of thumb endorsed by many of the participants appears to be:

"Any more than three lines on the screen is too much to read."
Male, moderately deaf, 35-54

This process demonstrates the importance of accurate subtitling – use of good English and correct spelling. In order to read text on screen information has to be quickly digested. If a sentence requires re-reading, or has an incorrectly spelt word, this can completely throw the subtitle user.

Subtitling Dilemma

The more subtitles there are, the slower the reader, or the more difficult or unfamiliar the subject matter, the less time there is for the viewer to focus on the other parts of the screen. This is the key subtitling dilemma.

Deaf viewers' primary concern is to be able to enjoy television programmes. This means that a full transcript of what hearing viewers receive, at the expense of being able to take in the visual action, is not a main priority. This was true for the vast majority of the sample, regardless of hearing loss, age or literacy level.

This is not to say that there were no issues raised about the way, or the degree to which subtitles are edited. But it was evident that some editing of subtitles is welcomed as a means of enhancing the overall viewing experience.

Whilst, for the subtitle user, speed is not an immediate topic of concern, it is arguably the key underlying issue behind nearly every important issue. For example, if the quality of the subtitles provided for a programme is high, users are able to cope with a higher speed; the process of digesting the information is not disrupted by a need to re-read sentences due to poor spelling or a poorly constructed sentence. If the quality is poor, the user is required to continually re-scan the text to be able to comprehend the scene. In this scenario, a higher speed will make it increasingly difficult for many deaf and hard of hearing viewers to keep up with the programme.

Section 6

The question of speed

a. Perceived importance

Speed, can only be understood in the context of a whole range of factors which affect deaf viewers' ability to take in and enjoy broadcast information. For almost all users, speed is not seen as a pressing issue in its own right. It is only one of a number of factors that influence subtitle quality.

Spontaneously, participants raised other concerns such as the proportion of programmes being subtitled, live subtitling problems, inconsistency in spelling or lack of subtitles when they were meant to be available. Even when prompted, most users declared themselves happy with current speeds.

> *"It's the information that's important, not the speed."*
> Male, profoundly deaf, 35-54, high literacy

> *"It's more relevant to talk about the flow of subtitles than simply speed – it's how easy the subtitles are to process that matters. They can be quick, but only if it's done in an easy-to-read way."*
> Male, severely deaf, 16-34, high literacy

Those with poor reading skills, or who had not been using subtitles for long, were more likely to say that current speeds were fast enough, or even a bit too fast.

> *"If they increased the speed of subtitles, I'd go crazy."*
> Female, profoundly deaf, 16-34, low literacy

> *"Subtitles are OK at the moment: I can't find fault."*
> Male, severely deaf, 55+, low literacy

Speed is seen to become more of an issue when it is coupled with other factors. For example, if a programme has poor speaker identification cues, then it is much harder for deaf viewers to keep up with the dialogue; one minor spelling mistake can cause confusion – a moment's hesitation can mean missing the end of the sentence.

b. Words per minute versus lines of text

Deaf people do not tend to split up programme viewing in terms of 'words per minute' but rather in blocks of subtitles or visual scenes. Some parts of text can be read more quickly than others – for example, where there is a simple 'talking head' and little distracting happening on the screen. In one of the clips we showed (a documentary about World War 2), by contrast, a relatively small section of text was found hard to follow because it was accompanying a visual reconstruction scene using graphics. The visuals distracted attention from the text and left viewers with an incomplete understanding of either. So 'words per minute' cannot be judged without taking account of words per scene.

Furthermore, it is worth noting that 'words per minute' can be misleading as a measure of speed. For example, if there is a ten-second burst of rapid speech from

three speakers, followed by a slow 50-second monologue, comprehensibility is difficult even though the word count is low.

The research found that users have little sense of speed in terms of words-per-minute, but rather judge it by the number of lines of text on screen. There would seem to be scope for devising an alternative measurement of speed for subtitling, incorporating words per scene / frame or lines per scene / frame.

Three lines of text appears to be the maximum that most users can cope with.

c. Genre

Whilst every programme, is to some extent, a unique case, it is possible to make some overall observations about how different genres give rise to differing expectations and experiences of subtitling.

Drama and Soaps
Drama and soaps are felt to contain scenes that are potentially complex, especially those with multiple speakers. They also require a relatively high level of involvement from viewers.

> *"I watch drama and documentaries quite differently. With something like EastEnders, I'm on edge – it's fast moving. I need to sit up and pay attention. After half an hour of that, I need a rest! Documentaries, though, I want to be slow."*
>
> Male, profoundly deaf, 18-34, high literacy

Subtitle users follow visually rich genres such as soaps much more easily than programmes with fewer visual cues, for example debates, where reliance on subtitles to understand the content is more crucial. Soaps are seen as being quite easy to follow because of the familiarity with the characters and the visually punchy directorial style. In soaps, words can occasionally be missed, or misread, without losing sense of the story. Participants could even identify mistakes in speaker identification colour cues through their familiarity with the characters and storylines.

On the other hand, users found some films hard to follow at the beginning because they were unfamiliar with the characters and also the style, pace and feel of the film. This also applies to one-off television dramas.

Documentaries
Documentaries were described by many as a more relaxing genre, mainly because the words come at a more sedate pace. Wildlife documentaries were singled out for praise as a good example of what documentaries offer the deaf viewer: much of the experience is visual, with the text annotating the pictures rather than leading the way. Many deaf viewers feel that they are able to enjoy the full viewing experience of these kinds of programmes.

