

The value of teletext sub-titles in language learning

Robert Vanderplank

In this study, fifteen European learners of English, between high-intermediate and post-proficiency level, watched nine hour-long sessions of BBC general output television programmes with CEEFAX English language sub-titles. The aim of the study was to investigate the potential benefits to be gained in terms of language learning from watching sub-titled programmes. The subjects provided detailed feedback on language gained from the programmes, on their reactions to the sub-titles, on strategies used in exploiting the sub-titles, on levels of anxiety, on the comprehensibility of the sound and text, and on the programmes themselves. The subjects also undertook a limited number of language-oriented activities connected with the programmes. Subjects reported that they found the sub-titles useful and beneficial to their language development and that they were able to develop strategies and techniques for using sub-titles flexibly and according to need. The findings suggested that sub-titled programmes may be of limited value for low-level learners, but may provide large amounts of comprehensible input for post-intermediate-level learners. The findings also indicated that sub-titles promote a low affective filter, encourage conscious language learning in 'literate' learners, and, paradoxically, release spare language-processing capacity.

Introduction

In the following, I report a study of fifteen learners of English who watched a variety of BBC programmes with Ceefax sub-titles over a period of nine weeks. Sub-titled programmes are available on all four UK television channels, and are intended as a service for the deaf and hard of hearing. The aim of the study was to investigate the potential benefits to be gained in terms of language learning by learners of English as a foreign or second language, that is, by those who could be described as 'hard of listening' rather than hard of hearing.

Background

From the reactions I have received the traditional and received wisdom on sub-titles in language teaching appears to be that they are distracting and slow down the development of listening ability in learners. It is said that they create a form of text dependency and lead to laziness, since learners rely on the text rather than the stream of speech. However, over a two-year period in Finland, I observed that many Finns were gaining benefits in their English language proficiency from watching English and American programmes (e.g. *Dallas*, *Bergerac*, *Yes*, *Minister*) sub-titled in Finnish or Swedish.¹

These observations suggested that far from being a distraction and source of laziness, sub-titles might have potential value in helping the

language-acquisition process (as defined by Krashen 1981), by providing language learners with the key to massive quantities of authentic and comprehensible language input. The observations also suggested that sub-titles might help to develop language proficiency through enabling learners to be conscious of new and unfamiliar language that might otherwise simply be lost in the stream of speech. It seemed to me that if the accessibility of Anglo-American broadcasts provided by Finnish and Swedish sub-titles could bring benefits in English-language development, then English-language sub-titles for programmes in English would also improve access to TV programmes for many EFL learners, would enhance the language-acquisition process, and would help to develop English-language proficiency.

The study The study was conducted in the Department of Languages, Heriot-Watt University in Edinburgh. It was decided that at this stage too little is known about the value and effects of sub-titled programmes over time to carry out any meaningful, controlled experiments, and thus a less formal approach was used in which subjects were asked to watch programmes, to note their reactions, to list any words and phrases which 'struck' them, and to perform a limited number of language-oriented activities. It should be emphasized that I wished to create a reasonably informal viewing environment, balancing this wish, at the same time, with the need to gain maximum feedback from subjects in terms of language gained, reactions, strategies, and processes going on and changing over time, while viewing programmes with text.

Objectives The specific objectives of the study were:

- 1 To find out learners' changing reactions to sub-titles over the period of the study with regard to attentiveness, motivation, attitude, and engagement.
- 2 To find out what strategies learners were using to exploit sub-titles and for what purposes.
- 3 To find out at what levels of language proficiency different sub-titled programmes seemed most useful.
- 4 To check on the comprehensibility of the language input.
- 5 To identify limitations and shortcomings of sub-titles, and to assess the 'quality' of the text.
- 6 To identify which programmes especially needed sub-titles and why.
- 7 To explore the role of extensive sub-titled programme input in the language-acquisition process.
- 8 To identify what learners learnt or got out of watching programmes with sub-titles.
- 9 To identify how sub-titled programmes could fit into the present teaching-learning structure.

