1. Introduction

BBC News 24 is a channel by the British Broadcasting Corporation which is intended to transmit news 24 hours a day, from all of the BBC's television outlets in the world. Its programmes are mainly information programmes covering the previous day's news, sport, business and weather items (Breakfast), the highlights of the week (HARDtalk), the latest stories and personalities from the technology world (Click), a series of special reports by the youngsters on issues important to the youngsters (Teen 24), all the day's sports events (SportsDay), specific general interest topics (OurWorld), the best of the week's films (The Week on Newsnight), the latest business news from around the world with live reports from Singapore, Frankfurt and London and the news of what happened overnight in New York (World Business Report), how events in the UK are being tackled around the world (Dateline London), in-depth discussions and analysis (BBC Five O'Clock News Hour) and obviously BBC News, the 30-minute news programme, aired some 25-30 times a day, covering the latest national and international stories as they break. Some stories are more relevant than others, or they have not yet come to an end, or have a follow-up and they are consequently broadcast again and again during the day. Very important events are covered for periods longer than just one day.

In the following chapters, BBC News will be first analysed as a genre *per se*. Then, all strategies adopted by BBC respeakers to subtitle BBC News will be analysed in detail. Finally, every single move will be analysed according to the strategies employed by the same respeakers and results discussed.

2. Genre analysis of BBC News

BBC News on BBC News 24 is an example of information TV genre. The European Broadcasting Union (1995: 25) defines news programmes and every information programme in general as programmes

> intended primarily to inform about current facts, situations, events, theories or forecasts, or to provide explanatory background information and advice. Information programme content has to be non-durable, that is to say that one could not imagine that the same programme would be transmitted e.g. one year later without losing most of its relevance.

Since BBC News is a live programme, the video and audio inputs do not contribute in the same way to the global meaning of the whole text. The visual component is indeed ancillary to the verbal one. When images related to the news item into question are shown, they rarely compensate for the oral text, but focus on a single aspect (setting, participants, the effects of a phenomenon, etc.). Moreover, on camera are often the faces of the speakers (newsreaders, reporters, etc.) and not the subject of the text.

As for its structuring as a genre, it is mainly composed of pre-prepared news reports and of live reportages, but it generally follows a quite common patterning:

- *jingle, digital clock and opening images*;
- *headlines*. They begin with the main newsreader who, first, tells the time and, then, introduces the headlines. This first 'step' (cfr. Bhatia 2002) is not read or improvised by the newsreader, but it is composed of formulaic expressions s/he repeats by heart adapting it accordingly. Therefore, there is no room for orality features. The second step is the reading of the headlines by one or two on-air newsreaders. If they are two, they either alternate in reading them or one reads the headlines and the other introduces the first news item.

Being a highly condensed version of the news to follow, and having been written to be read, the headlines are characterised by a very low rate of grammatical intricacy and a high rate of both lexical density (cfr. Halliday 1985) and reading speed. Sentences are indeed mainly composed of one main clause and up to two subordinate clauses. Almost all of them follow the basic S-V-O

syntactical structure and each headline follows paratactically the previous one. In this context, each lexeme plays a vital role and no omission would be possible. Moreover, the headlines are read at a higher rate in comparison with the other moves and there is no visual compensation by images or other kinds of visual support. Finally, the information provided by the text is totally new to the respeaker, whose job is then very demanding, since s/he has not only to tackle with all that has been said, but has also to keep the same pace as the source text (>180 wpm). Unfortunately, neither the speech-to-text software used is ready to compete with such an amount of input, nor the respeaker. The former would have more difficulties in recognising the mid-text[1], thus slowing down the speech recognition process, and the latter would not articulate her/his words as correctly as usual. Consequently, the accuracy rate of the subtitles would be inferior to the average. The third and final step is made of one or two sentences: a clause explaining that full details will follow concludes the move and a thank by the other newsreader (if there are two newsreaders) functions as a transition clause to introduce the following move. From the quantitative point of view, the headlines account for 4,3% of the total text;

- *news reports*. They begin with the newsreader expanding what has already been said in the headlines with more relevant information. Once again, the text is pre-prepared and read on-line. Grammatical intricacy and lexical density are then similar to the ones in the headlines, while the flow of speech is slightly slower. The transition to the following step is guaranteed by the newsreader leaving the floor to the live reporter either directly, posing her/him questions or introducing her/him with a formulaic expression (e.g. "there is the scene of our sports correspondent, James Munro"); or indirectly, clearly finishing her/his speech turn.