The documentary genre does have its own issues, however, many of which were evident in the clips used in the research. They include:

- obfuscation of the names of speakers at the bottom of the screen
- complex subject matter using technical language
- change of voice from narrator to contributor without clear signalling
- complex plans, diagrams and graphics being shown simultaneously with difficult text

> [Documentary on World War II] *"When the planes were coming down your eyes wandered and you got distracted from the subtitles."*
>
> Male, severely deaf, 16-34, high literacy

Many simply avoid documentaries where they suspect they might struggle with the vocabulary, or switch over if viewing becomes too difficult.

Situation Comedies
Situation comedies also raised speed-related issues.

> *"Comedy can be too fast. I look at the subtitles and miss the action, or vice versa."*
>
> Male, profoundly deaf, 55+, low literacy

The issue for many is more about timing than speed as such, though the two are related. Most comedies depend on a close and precise relationship between words and actions. The success or failure of the programme is perceived to be linked to how well these are synchronised through the subtitling. The Only Fools and Horses clips shown were considered, on the whole, to be successful examples.

Editing in comedy is often required to maintain the flow and pace of the words to match the pictures. Expectations are relatively low. Few expect to receive the same experience as a non-deaf viewer and accept that some comedy will not translate well into subtitled form. This may be down to poor experiences of subtitled comedy programmes in the past. Perseverance with sitcoms therefore may be shorter than would be the case with non-deaf viewers.

> *"It's worst with stand-up comedy – it just doesn't work with subtitles…so I just don't bother watching it."*
>
> Female, severely deaf, 35-54, high literacy

Another issue raised by comedies has wider implications: where comedic effect depends upon a local argot or accent. How should this be dealt with in subtitling? Age of onset of deafness appears to be an important shaper of attitudes here. Those with a knowledge or memory of local speech patterns are often those who want to see them reflected in the subtitles. However, viewers with severe or profound deafness from birth, slower readers, and those for whom spoken English is not a first language, found the attempts of subtitles to reflect dialect or accent (e.g. in Only Fools and Horses) to a degree irritating and confusing.

> *"It can be confusing to show local accents. I'm willing to sacrifice them. I don't know what they sound like anyway."*
>
> Female, profoundly deaf, 16-34, high literacy

d. Speed and enjoyment

Deaf viewers are no different to hearing viewers in that television viewing is often a source of stress relief, wind down and relaxation. This means that they do not want to work hard at extracting information from the screen. Subtitles are often read when people are at their most relaxed or when their energy and concentration levels are low, for example, after a day's work.

Many participants give up on programmes if they involve too much effort - speed of subtitles is integral to the overall perception of a programme. 'Heavy' programmes

such as political debates with few visual clues, or intellectually demanding documentaries where the visuals need to be followed as well, suffer for the same reason: they are often passed over in favour of 'easier' and less demanding viewing choices. Where speed and weighty intellectual content combine, this is often not relaxing and casual viewers are deterred by the effort required to follow the subtitles.

> *"I could just about follow that clip* [Fifth Gear, Clip 3] – *but it was an effort."*
> Male, moderately deaf, 35-54, low literacy

This is more likely to be the effect on the casual viewer. A viewer who has made a special effort to watch a particular programme is likely to stick with it. It is fair to assume that, if watching a more serious or technically demanding programme, a viewer is likely to watch with a different mindset. Whilst it is still a leisure activity, they may be more willing to invest more effort than they might be during a sit-com or reality show, for example. In these instances, it could be argued that the combination of speed and complex material will be less of an issue to the committed viewer.

It is much rarer to hear of examples where slower or insufficient subtitles detracted from the viewing experience.