Subjects The subjects were a volunteer group of fifteen European exchange students studying English language, translation, and interpreting in the Department of Languages, Heriot-Watt University, Edinburgh. They varied in English-language level from high-intermediate to post-proficiency. Use of video-tapes before the study had indicated that all subjects had difficulty in following general output programmes and lacked confidence in watching television programmes. In addition to this group, a group of eight Arabic-speaking subjects, varying in English-language level from low-intermediate to advanced, was shown some of the same sub-titled material as the study group. These subjects were all taking the Diploma/MSc in Arabic-English Translating and Interpreting at Heriot-Watt University at the time.

Material and equipment The material to be viewed was recorded on a Matsui VHS video recorder via a Radofin teletext adaptor. The material consisted of a selection of programmes from BBC general output.² These programmes were chosen to represent a wide variety of genre, accent, presentation, content, style, and pace, and were as follows: *Bergerac* (police series set in Jersey), *Eastenders* (twice-weekly popular soap opera set in London), *Cagney and Lacey* (American police series set in New York), *Holiday '87* (weekly programme of holiday reports), *Don't Wait Up* (situation comedy based on father and son doctors), *'Allo, 'Allo* (indescribable comedy of deepest British humour), *The Two Ronnies* (visual and verbal humour), *The Disappearing Red Squirrel* (natural history documentary), *Cabinet of Curiosities* (documentary on British habit of collecting), *Q.E.D.: A Fall from Grace* (documentary on human error in routines). In addition, short extracts from *Hill Street Blues*, the American police series, *Coronation Street*, the popular English soap opera set in Northern England, and *Wish You Were Here* (about holiday reports) were shown for comparative purposes.

Method The subjects watched the sub-titled programmes for one hour each week for nine weeks. They were given a brief introduction to each programme (as much as would be given in the BBC's weekly publication of television and radio programmes, *The Radio Times*³) and were given some direction as to what sort of feedback would be welcomed. For example, notions such as 'dependence' and 'chunking' were explained briefly, as it was felt that such metalanguage would help subjects to express their reactions.

Subjects were usually asked to consider how much they were using or depending on the text; to note striking or unfamiliar words and phrases; to note any problems with the text (for example, omissions, or differences between text and speech); and to provide specific feedback for particular programmes (for example, the characters and their relationships in the episode of *Bergerac*; details of the 'Crown' hotel grading system in the holiday programme; the frequency of their own laughter response compared with that of studio audiences in the comedy programmes).

The programmes were viewed with the minimum of interruptions. There might be occasional breaks to check cultural references or slang expressions, or to allow time to write up tasks or reactions to particular sequences. Subjects' scripts were collected for analysis at the end of each session. The group of eight Arabic-speaking subjects was shown *Bergerac* and *Holiday '87* and was asked to provide the same feedback as the European subjects. Their scripts were collected and analysed.

Subjects also undertook a limited number of exercises and activities, usually to provide some language reinforcement during the last ten minutes

of the session. Such work related to each programme, and included pair work; acting out dialogues and scenes from situation comedies; re-telling jokes and then telling their own jokes and stories; writing lists and explaining differences; and group discussions.

Findings From observations, subjects' reports, activities, and feedback, the findings were as follows:

1 All European exchange students reported that they found sub-titles useful and beneficial to their language development.

2 Some initial disturbance and distraction at the presence of text was noted, but this tended to disappear over the period of the study.

3 Two subjects reported that they still had feelings of guilt and laziness at needing or wanting to use text even after nine sessions. They felt that they would have listened harder without the text, and would have had to try and improve their listening ability if the text had not been present.

4 All subjects reported that they had developed techniques and strategies for minimizing distraction and maximizing the usefulness of the text: some had become used to switching from sound to text and *vice versa* flexibly and according to need, others stated that they had found that they could follow text, sound, and pictures simultaneously. Some subjects reported that they felt able to process longer stretches of sound and text after a few hours of watching sub-titled programmes, i.e. they appeared to be developing a 'chunking' ability.

5 Subjects reported that they were conscious of learning a great deal of language from the programmes watched. They talked of 'finding' new words and phrases which they would be able to use themselves, and of learning the spelling of many proper and place names. They also reported that they felt that they were unconsciously picking up a great deal of language that they would use at some later time.