This step brings in a live reportage or a pre-prepared news report. If the news into question is really breaking, i.e. if BBC News 24 has never reported it before, the live reporter will sum up what has happened. This step can be either a long account or a brief summary depending on the personal style of the reporter and on the questions of the newsreader. It is generally a pre-structured oral speech, characterised by a lower lexical density and a higher grammatical intricacy than the previous steps and move. The speech will also be slower than the other texts, but the quality of the transmission will be inferior. Therefore, the respeaker will have two kinds of difficulties: eliminating all features of orality from the source text; and understanding the source text with the least effort possible.

After this first reportage, the newsreader generally poses a question or a set of specific questions asking for more details. To this, the reporter will react by structuring her/his answer on some on-the-spot notes. This means that the source text is composed of short questions and answers in rapid succession. Consequently, the respeaker has to catch up without reformulating or omitting.

On the contrary, if the news has already been reported, the news report (images and text) is either the same as a previous programme or pre-recorded. In the first case, the respeaker will be confronted with a text s/he knows and having the same characteristics that have been just enumerated. In the second case, the text is written to be read, with higher lexical density and speech rate and lower grammatical intricacy than the live reportage. It is generally easier to respeak than the live reportages because the text is aired semi-live, that is the operators already know its form and content because it is pre-recorded, but it has never been on-air.

Worth a mention is the nature of both the live reportage and of the pre-prepared news report. The two of them are not a unique genre or subgenre. Be they live or semi-live, they usually refer to on-going noteworthy events. For this reason, they contain other live and pre-recorded genres or subgenres, like interviews, press conferences, commentaries, etc. In the case of a live reportage, the difficulty for the operator to respeak it will be to the utmost. The event has never been aired before. The texts to subtitle are rarely pre-structured and the respeaker vaguely knows its content. Moreover, lexicon is wholly unknown to everybody. This means that apart from some content-

[1] The word 'mid-text' is here used to refer to the text pronounced by the respeaker. It cannot be considered as the target text, because it is not the final product end users will read. It is the oral input to be automatically translated by the speech-to-text recognition software in written subtitles.

related words prepared by the respeaker her/himself or by the subtitling staff in advance, the subtitler has to cope with high grammatical intricacy, generally high lexical density, many speech turns, different speech rates, high amount of orality features, and a generally lower signal transmission quality than the average. The respeaker is forced to keep the same pace as the source text, so as to minimise asynchrony between images and subtitles. Intuitively, there is no room for other strategies but verbatim repetition and omission of ideas and of orality features.

This move normally ends with a formulaic expression pronounced by the reporter and containing her/his name, the company s/he works for and the town s/he is reporting from (e.g. "Andrew Hardy, BBC News, Singapore"). Follows a thank by the newsreader, who moves her/his head from the on-studio screen to the camera. This plays the role of a transitional clause. It signals that the step is over and that the newsreader will to turn to a new step or to a new move. From the quantitative standpoint the news are 68,2% of the total text;

- *weather forecasts*. This subgenre constitutes a whole move and is usually introduced by the newsreader with a formulaic expression (e.g. "Now, let's have a weather forecast, with Jo Farrow"). The camera then airs the face or body of the weather reporter who thanks the newsreader and immediately moves to the forecasts. This move is characterised by a pre-structured written text to be read. As far as the United Kingdom is concerned, the reporter explains the forecasts for every town and then sums up the global forecasts for the State or region the mentioned towns are part of (e.g. 'So, wet weather in the north-east'). This move may end with a transitional clause by the reporter or the newsreader. Another transitional clause follows. It is usually pronounced by the newsreader who moves to another topic or greets the audience for listening. Since the verbal component is compensated by the visual one (little icons representing a sunny, windy, cloudy, stormy, or foggy weather are usually positioned over a map of the region or State), the speaker speaks at an accelerated speech rate. Sentences are generally very short and lexical density is very high. If the respeaker opts for a verbatim rendering s/he will be forced to keep the same pace as the speaker. Moreover, s/he has also to care of synchrony. Since images and iconicity (gestures by the speaker indicating the region or State s/he is talking of) change in rapid succession, subtitles referring to a region or a State have to appear as soon as possible under the relative images and not under images referring to another region or State. From the quantitative point of view, the weather forecasts represent 8.9% of the total text;

- *news summary*. It is usually positioned after the weather forecasts. Its structure and nature are similar to the one of the headlines: it begins with a formulaic expression (e.g. "Some news summary first") and is characterised by a list of the mentioned news. The text is written to be read and sentences are short and lexical density and speech rate are high. Moreover, the text is not compensated by images. However, as far as its function is concerned, it is not an introduction of what is going to be said, but a sort of state-of-the-art of the news, a summary of the most important news which have already been broadcast. It usually ends with a formulaic expression recalling that news items, headlines and summaries can be accessed to through the BBC interactive archive. Follow breaking news or the last move. Quantitatively, the new summary are 17.5% of the total text;

- *jingle, digital clock and closing images*.