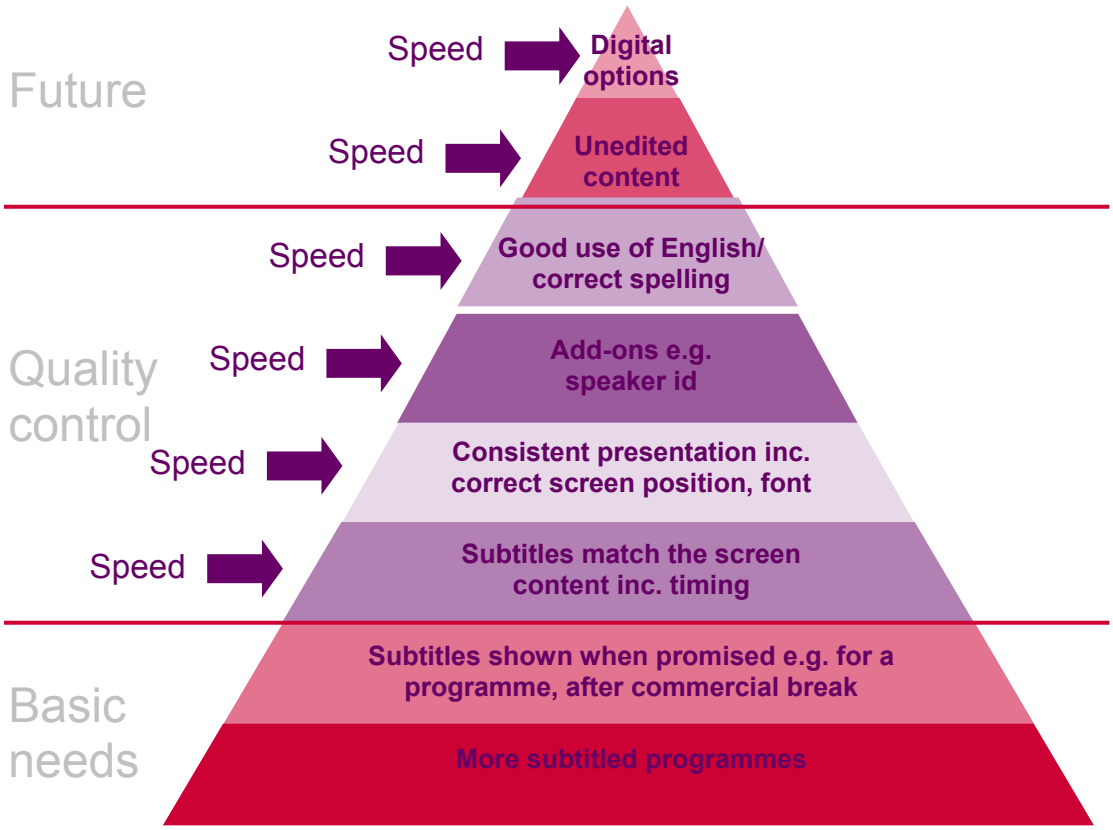
e. Hierarchy of subtitling needs

A broad hierarchy of subtitling concerns was constructed from the issues raised by deaf and hard of hearing viewers (see Chart 1). With such a diverse population, there will be those who place different emphasis on some of the elements, but in general this order of concerns can be applied to the majority of users.

The fundamental issue for the majority is the provision of more subtitles. Of almost equal importance is that subtitles are provided when promised. Failure to do so produces enormous frustration.

For all other areas, whilst not directly mentioned as a spontaneous concern, speed is an underlying requirement. As mentioned previously, the ability to cope with higher speeds is connected to the way subtitles are consumed. If the subtitles are of high quality – timed and edited to correspond with the action, a consistent presentation and format etc. – the likelihood is that more users could cope with increased speeds.

Chart 1: Hierarchy of Subtitling Needs



Section 7

Editing

a. Political versus practical

The question of editing is a very emotive one for many subtitle users. Almost universally, people's first reaction is very negative towards any mention of editing.

> *"What hearing people hear, we should be given."*
>
> Male, severely deaf, 16-34, high literacy

> *"If you edit too much and condense the information, deaf people won't learn anything."*
>
> Male, profoundly deaf, 35-54, high literacy

For some, it is seen as a form of censorship and 'denying' deaf people full access to information available to the hearing population. Many participants, especially those with some hearing, or good lip-reading skills, describe instances where seemingly meaningless editing has taken place. Surprisingly, not everyone is aware of the reasons for editing; indeed people refer to the process as 'changing', rather than editing.

b. Editing as censorship

The 'censorship' aspect of editing is a major issue for certain groups, especially the more politically minded. They refer to the right to 'full information' and feel that they are missing out on what hearing viewers have access to. These groups notice what they perceive as 'meaningless' changes, for example subtitling 'wonderful' as 'very good', and what they perceive as protective editing, such as not subtitling swear words.

Interestingly, swearing is often mentioned in this context. Where swearing is broadcast in the sound transmission, but omitted or altered in the associated subtitles, it is widely resented as being patronising, particularly among younger viewers.

Discussion of current affairs documentaries raised reactions amongst some participants who felt that over-editing could cause an information deficit in key areas of their lives.

> *"Documentaries on health issues can be edited too far and deaf people can lose access to important information."*
>
> Female, profoundly deaf, 55+, low literacy

But, for many of the participants, omissions are rarely noticed, as they do not usually lip-read and can not tell what has been missed out. For example, one participant watching The Weakest Link had not known that contestants (and not Anne Robinson) call out 'Bank!' as this was not clearly signalled. He only understood how the point scoring worked in the game after a hearing person explained the rules of the game to him. Those most animated about the censorship issue are either politically-minded, or those who can lip-read, retain some hearing, or live with hearing relatives.

c. Perception of benefits

Some of the controversy surrounding editing is eased when the different meanings associated with 'editing' are considered. Most of the strongest negative feelings are expressed about 'editing' in the sense of cutting down the amount of information communicated. As well as feeling short-changed or even discriminated against, this kind of editing excites empathy with other deaf subtitle users and feelings of protectiveness towards them. For example, many lip-reading or partially hearing participants are angered by omissions that they notice, but that they think will go unnoticed by profoundly deaf friends. They feel a sense of the more vulnerable being taken advantage of by broadcasters taking short-cuts. This perceived sense of 'information deficit' was particularly resented in programmes of public importance, such as the news, current affairs, documentaries and discussion programmes.

But, many were able to make a link between edited subtitles and easier reading. 'Editing' in the sense of presenting language more clearly than it was spoken e.g. avoiding repetition and 'ums and ahs', was welcomed.

> *"The English should be modified to make it simpler and help people to keep up ... I already find it hard to read subtitles, without making it any faster."*
>
> Male, profoundly deaf, 35-54, low literacy

Again, solidarity with wider deaf interests impacts on this for many. Many of the orally deaf suggest that BSL users and the elderly may struggle with non-edited subtitles. They perceive that BSL users that they know find long words and complex sentences harder to follow and therefore need editing to produce easier and slower subtitles. However, some orally deaf participants who were more distanced from the signing deaf community did not show these concerns.

d. Finding the balance

The balance between providing slower, easier, edited subtitles, and faster, complicated, word-for-word subtitles is not easily achieved. There is no simple answer that meets everyone's expectations and requirements.

Participants themselves acknowledge that want they want is paradoxical. On the one hand, they oppose editing on the principle that they want the same information as hearing viewers, but on the other hand, they appreciate slower easier subtitles that facilitate relaxed and enjoyable viewing. Participants accepted the difficulty in providing a perfect system.

> *"I don't want subtitles to be edited but I do want less of them to read. What's the balance? Depends on the person, your mood and what you're watching…you're never going to please everyone that's for sure!"*
>
> Male, profoundly deaf, 35-54, low literacy

Section 8

Other influential factors

The following section discusses a breakdown of the factors that participants believe dictates the 'quality' of subtitles and which in turn affect perceptions of subtitle speed. Many feel that 'good' subtitles can be read much faster than 'bad' ones.