6 Subjects also reported that sub-titles made fast, authentic speech and unfamiliar accents (regional and American) much easier to tune in to and to follow. Some mentioned that they had never been able to follow some of the programmes watched (e.g. *Eastenders*) because of the accents. All reported that comedy programmes, plots, relationships, and characterization were much easier to understand and appreciate with sub-titles. Even with text, programmes with large amounts of information such as *Holiday '87* caused some difficulty, while a police thriller such as *Bergerac* with a strong plot caused little difficulty with text. American programmes such as *Cagney and Lacey* and *Hill Street Blues*, and 'soap operas' such as *Eastenders* often presented the subjects with additional problems of culture and assumed knowledge of plot and characters. With regard to documentaries, subjects reported that while they really did not need the sub-titles very much for programmes such as *The Disappearing Red Squirrel* in order to follow and understand, they none the less found the text very useful for 'finding' large numbers of new and unfamiliar words and phrases (more than for any other programme).

7 Subjects were relaxed and attentive throughout the programmes being viewed. There was no sign of anxiety or defensiveness in their behaviour either before, during, or after the viewing.

8 Subjects had a high level of retention and recall of language used in programmes, and of specific words and phrases, as shown by feedback sessions and by their performance in exercises and activities. In particular, subjects were able to ask detailed questions about the language used in programmes, and especially about the language which they had followed in the text but had not understood.

9 Subjects reported few cases of text dependency (i.e. being tied to the text) or of overloaded channel capacity caused by the addition of the text. This is perhaps a paradoxical finding, since one might have expected that if watching television programmes without sub-titles already took all their concentration and effort, then adding another channel would overload their processing capacity. Subjects reported that by the end of the study, they could use the sub-titles so flexibly and could manage such larger chunks of text and sound (which of course had the same semantic content) that in fact they had spare processing capacity which could be used for maximizing the potential usefulness of the language in the programme, in both speech and text.

10 The more familiar subjects were with watching programmes sub-titled in their mother tongue, as in the case of a Danish subject, the more rapidly they adapted to English sub-titles and developed strategies for using them to best effect.

11 The European subjects were much more positive towards sub-titles than the Arabic-speaking group, even after the first viewing. Members of the Arabic-speaking group complained that the text changed too rapidly for them to read it with understanding.

12 The quality of the text was at times in some programmes rather poor and subjects reported inconsistencies, omissions, errors, and misleading inaccuracies. Differences between text and speech were seen as a hindrance at first, but were used as a useful and productive self-monitoring device later, and, of course, could be a very useful teaching technique.

Discussion

The findings suggest strongly that sub-titles, far from being a dangerous and disturbing distraction in language learning, can bring benefits to those who are 'hard of listening'. I shall now discuss the findings in terms of acquisition and learning, listening comprehension and language teaching, speech perception and language processing, levels of learner proficiency, and accent and dialect.

Acquisition and learning

How does the use of teletext sub-titles fit into the language acquisition-language learning distinction as described by Krashen (1981)? Well, not altogether neatly. Television watching would seem to fit into the informal environment of acquisition, to provide comprehensible input with the emphasis on the message rather than on the form, to rely on attitudinal and motivational factors, and largely to rule out the use of the 'monitor' through lack of time. Yet, to what extent, in Krashen's terms, can watching television be considered meaningful interaction in the target language? What is communicative about watching television? Isn't it a mainly passive activity in which we are entertained rather than engaged? Furthermore, it seems that the presence of text with sound does at times lead to a conscious focusing on the form (especially on correct form), particularly when new or striking expressions are used, or when proper names or technical words are

used, the spelling of which is unfamiliar. Indeed, as I have reported above, for many learners, text provides a conscious monitoring of the speech, by which words and phrases can be 'found' in what would otherwise be a constant stream of speech where such words and phrases might be lost. This is perhaps a positive feature for those who have learnt to use the text only for support, while it might be regarded as intrusive and disturbing for those who are distracted by it, and who thus feel obliged to focus on the form of the running text, rather than on the message of the stream of speech. This is clearly a worrying aspect, but the evidence from the study suggests that most learners do in fact learn to use the text for support and for 'finding' new words and phrases in a flexible and independent way. Furthermore, the findings suggest that learners progress in taking in much larger stretches of text at a time, and from this to processing the message in longer stretches of speech; that is, they develop a 'chunking' ability in both reading and listening, which in turn releases spare capacity for conscious learning.