All this being said, it is probably important noticing that this structure is elastic. Being a live coverage of the latest news, BBC News has to be flexible and not necessarily follow a given pattern. News items are covered as they break and, consequently, they are broadcasted live whatever the pre-established ordering, that is before or after the weather forecasts and before or after the news summary.

3. Strategic analysis of BBC News

As has already been said, the verbal component of a multimodal text like BBC News is of paramount importance since the visual one does not compensate for it. Precisely because of that, the request of the British Royal National Institute for Deaf and Hard of Hearing People, representing the target audience of the subtitling provided by the BBC Access Services[2], has asked for verbatim subtitling as the only means for a full access[3] to these kinds of programmes. Ofcom, the independent regulator and competition authority for the United Kingdom communications industries[4], mitigates this request by suggesting that it is possible to "reduce the amount of text by reducing the reading speed and removing unnecessary words and sentences" (Ofcom 1999:27). What is important, is indeed representing "the whole meaning" (*ibidem*). To do so, "subtitles should contain a reasonable percentage of the words spoken"; 'idea units', that is "where a proposition or key information is given" (*ibidem.*), should "appear as a good percentage of the original" (*ibidem.*); and, finally, "'idea units' which are unnecessary or different from the original" (*ibidem.*) can be omitted.

Thanks to a deep analysis of eight editions of BBC News in general, and of every move in particular, it will be possible to check how the RNID and Ofcom requests have been put into practice by BBC respeakers.

3.1 Methodology

In order to describe the methodology used to analyse the eight BBC News editions from a strategic standpoint, it is first of all necessary to further deepen the notion of 'idea unit', which has just been introduced. Despite the introduction and the definition of the notion of 'idea unit' by Ofcom, in practice, it still remains unclear what an 'idea unit' is. Should an 'idea unit' be considered a lexical word? A sentence? A clause? A period? Let us consider the following example from a BBC News live reportage:

ST[5]: London have to focus on the key 45' presentation <u>tomorrow</u> to <u>all</u> the IOC members

TT: London have to focus on the key 45 minutes presentation (…) to (…) the IOC

Is it possible here to say that the ST has been transferred into the TT? As for the global meaning of the sentence, it has been rendered in a quite complete way. The same can be said about 'IOC' in the TT translating 'all the IOC members': as a consequence of a reduction strategy, the same concept expressed by the reporter in the ST by means of four words has been expressed by the respeaker in the TT by means of a two-word synonym. Moreover, the idea of a presentation to the International Olympic Committee was not new to the TV viewer. It had been mentioned many times already in the course of the report. For a full access to the ST, it was not even necessary to

[2] At the time the analysed text was broadcast, real-time subtitling was still provided by BBC Access Services. Now, the BBC Access Services have been dismantled and accessibility at BBC programmes is guaranteed by Red Bee Media, a private company having hired the former BBC Access Services staff and following the same guidelines and using the same software as the BBC Access Services.

[3] The 2006 First International Seminar on Real-Time Intralingual Subtitling, held in Forlì, Italy, on November 17th, has further deepened an on-going debate within the research community on the meaning of full access for the deaf to the audiovisual text. Some support the theory that only a verbatim subtitling provides for full accessibility (cf. Mereghetti 2006) while others consider a reformulation to be more suitable to the deaf needs (cf. Eugeni 2007).

[4] Ofcom is the main authority in the field of TV accessibility in the UK since it regulates BBC broadcasting policy in the area of subtitling for the deaf, real-time subtitling, audio-description, and simultaneous interpreting. Its guidelines still provide the reference for all UK broadcasters.

[5] ST stands for 'Source Text', a label borrowed from the Interpreting Studies and used here to define the orthographic transcription of the original broadcasted speech. The same is true for TT, standing for 'Target Text', and used here to define the transcription of the real-time subtitles as the target audience has received them. Finally, underlined is the text to consider and the symbol (…) is used to signal that, of the underlined text, a word or a group of words has been omitted in the TT.

repeat the words 'the IOC' in the TT again, since the TV viewer would have easily inferred the essential information from the context even by simply getting the word 'presentation'. But what about the omission of the word 'tomorrow'? Here again, this is a case of known information, but it is also a lexical item, with a specific semantic load. What happens when the respeaker omits it? Since it is a known piece of information, the TV viewer is not deprived of something meaningful. However, if it were not known as a piece of information, what would have this omission caused? A non rendition of a meaningful idea unit? A rendition of a bigger idea unit by means of reduction strategies? These questions seem without a convincing answer. That is why, I propose a distinction between two kinds of 'units':

-micro-units: all relevant pieces of information in a clause (lexical units like subject group, verb group, adverbs, etc.) contributing to the global meaning of a bigger meaning unit;

-macro-units: every clause providing a finite self-standing set of information (e.g. a defining relative clause, an embedded clause, an incidental clause, etc.).