Subsequently, speed becomes more of an issue if there are inconsistencies or if anything is unclear. This is not meant to be a 'catalogue' of criticisms (subtitle users are on the whole happy with the service and grateful for it), but rather a critical analysis of the factors that affect subtitle usage.

a. Consistency

Almost all participants feel that subtitles suffer from inconsistency in a variety of ways. This may be in the form of a programme having subtitles one week but not the next, variations of standards within a certain channel or genre, or different methods of identifying speakers.

> *"If it says in the newspaper that a programme is going to have subtitles, then they have to be there."*
>
> Female, profoundly deaf, 16-34, low literacy

One often-cited inconsistency is subtitles disappearing during a programme: either unfinished sentences, not reappearing after advertising breaks or a total disappearance half way through.

> *"Hornblower: the first episode was a problem. Words kept dropping and going missing."*
>
> Male, profoundly deaf, 35-54, high literacy

> *"There is a problem with subtitles not coming on straight away after the ad break."*
>
> Female, profoundly deaf, 16-34, high literacy

b. Speaker identification

Speaker identification is a tool that is seen to have improved over time, and that users find useful. It seems to complement the flow of dialogue, and relieves the need to concentrate on an extra (unwanted) aspect i.e. who is saying what. There are a minority of deaf subtitle users who find it distracting, but these are mainly people who have used subtitles for a long period of time and are wary of change. Typically they grow accustomed to these kinds of changes after a while. Certainly, participants used to colour identification found it distracting if it was absent.

The main debate centres on the method of speaker identification. Most people are happy with colours, although they acknowledge that this is what they are most accustomed to. The drawbacks are that the colours are only relevant once the dialogue has been going on for at least one exchange. At the beginning there is some confusion, especially for some lip-readers, and particularly if the characters are facing away.

Participants stress the importance of having a colour for every person talking – sometimes only two colours are used for four speakers. A few participants believe the name of the character could also appear before their speech, although others feel this would distract and take up too much room.

Positioning the subtitles under each speaker is seen to have its advantages – notably it reflects the idea of speech 'coming from' the speaker. However, its drawback includes the fact that this system takes up more of the screen (it has less space to go horizontally and therefore spreads vertically, or goes too fast) and also it does not allow for characters moving about the scene, or if they appear close together.

Arrows are also appreciated, especially if they accompany the above technique of positioning, although some people feel this is too 'cluttered'. Arrows are seen to be useful though in any cases of likely confusion. One example is to use an arrow to point to a speaker for colour identification – this immediately shows the viewer which character relates to which colour. Also, arrows that point off-screen are useful indicators of off-screen speech or dialogue starting in the next screen.

c. Timing

> *"Timing is crucial: matching the speaker to the text."*
> Male, severely deaf, 16-34, high literacy

Participants acknowledge that timing is very difficult for subtitlers. The main question surrounds whether each sentence should appear as the action unfolds (in blocks rather than scrolling) or whether it all appears at once (as is most common). Most subtitle viewers are used to having all the sentences together and agree that changing this would be difficult.

However, they do point out that this can sometimes ruin a scene, especially in sitcoms or in comedy whereby the dialogue often interacts with actions or expressions. Many people do not watch stand up comedy because they just feel subtitles do not work at all for this genre. Participants stress the importance of matching method to the particular programme, for example when watching a game show with friends or family the answer should not come up at the same time as the question.

Timing and speed come to the fore when considering quiz shows, e.g. The Weakest Link. Two aspects of the timing came in criticism here:

- having answers on the screen for too short a time
- showing answers on the same screen as the question, thereby depriving the viewer of the chance to have their own guess.

This is another example of where a simple speeding up or slowing down would miss the point. A more nuanced, screen-by-screen approach is needed to address deaf viewers' needs.

d. Obscuring

Many participants cite incidences in which subtitles have obscured something important to the programme – most often this happens with original subtitles in the programme (such as names of interviewees in news programmes or Question Time)

- but also in other instances such as obscuring the score box in a game show, or over a low-screen piece of action.

Although most participants feel that subtitles should move about the screen to avoid obscuring something important, it does seem to slow down the reading process – people find they are lost if the subtitles move around suddenly. Slow moving documentaries, such as the one used in the study called California Bay, where each set of subtitles remains on screen for a relatively long time, could get away with using different screen positions for the subtitles. Faster programmes with more complex and detailed information, cannot do this without detracting from the viewing experience.

The general consensus is that the subtitles should not take up more than three lines at the bottom of the screen, even if they are 'see-through', as not only do they begin to encroach on the on-screen action, but also there is too much information to read in one glance.

e. Spelling

Incorrect spelling was mentioned by participants as something that can trip them up. Spelling mistakes are most often encountered in live subtitling.

> *"Their mistakes are funny: 'Milosevic' came out as 'Milk Marketing Board'."*
>
> Male, moderately deaf, 55+, high literacy

Accuracy, especially when subtitles are being read quickly is essential as any little deviation from the expected will slow the reader down considerably.

f. Cues

Cues have become an expected part of subtitles on UK television, so much so that many participants do not actually notice that they are there. Although they do not affect speed directly, they add a depth to the subtitles that enriches their viewing experience. Cues such as (!) meaning sarcasm, background noises in brackets and even … to indicate a pause, are all highly appreciated.

> *"I'd like the laughter signalled – I want to visualise the studio audience … humour cues are really useful … I'd like some sound for when he drops the tray for example."*
>
> Female, profoundly deaf, 16-34, high literacy

Some participants feel that modern DVDs set the standard for subtitles, and the cues found in DVDs are thought to be very good, giving a welcome richness to the scenes. By their nature subtitles are thought to be a very one-dimensional medium and cannot always give the full impact of the spoken word. Anything that works to add to the colour and context of the broadcast is greatly appreciated.

g. Font and visibility

Almost universally, those with access to digital television preferred the font used in digital subtitling to that of analogue television. It is seen to be much clearer, sharper and more modern. Digital font is acknowledged to be smaller and 'thinner' (although no less visible) and therefore takes up less space on screen, another advantage.