Turning to motivation and attitudinal factors, the findings indicated that in most subjects, negative attitudes and feelings of guilt regarding reading text while viewing disappeared over time. It is perhaps worth considering where such feelings and attitudes may have come from in the first place. I had noted negative attitudes and hostility towards sub-titles in many language teachers (and indeed many non-teachers) prior to study, and it appears that these commonly held attitudes to sub-titles are frequently passed on to learners. Many believe that it is somehow cheating, or is not the 'real thing' to watch programmes with sub-titles, or to read the sub-titles. On the other hand, my own past observations of the subjects in the study and other learners watching programmes without sub-titles suggested that many were very anxious about watching these programmes, as they could never be sure that they had not mis-heard or simply missed something important. Frequently, they would reach a point when they would just cease to follow, either because they could no longer concentrate, or because they felt that they had already missed so much that they would gain little by continuing. The practical use and value of sub-titles found by subjects largely changed negative attitudes and associations over the period of the study. Subjects indicated that they felt no anxiety and could relax when watching, secure in the knowledge that they could check what they heard in the text. This appeared, in turn, to produce growing confidence in their own listening ability and greater enjoyment as they began to feel that they could manage without the text, as shown when they looked away or closed their eyes. In Krashen's terms, the text seems to contribute to security and to a low affective filter, by which intake may be encouraged. It seems possible, as well, that the growing confidence and lack of anxiety resulting from understanding may have contributed to a reduction in the amount of capacity needed just to process what was heard, and may thereby have allowed subjects to spend more time on learning, i.e. the conscious focusing on newly-found words and expressions. Of course, it might be thought that with European exchange students, integrative motivation and a low affective filter would be present anyway, but, in fact, as stated above, pre-study observations of the subjects with un-sub-titled programmes indicated a high level of insecurity and anxiety before and during viewing, and defensiveness after viewing. In psychological terms, it might be argued that the text provides instant feedback and therefore positive reinforcement for learning. It seems highly plausible that this

constant positive reinforcement was an important factor in building up the subjects' confidence, and in allowing them the spare capacity to develop sophisticated and flexible strategies for using sub-titles.

*Listening
comprehension and
language teaching*

In terms of current principles and practice in language teaching, where do sub-titled programmes fit in? What, in pedagogical terms, does the facility seem to have offered the subjects? I have suggested that sub-titles 'unlock' television for learners who are literate in English and who are roughly at intermediate level or higher. Why, a teacher might ask, does television need to be unlocked in this way? Surely what is needed is a lot more graded practice in listening comprehension in order to bring the learners up to a high enough standard so that they can watch television without the support of sub-titles. Give learners sub-titles and they will never be good enough at listening to watch television unsupported.

There are several answers to this. First, I am not suggesting that watching sub-titled programmes is a substitute or replacement for graded listening exercises, especially intensive listening. My own students have continued their listening exercises in the language laboratory, and have carried on with their listening-speaking activities. But why should we wish to deprive them of massive quantities of authentic language, of a variety and quality unattainable in the language laboratory or classroom? Furthermore, this is a form of language which is watched by native speakers for, on average, three or four hours per day, which for our students requires a simple and available key which enables them to watch these programmes with enjoyment and understanding and is therefore of benefit to their language development in who knows how many ways. It seems to me that we have in text-supported viewing a means of increasing the redundancy in the language and bringing down the level of ungraded, authentic language. (Of course, television language is mainly written, scripted material, well rehearsed, but is certainly perceived as authentic by viewers these days.) We also have a means of enriching the sound and images and thereby of encouraging strong associations for retention and use of language.