The second step has been the transcription of the ST and its consequent segmentation into macro-idea units. The same has been done with the transcription of the relative subtitles. The two texts have then been aligned and compared. First of all, all those macro-idea units which have not been rendered (mainly because of macro-unit omissions) have been highlighted. As for the remaining macro-units, some of them have been faithfully repeated in the TT, while others have been altered, that is slightly or heavily modified in the form at a micro-unit or word level (cfr. Gambier 1992). Altered macro-units have then been highlighted and analysed by means of a special taxonomy composed of three categories, inspired and partially corresponding to Gambier's taxonomy (2006) for the analysis of the strategies used by subtitling professionals. The taxonomy has been structured as follows:

-**non rendered macro-units**: a macro-unit has not been rendered, mainly because of macro-unit omission or as a result of a ineffective strategy;

-**rendered macro-units**: the meaning of a macro-unit has been rendered thanks to

- repetition: a macro-unit has been repeated word-for-word;
- alteration: a macro-unit has been slightly or heavily modified in the form by means of
  - expansion: a macro-unit has been disambiguated by means of more characters than the ST;
  - reduction: a macro-unit has been partially omitted or partially or totally compressed;
  - mistakes: a macro-unit has been altered by a human or software mistake;

Worth a final mention is the quantitative nature of the strategies. The rationale behind this analysis is indeed the quantitative one. If the subtitled version of a macro-idea unit contained less characters than the original, the macro-idea unit has been considered as the result of a reduction strategy; while if it contained more characters, as the result of an expansion strategy. Then, macro-units have been further analysed according on whether a strategy has produced a semantic reduction or expansion of the source text (meaning has been erased or added), or a mere reduction or expansion of the number of characters of the source text without distorting the meaning of every single component of the scrutinised macro-unit. As far as mistakes are concerned (both by the

speech-to-text software and by the respeaker), they have been considered as an alteration of the macro-units, because they result in a non-faithful rendition of the ST, but have not been included in one of the two strategies above, because they cannot be considered as the result of voluntary strategies, but as the result of an unconscious or mechanic (unpleasant) incident.

3.2 Global strategic analysis of BBC News

The analysed text is composed of 1101 macro-idea units. 208 of them (18.9% of the total macro-units) have been completely omitted, and 893 (81.1% of the total macro-units) have been rendered. 522 (that is 47.4% of the total macro-units or 58.5% of the rendered ones) have been faithfully repeated, while the remaining 371 macro-units (33.7% of the total macro-units or 41.5% of the rendered ones) have been either quantitatively expanded (7% of the altered macro-units), or reduced (89.1%), or the object of unintentional mistakes both by the speech recognition software and by the respeaker (3.4%), or of conscious correction by the respeaker (0.5%). The last ones have all been considered as semantic compressions, since this strategy has always produced a decrease in the number of characters of the corrected unit.

Omissions

All the non rendered macro-units which have been analysed are the result of just one macro-strategy: omission. The omitted macro-units are mainly sentences produced in a passage which is more rapid than the average speech rate (59.8% of the total omitted macro-units), sentences produced in a moment subtitles are lagging (12.8% of the total omitted macro-units) or formulaic expressions (27.4% of the total omitted macro-units). As far as the first type of omitted sentences is concerned, it is to be noted that the average speech rate of a normal BBC News text is 183 wpm. When the text gets sensibly faster than the average speech rate, the total amount of omitted units increases. Noteworthy is also the fact that the omitted sentences are not really 'omittable'. They are not less important sentences, but, most of times, meaningful units which are only guilty of appearing in a rapid step. In the following example, the reporter interviews several locals from a Scottish village called Gleneagles. They comment on the high number of policemen in the village, because of the forthcoming G8 summit. One of the interviewees says:

ST: It seems too much for what is going on. No-one at Gleneagles is gonna know what's happening. <u>All these big marches and things I don't think it is useful at all.</u>

TT: It seems too much for what is going on. No-one at Gleneagles will know what is going on <u>(…)</u>