In general, participants have few issues with visibility. Most feel that white on black background works very well in terms of visibility, with light, bright colours for speaker

identification. The black background appearing with the subtitles is seen to be unobtrusive although a few participants would prefer a permanent black subtitle box at the bottom for the subtitles.

h. Channel-hopping and recording

Issues that came up regularly amongst participants were the problems associated with changing channel and recording programmes. They are not related to speed as such but are of concern to deaf and hard-of-hearing viewers. Currently, the user has to log out of 888, than change channel, and log back in to 888 to get subtitles for a programme on the new channel. The digital system enables the viewer to channel hop with the subtitles turned on and this is much more attractive. Recording programmes with subtitles on video seems problematic for many participants (it requires a special video recorder) and, again, was the subject of much discussion about subtitles.

i. Availability

Although the presence of subtitles is a factor which does not affect speed, it is clearly one of the most important issues to deaf viewers. Many complain of live shows not being subtitled such as So Graham Norton and also a lack of early morning programmes with subtitles. Participants get quite angry when programmes are advertised or listed as having subtitles, when they do not. This is not a regular occurrence but it sticks in the memory when it does happen.

Section 9

Major factors affecting subtitling usage

a. Age of onset of deafness

Age is one of the most influential factors affecting perceptions of subtitling. Not only does it determine the length of time people have been using subtitles but it also dictates which channel of communication they use most easily and freely. For example, those losing most of their hearing early on in life prefer to learn British Sign Language (BSL) and move away from English in its written or spoken representations. On the other hand, those who lose a limited amount of hearing later in life (who find it hard to learn another language) rely more on a combination of receptive techniques, e.g. residual hearing, lip reading, repetition.

> *"I can't be learning sign language at my age [64], you've just got to learn to get by with what you've got…I can lip-read a bit now and people know to speak to me loudly."*
>
> Male, moderately deaf, 55+, low literacy

Age of onset is important when looking at the different people who use subtitles regularly: statistically, most deaf people lose their hearing late on in their lives. These older people have often never used subtitles before and find it quite difficult to get accustomed to the service. They form a 'silent majority' of subtitles users who do not have a strong sense of 'deaf identity' and therefore tend not to be involved in deaf lobbying groups or deaf/hard-of-hearing networks.

With some, the onset of deafness has developed gradually, but they do not see themselves as 'deaf'. Using subtitles is one of the few overt manifestations of deafness that they may admit to.

Those with later onset deafness often resent the role deafness plays in their lives. Some refuse to acknowledge the fact that they are growing deaf, creating psychological 'blocks' or using alternative communication techniques.

> *"He pretended he wasn't going deaf for years, he wouldn't use a hearing aid and never used subtitles. Even now he doesn't like using subtitles but in fact he always has them on now… always."*
>
> Wife of male, severely deaf, 55+, high literacy

> *"They always get in the way – you have to look at them instead of looking at the picture, you miss out on the action reading the words. It takes ages to get used to it."*
>
> [Husband] Male, severely deaf, 55+, high literacy

One severely deaf participant had been going increasingly deaf for over 50 years, but not having picked up either lip-reading or BSL skills, he relied on asking people to write words down.

> *"I started going deaf during the War – I was a parachutist – and it's got worse over the years … I can hear sound but I can't hear what they're saying."*
>
> Male, severely deaf, 55+, low literacy

These older users begin using subtitles reluctantly and initially find it quite difficult. Often, they do not utilise lip-reading skills, but tend to try to read each word, rather than internalising the whole sentence as more experienced subtitle users do. They struggle to cope with fast sections of dialogue or narration. As soon as they miss a word, they miss a whole meaningful 'chunk' of information. They are inclined to see themselves as slow readers rather than being critical of the speed of the subtitles.

> *"It's not the subtitles' fault is it? They're just going at the speed of the people speaking – it's my fault…it's me that can't keep up."*
>
> Female, moderately deaf, 55+, high literacy

Over time, however, they become more skilled and more familiar with subtitles as they grow accustomed to being deaf and to finding ways of maximising other communicative techniques. They become less worried about missing individual pieces of information.

> *"I suppose I started to get used to subtitles at the same time I started getting used to being deaf – if you miss one word it doesn't matter so much because you get better at guessing what people are on about."*
>
> Female, moderately deaf, 55+, high literacy

It is likely that those who become deaf later on in life find the process of learning to use subtitles more difficult than those who have been using them since they were young.

> *"You can't teach an old dog new tricks…at least not quickly!"*
>
> Male, severely deaf, 55+, high literacy

b. Age

In general, younger subtitle users are able to read subtitles faster than older users and have fewer problems with speed.

Education makes a big difference and there have been advancements in the way deaf children are educated. Younger participants were more positive about their experiences than older ones (especially over 55s). Many older participants could recall bad experiences at school in terms of the way their deafness was handled.

> *"When I was a kid they didn't make any special arrangements for your education if you were deaf – they just put you at the back of the class."*
>
> Male, profoundly deaf, 55+, low literacy

> *"I didn't communicate with anyone until I was about eight – another deaf girl taught me to sign secretly and once I started to do that I also started to try to talk."*
>
> Female, profoundly deaf, 55+, high literacy

The younger deaf participants also found schooling hard, but they have more confidence in their communicative abilities. They feel that with improved technology for the deaf, and better educational opportunities they are better able to compete with their hearing peers than previous deaf generations. Many, however, still feel both disadvantaged and over-looked by society in general.