The evidence of the study indicates that learners themselves develop strategies for deriving benefit with minimum guidance, but do need regular viewing of varied and well-selected programmes in order to maintain these strategies and to remain fully engaged in their viewing. Just as my earlier studies on the use of the language laboratory (Vanderplank 1985) indicated that faster, better, and more enjoyable language development was to be gained only through frequent and independent use of the language laboratory, so it seems to be the same case with television watching: learners need to be able to develop their own conscious, critical faculties and their ability to draw language from programmes and build it into their own competence. This process clearly takes time to get used to, unless, of course, the learners are already used to sub-titled programmes, as was the case with the Danish subject.

At the present time, fitting extensive television watching, with or without text, into a language-learning syllabus is difficult. The choice of time and duration is left to the individual, who may or may not have access to television in the first place. And video-taping broadcast programmes for self-study in video-labs is illegal. The present study was made possible only with the sponsorship of the BBC, and with the technical support of a teletext adaptor. However, there is little doubt in my mind that self-access, self-controlled sub-titled programmes in video-labs would greatly improve

the quantity and quality of language intake by learners. The question which remains unanswered after such a small-scale study is whether learners with reasonable knowledge of English could come to Britain, hire or buy a teletext television, watch it for a few weeks at three or four hours a day (or even more frequently) and end up understanding and speaking English proficiently?

From a theoretical point of view, there are several problems for such hypothetical learners. First, no matter how engaging, television is all reception. For students to become proficient in the language, productive practice would also be necessary at very regular intervals. While the findings of the present study did suggest that a reasonable quantity of the language received from the programmes was available for productive use, I was unable to measure this in any controlled way, and further research in this particular area will be required. Secondly, the hypothetical learners might develop highly idiosyncratic linguistic universes, in which the language learnt and acquired would have very little communicative value. This aspect also requires further investigation.

As far as intensive classroom viewing is concerned, sub-titled programmes offer an alternative approach to those teachers who have felt that thus far all they have been able to offer are coping and gist-getting strategies in watching television programmes. The BBC itself in its videocassette and handbook *English Teaching with Video* suggests techniques such as silent viewing, description, mind reading, understanding feelings, topic interpretation, and reviewing. While these techniques may be excellent in themselves as classroom techniques for exploiting video and encouraging learners to use language, the problems of, on the one hand, language in detail, and of the massive amount of language available in the stream of speech on the other hand, are not tackled at all. Learners are offered ways of getting *something* out of the programme, but clearly something very different from native speakers, and very far from authentic exposure, as it were, in the native-speaker sense of engagement and appreciation. It is television watching-like behaviour, rather than television watching, and is, perhaps surprisingly, teacher-oriented rather than learner/viewer-oriented since all the activities rely on the teacher as guide and manager. In the end, most broadcasting is still about spoken language supported by visual images, rather than *vice versa*, and intensive language practice needs to *identify* and activate that language. But first it must be made accessible and comprehensible. I am not convinced that the techniques suggested in *English Teaching with Video* really do make the programmes more accessible or help the learners to adopt much of the language used in the programmes. These techniques may activate the language already in the learners' heads, but do not necessarily turn programmes into comprehensible language input.

Speech perception and language processing

If we assume that speech is processed by the listener in an active matching way, as proposed by D. A. Sanders in *The Auditory Perception of Speech* (1977:153), we might say that native speakers know or recognize what they hear and make an approximate active match at a sort of linguistic interface. To make an analogy with television watching, it is as if native speakers have the script in their heads, or at least something very close to a script. I am not suggesting that this is a template on to which the received speech fits neatly, but it is a much more active process. Now it seems evident to me that learners, as learners, do not have the full script, or indeed anything like it, and can usually generate only fragments at what I have called the interface,

often based only on phonetic matching. It may be that the text of sub-titles provides the learner/viewer with a recognizable and intelligible script which can be used to fill in missing parts of the speech, and thereby provide an accurate match at the proposed interface. Feelings of guilt on the part of the learner may come from having the script on the screen rather than in the head. The fact that one is presented with a script naturally makes considerable demands on reading skills, and it is not surprising that in the study reported here, it is the highly literate learners, who are familiar with Roman script and are used to learning through text, who appear to benefit most from the textual support.