"I got my 'A' levels ok at school and now at college I either sit at the front where I can hear and lip read [with digital hearing aid] or I have a note taker."
Male, severely deaf, 16-34, high literacy

Significantly, the younger participants have grown up with subtitles – they take them for granted and cannot imagine life without them. They 'internalise' subtitles easily and naturally. They see watching television as an essentially 'mixed media' experience (sound, pictures and words).

Younger deaf people are also more likely to have been schooled with computers. Many consider that the experience of reading text on computer screens has aided their television screen reading skills and even speeded up their ability to process the electronically written word.

c. Degree of deafness

The research found less conclusive distinctions between the needs of profoundly, severely and moderately deaf subtitle users than might have been expected.

All participants who were severely or profoundly deaf, together with most of those with moderate deafness, were heavily or completely reliant on subtitles to understand what was said on the television. Any differences between these groups in the way they used subtitles was found to be due to other factors, rather than level of deafness.

Much more differentiating were factors like age of onset of deafness, use of BSL as a first language, and educational/literacy level. Many among the profoundly deaf, for example, are less adept at reading text quickly, for reasons related to their profound deafness. However, it is their level of reading and comprehension skills which seem to be determinative, not the level of deafness as such.

It is also important to remember that, because many people's hearing gets progressively worse as they get older, a high proportion of the profoundly deaf have previously been moderately and severely deaf. This means they have subsequently spent longer using subtitles and are frequently more skilled at reading them.

Many moderately deaf people use subtitles in conjunction with their residual hearing. Typically, they turn up the sound on the television set, using subtitles as a secondary aid, a 'sense check'. Their hearing helps their comprehension of programmes, but they have difficulty following more complex or rapid pieces of dialogue, or when there is background noise. In these circumstances, they can find following the subtitles harder than a profoundly deaf person who is used to and skilled at reading subtitles quickly.

But, most of the moderately deaf people included in the research could not consistently distinguish precise words and did not use sound as the primary way of watching programmes.

"I can hear a little, but I rely heavily on subtitles to make sense of it."
Male, moderately deaf, 34-55, low literacy

Where these participants did use sound, it was to help alert them to changes in mood within a programme, rather than to make on-screen speech audible.

d. First language – BSL versus orally deaf

Probably the most important factor when breaking up the sample was the division between those whose first language was BSL, and those whose first language was English. Participants were forthright in how they would divide the sample – 'Deaf' versus 'the deaf', signers versus speakers. The difference between the two groups is important not just because the groups hold different attitudes towards deaf issues, but also because of the different ways language is processed.

BSL users acknowledged that some English patterns were more difficult to follow and confessed to spending much more time with other signers than with speakers. Interpreters pointed out the difference in word order between BSL (verb after subject and object) and English (verb between subject and object). However, the distinction between speakers and signers is not without exceptions – many participants described themselves as fluent in both languages, and some predominantly BSL speakers were avid book readers. Sign Supported English (SSE) users are less easy to define as they often also have a good command of either BSL or English; SSE itself varies considerably amongst users.

e. Literacy, reading skills and education

For those participants who grew up deaf, the schooling they received heavily influences their command of English. Many deaf people complain of a less than ideal schooling stating that they did not feel they fitted in and that the 'trends of the day' overrode their individual needs. The general perception is that the schooling system has become more considerate towards the needs of deaf children. However, older generations voiced concerns that deaf schools are now too undemanding of deaf pupils allowing them to leave school without adequate literacy skills.

What is clear is that many participants do not feel confident with their literacy levels in English - and this is not restricted to those who were encouraged to sign from an early age. It is also the case that some deaf viewers are also dyslexic, bringing additional difficulty with fast reading and comprehension.

It seems that although less literate deaf people may read average subtitles quickly they still find it hard to read complex sentences and words in books at speed. Some have trained themselves to skim-read for sense. They have got used to ignoring words they do not know; but if there are too many of them they often lose patience with the programme. This is especially true of some BSL users and less literate orally deaf viewers who are more likely to switch channels if the language is too complex and fast at the same time.

Section 10

Perceptions of the future

a. Digital facilities

For some participants, future developments in subtitles will stem from their perception of digital television and home entertainment, most notably a more interactive and personal aspect. When asked to visualise an ideal future system, in addition to 100% subtitling and no mistakes, they see themselves setting their own levels of editing, speed, style and look of subtitles. Some suggested a 999 with a higher subtitle speed, to go with the 888 service. Although this may not be practical in the very near future, it shows that people are looking for subtitles to become more user-orientated.

The font and channel-hopping facility of digital television are seen to be major benefits, as is the recording facility. The quality of DVDs (in terms of both picture and subtitles) is seen to be superior and more 'modern'. The younger participants feel that Teletext is slow and old fashioned, especially now that the Internet is so established. And even the older participants feel swept up in the 'digital revolution' – it is interesting that many have recently acquired digital hearing aids and have mostly been impressed.

b. Standardisation

There is some debate about the need to standardise subtitles across the board. It seems to some subtitle users that some channels use one system of speaker identification and other channels use another; some programmes are edited and others are not. The fact is, as this research shows, that there is no single method or style of subtitles that can please every deaf viewer and so standardising the whole seems to be problematic. Most participants feel some flexibility is needed – they believe the quality should remain high and each genre or programme type should adapt as necessary to best suit the subtitle user.

Although some deaf people are aware of guidelines and recognise the great efforts by various bodies to set standards, people do not know where to look for the definitive 'set of rules'. This is especially so of people new to subtitles – a page in Teletext (such as Read Hear) that outlined the meaning of the various symbols used in subtitling, the techniques for reading them, and the benefits to be had would be useful to those new to using subtitles.

c. Quality versus quantity

Although there has been much campaigning to increase the quantity of subtitles on UK television, participants are very keen to keep the high quality as well. Deaf subtitle users genuinely appreciate the high standards of subtitles in this country. They are protective of these standards and feel a sense of ownership – they are aware that they are available and of high quality as a result of many people campaigning for them over the years in one way or another.