What does seem to be certain from my observations and findings is that the presence of text does not reduce television watching to text reading + pictures, but that learners continue to try and match sound and text, and indeed try to monitor the correctness of their own match at the interface, via the text. The text can therefore be regarded for many learners as a potentially valuable mediating device. Some might argue that such a view is too optimistic and that what is going on is no longer listening, but simply hearing sounds while reading text and watching pictures, with consequent lack of attention to meaning in the sound. However, given a degree of unconscious integration of the senses, who is to say that there will not be long-term benefits in retention and recall from the richer environment created by the different channels? This is obviously another area which requires further research.

Levels of learner proficiency

As we have seen in the findings of the study, there are serious questions regarding the use of sub-titled programmes with learners who are not used to reading in English or who are below intermediate level. At beginner and low-intermediate levels, the language may not be comprehensible enough, even with textual support, since not only may the text be beyond them in terms of grammar and lexis, but the learners' reading speeds in English may also be too slow, even if the grammar and lexis are familiar. A large number of items might have to be introduced beforehand to ensure recognition during the programme. As we have seen with the Arabic-speaking group, who were able to express themselves well and fluently in English for the most part, sub-titles proved to be distracting and disturbing. Just as they were slow in reading books and articles in English (some still sub-vocalized), so the same slowness proved to be a great hindrance in watching sub-titled programmes in English. It might be interesting to consider, however, that if learners' listening skills are better than their reading skills, then sub-titled programmes might help to speed up reading ability, since it has already been noted that the European subjects reported that they developed a 'chunking' ability in both reading and listening. It is also interesting to note that the European subjects, with their rapid reading skills, felt guilt at relying on such skills at times, while the opposite was the case with the Arabic-speaking subjects. They felt that their slow reading ability was exposed, and for this reason they were disturbed by the text.

Sub-titles, accents, and dialects

How have Glaswegians got used to understanding programmes set in London such as *Minder*, or Londoners to understanding programmes set in Glasgow such as *Taggart*, or how indeed in the 1930s did British people tune in to American accents other than by regular and extensive watching of films and programmes with such accents and dialectal features? One needs a large amount of comprehensible input in order to tune into unfamiliar

accents and dialects, and with learners, I would argue, the text, together with the images on the screen, provides the comprehensible part of the multi-channelled input. Simple exposure alone will probably not be sufficient to enable a learner to tune into what is perceived as a difficult and normally incomprehensible accent. One has to know what people are saying in order to make the approximate match with one's own or with a familiar model of speech. Thus, the important aspect regarding sub-titles in programmes with strong regional or American accents is not that the subjects in the study were able to understand what the actors were saying, but that they were hearing the accent and knew what was being said. Thus, they were not simply exposed to accent, they could also use the comprehension of the speech to facilitate tuning in to the value of the sounds of a particular accent.

Outcome One interesting outcome of the study was that it produced a great deal of frustration on the part of those students returning to France, Germany, Austria, Italy, and Spain, since they would be able to see only dubbed programmes in their countries. They envied the Danish student her Danish sub-titles, since they had by this time taught themselves how to use sub-titles for their own benefit. It is to be hoped that with the ever-growing number of European television channels, and with increasingly sophisticated television technology, sub-titles will be available in different languages via the teletext system throughout Europe. A less ambitious outcome would be simply to use some of the spare capacity for showing programmes in both dubbed and sub-titled formats. In Britain, the extra capacity provided by Channel 4 has meant that the French programme *Chateaufallon* can be shown in both dubbed and sub-titled versions, and further experiments of this kind are to be hoped for in the future. □

Received August 1987

Notes

- 1 Conversely, I myself found that my knowledge and understanding of Finnish was helped through reading the Finnish sub-titles of English and American programmes.
- 2 The sponsorship of the BBC Education Department is gratefully acknowledged in permitting me to videotape general output programmes for research purposes.
- 3 Such an introduction would take the form: 'Today you are going to watch an episode of *Bergerac*, a police series set on the island of Jersey. This episode is about a man who tries to take his revenge on Detective Sergeant Jim Bergerac.'

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