Maintaining these standards at their current level is almost taken for granted by participants, indeed they expect standards to continue rising and some seem even to be waiting for a technological breakthrough in subtitles. However, if quality were seen

to be sacrificed for quantity, many deaf subtitle users would see this as a step backward rather than forward.

> *"I think the deaf community will object to an increase in speed. If you increase the speed, the quality will go down."*
>
> Male, profoundly deaf, 34-55, high literacy

Also, the quantity question - the percentage of subtitled programmes – is seen as honourable but 'campaignable' and 'protestable'. It is easily explained and clearly quantifiable. The quality question however, the everyday use of subtitles, is much more of a personal issue; it is not so easily packaged for lobbying but it affects people's enjoyment of their television much more directly. Many 'average' deaf people, although having views of their own, appear to feel they can rely on the 'campaigning element' of the deaf community to keep the quantity question alive, but they do not seem so confident about the quality question.

There is a possibility that raising the speed of subtitles may be interpreted as a drop in quality. The majority of participants do not view increasing subtitling speed as necessary; indeed they feel they are, if anything, too fast. Therefore communicating an increase in speed as a benefit to the consumer might be viewed with scepticism, as it may even be viewed as a benefit to the provider. The only perceived benefit to the deaf viewer would be subtitles that better reflect the hearing viewer's experience – towards 'full information access'. Most participants seem to agree that, even with perfect speaker identification and 100% consistency, an increase in speed could mean a decrease in 'quality' for the user.

Appendix I

Methodology

In-home individual depth interviews

To gain a true understanding of subtitle users' needs and viewing behaviour, the qualitative individual depth interviews took place in participants' homes. This gave the qualitative team an opportunity to see exactly how people used subtitles and a chance to learn about the person being interviewed.

By conducting the interviews in home, useful information was picked up about the participants: how far away from the television they sat, whether they watched in the company of other family members, what technological aids they used e.g. aerial boosters, amplifiers, infrared or induction loops etc. It also gave the research team an insight into the person's lifestyle and interests.

Carrying out the interview with people in their homes enabled the interviewers to put responses into immediate context and it put participants at their ease. One-to-one interviews present an environment in which views and opinions are given freely and genuinely, providing intimacy and attention to detail. This attention to detail was very important in respect of following up responses, and probing for more detail on specific issues.

The interviews loosely followed a Discussion Guide which was used as an outline of ideas to be pursued with each person rather than a set questionnaire. Trained specialist qualitative researchers were used, using probing techniques and open-ended questions that encouraged spontaneous and genuine responses. For interviews with BSL users, a signing interpreter was present.

Mini-discussion groups

Two mini-discussion groups were held at the Derby College for Deaf People, one with teachers and one with pupils. Each mini-group had five people participating and the questioning followed a similar path to that of the depth interviews. BSL interpreters were used for the groups. Participants were shown the video clips in the same way as in the depth interviews and they each gave individual responses.

Although using individual depth interviews was the ideal methodology for the bulk of the project, the groups added an extra dimension to the results of the depth interviews: because each person is so different in the way that they process information and in their viewing behaviour it was interesting to compare and contrast different views and opinions. Because the issues under question are so personal and complex, mini-groups facilitated open discussion of key concerns – allowing one argument to be thrown against another.

The groups were also made possible by the fact that the students and teachers all knew each well and the fact that the groups were carried out in the 'day room' where everyone normally watched television – this ensured an open, natural and relaxed atmosphere.

Desk analysis

The qualitative fieldwork was supplemented by desk analysis. Past papers, views and opinions published by the various deaf organisations and some web discussion groups were all analysed and factored into our thinking.

Diary

Diaries were distributed to participants taking part in the qualitative interviews and groups. Participants filled them out over a period of a week describing their reactions to various programmes they had watched on television. The diary was a mixture of quantitative and qualitative questioning, on the qualitative side allowing participants to assess programmes in depth and also revisit the themes they had discussed in the interviews.

Online bulletin board

The bulletin board was set up for people to express their views about subtitling in general and speed in particular. It allowed people who did not qualify for the interviews to give their opinions and also allowed deaf people to respond to one another's comments.

Qualitative sample

	Ages 16 – 34		**Ages 35 – 54**		**Ages 55 +**	
Moderately deaf	2 male 2 female	2 male 1 female	2 male 2 female	1 male 2 female	2 male 2 female	2 male 1 female
Severely deaf	2 male 2 female	1 male 2 female	2 male 2 female	2 male 1 female	2 male 2 female	1 male 2 female
Profoundly deaf	2 male 2 female	2 male 1 female	2 male 2 female	1 male 2 female	2 male 2 female	2 male **2** female
	Higher literacy	**Lower literacy**	**Higher literacy**	**Lower literacy**	**Higher literacy**	**Lower literacy**

Total 64

The above sample frame is a breakdown of all respondents, including the ten who took part in the mini-groups as well as the remaining 54 who were interviewed individually.

The sample was split by level of deafness, age and literacy levels and split equally between men and women.

There were some criteria that applied to all participants:

- All participants were watching television regularly
- They always, or nearly always, used subtitles when they watched.
- All participants' first written language (i.e. not a signed language such as BSL) was English.

b. Level of deafness

The sample frame above shows how moderately, severely and profoundly deaf people were equally represented in the research project. This gave the research the ability to analyse the results against different levels of deafness in equal measure. Mildly deaf people were not included, as they tend not to be as dependent on subtitles in the same way. Participants defined their level of deafness themselves – there are many different aspects and variables to deafness, but in order to look at differences on a large scale there was a need to categorise broadly and the research found that self-categorisation was invariably very accurate.

c. Age

The sample incorporated three age divides: 16-34, 35-54 and over 55. Although quite broad, these categories divided the audience in a significant and meaningful way – for example those in the 16-34 category had all grown up with subtitles as standard (if they had been deaf for some time), whereas many people in the other categories could remember the introduction of subtitling services and had a perception of its improvement over the years.

The age splits also enabled the research to consider possible factors that might prove influential – such as the younger participants being more accustomed to computer usage, and their 'MTV Generation' exposure to multi-media television viewing that incorporates a 'low patience/concentration threshold'.

d. Literacy levels

The question of literacy with deaf people is complex. It should be pointed out that in this case 'literacy' refers to competency with written English. For people with BSL as their first language, English is a secondary medium of communication. Educational experiences are diverse with different types of deaf children and young adults, and these experiences have significant consequences.

To gauge these consequences and differences the sample was split into two segments – higher and lower literacy. The higher-lower distinction was made from a series of questions in the screener about schooling, qualifications, newspaper readership and first language. This segmentation was carried out through the screening questionnaire although if, after the interview, an interviewer thought that the initial segmentation had been incorrect then the sample was adjusted accordingly.

e. Sample source

The interview sample was recruited through a variety of methods but, importantly, was random and unbiased. Although political views were also analysed, the research had to make sure that the sample did not all come from deaf clubs, organisations and lobbyists – who would be easy to recruit but not necessarily characteristic of the wider viewing audience. It was therefore important to go out and actively find people who might normally have 'kept quiet'. The sample was recruited from a wide range of sources – hospital audiology departments, shops selling hearing aids, university departments, relatives of colleagues, and even people seen signing in the street.

However, through random selection, the various political standpoints surfaced naturally and some participants happened to be members of deaf organisations. The sample did recruit a minority of people from local deaf networks.

The mini-groups were made up of five students and five teachers from the Derby College for Deaf People.

Appendix II

Discussion Guide

7734uz01 ITC Subtitling Research April 2003

Discussion Guide for Pilot Stage

Introductions

- Explain nature of research and confidentiality issues
- Respondent to introduce himself / herself
- Name
- Age
- Family situation
- Work status – previous jobs / professions if not currently working
- Interests, hobbies, activities, social groups
- Using / not using computers
- Level of deafness
    - History of deafness, age of onset, increasing / decreasing
    - Aids used
    - Do they lip read?
    - Do they understand/use BSL?

TV Viewing

- How much TV do they tend to watch generally?
    - When do they watch TV most (day, night, peak etc)
    - What kind of programmes do they tend to watch most often?
    - What do they always watch / never miss?
    - How important would they say TV is in their lives?
    - Do you have terrestrial or digital television (cable/satellite/free to air)

Subtitling (briefly)

- How often do they tend use subtitling?
    - Are there any genres that they don't use them? Why? Why not?
    - Do they have any issues about subtitling in general?
    - If digital TV user – do you notice any difference between

Explain they are going to watch a video of a programme (in the genre of their choice)

Ask them to relax and view it in the way they would normally

Show video

After each clip ask respondent to complete questionnaire

Then discuss in terms of general viewing:

Speed

- How fast a reader do they consider themselves to be?
- Do they read newspapers? (Which one(s))
- How does the speed of the subtitles affect their overall enjoyment of the programme?
    - What kind of programming is more/ less enjoyable according to faster / slower subtitles?
    - What about the sample video – would they have enjoyed it more / less if it had been faster / slower?

Genre

- How does the genre affect the uptake of subtitles?
    - Which genres facilitate reading subtitles?
        - Which ones do not?
    - What about US programs?
    - What about the sample video just viewed?

Size / legibility?

- How does the size or font of the subtitles affect reading?
    - How easy / difficult was it to read the subtitles (according to size)
    - Do they find it hard to read from a screen?
    - What did they think of the sample video just viewed?

Positioning

- What affect does the positioning of the subtitles have on reading?
    - Does it sometimes obscure lips / other titles / other content?
        - How does this make them feel?
        - What effect does it have on speed of reading?
    - What did they think of the subtitle positioning on the sample video?

Colour / speaker identifying

- Do they normally have any problems with following who is talking?
    - What usually causes this confusion?
    - How does it affect the speed with which they can read the subtitles?
    - What other ways can identification be communicated?
    - What did they think of the identification in the sample video?

Block versus scroll

- Which do they prefer?
    - For which kinds of programmes?
    - How does it affect ease of reading?
    - Which one can they read faster?
    - Are there any other issues for scroll versus block?

Conclusions

- Thinking of their normal viewing habits, what do they think about the average speed of subtitling?

    - Would they rather see it faster / slower?
    - For which kind of programs?
- What about for other deaf and HOH people?
    - What kind of people would rather have slower subtitles? Faster subtitles?
- What reaction would there be from the deaf and HOH community if the speed of subtitles were increased?
    - Who would be most affected?
- Do they have any other issues about subtitles they would like to talk about now?

Thank and close

Appendix III

Programme Clips

- EastEnders
- Ground Force
- The Sopranos
- West Wing
- Only Fools & Horses
- Weakest Link
- Time Team
- Weapons of World War 2
- The Simpsons
- California Bay (dolphins)

Appendix IV

Show Card

1. I was able to read:

    a. All the subtitles
    b. Nearly all the subtitles
    c. Some of the subtitles
    d. Very few of the subtitles
    e. Hardly any of the subtitles

I felt that the speed of the subtitles was:

    a. Much too fast
    b. A bit too fast
    c. About right
    d. A bit too slow
    e. Much too slow

I thought the overall standard of the subtitles was:

    a. Very good
    b. Good
    c. About normal
    d. Poor
    f. Very poor