The average speech rate rises here to 191 wpm. Moreover, turn taking is very fast, 8 seconds on average. If we consider that the average delay between the ST and the corresponding TT is 4.3 seconds, it is quite clear that the respeaker has been forced to reduce the ST. However, her/his choice has been to omit a very important macro-idea unit, a bitter comment on what is going on in the village. Why has the respeaker opted for its omission and not for its compression? And why has s/he omitted that sentence and not another one? Answering to the first question appears to be obvious: omitting is less time-consuming and more effective in terms of space than compressing. As far as the second question is concerned, there seem to be three possible reasons: 1) the respeaker realises that the interview is made of two personal opinions, very similar between them: "It seems too much for what is going on" and "All these big marches and things I don't think it is useful at all"; and of a general comment: "No-one up at Gleneagles is gonna know what's happening". S/he decides then to omit the last unit because it is redundant and not useful to the general understanding of the ST; 2) as the respeaker finishes dictating the first two units, the journalist starts commenting

on the interviews. The respeaker decides then to leave the last unit out, so as not to overcharge her/his short term memory and the semantic load of the subtitles; 3) both of them.

Another example of sentence omitted because it is produced in a rapid text is the following:

ST: I feel very proud to be a British athlete and a Paralympian. There is not another country in the world with so much attention to Paralympian athletes as the UK both in terms of financial support, and of media coverage.

TT: I feel very proud to be a British athlete and a Paralympian. (…) Both in terms of financial support, and of media coverage.

This example is taken from the London bid team[6] press conference. All athletes sitting at the conference floor are addressing some welcome words to journalists. Turn taking is very rapid (every 15.2 seconds). When Dame Tanni Grey Thompson takes the floor she speaks faster than anybody else (169 wpm)[7]. The respeaker probably feels lost by this rapid change and decides to omit portions of the ST. Here again, it seems that the rationale behind this choice is arbitrary. The subtitles produce a sense of something missing even if some cohesion may be found somewhere. Moreover, an important piece of information is erased: the UK is the country paying more attention than any other to disabled athletes.

A similar type of omitted macro-idea units is the second one, that is sentences or clauses having been leaved out because the gap between subtitles and the corresponding text is so high, the respeaker cannot but to skip something over in order to catch up. There is a main difference between this type of omission and the previous one: in this case, speech rate is not so high to justify an omission. The reasons for this type of omissions are basically two:

1. the text is particularly dense, i.e. lexical words in a single macro-idea unit are more than the average (4.7). This is the case of the headlines, where the amount of lexical words per macro-idea unit rises to 6.1 and the average speech rate is just slightly higher than the average (186 wpm). While respeaking this kind of units, the cognitive load becomes more demanding and the gap between the ST and the TT increases. The following example clearly shows that no other reason is possible:

ST: Liverpool have received a £32 offer from Chelsea for the star, which they say they will turn down. West Ham have been busy on the transfer of Cardiff defender Danny Gabbidon, one of three players to join West Ham today. And the Lions have beaten Auckland, but only just.

TT: Liv were received a £32 offer for the star, which they say they will turn down. (…) And the Lions have beaten Auckland, but only just.

While the first (micro-unit) omission ('from Chelsea') is not so influent, and probably not due to a surplus in lexical density, the second (macro-unit) one is a clear example of what has just been mentioned. The omitted sentence is a whole macro-idea unit and the TV viewer will have to wait for the corresponding news report to get the momentarily lost piece of information;

2. the video input plays such a vital role, the verbal component turns out to be of minor importance. The subtitles then cannot lag too much behind and the respeaker is forced to reduce the delay to a minimum. This is particularly true for the weather forecasts. This move is characterised by text describing maps and icons appearing on the screen in rapid succession. In this context,

[6] The UK athletes' commission in charge of convincing the IOC delegates to choose London to host the 2012 Olympic Games. The commission's spokespersons are: Jonathan Edwards, Shirley Robinson, Sir Matthew Pinsent, Denise Lewis, Sir Steve Redgrave, Dame Tanni Grey Thompson, Colin Jackson, Sebastian Coe, David Hemmery and David Beckham.
[7] The average speech rate of the athletes speaking is 148 words per minute.

omitting a macro-idea unit does not produce a total loss. That is why, whole sentences are deleted so as not to produce misleading subtitles, i.e. subtitles referring to a given map or a given icon appearing under other maps or icons. Once again, there seem to be no other reason for the omission of these sentences. Let's consider the following example:

ST: In the late morning we'll begin to see the clouds increasing across northern England as this wet weather moves in, moving across Cumbria by lunchtime

TT: (…) We'll begin to see the clouds increasing across northern England (…)

While for the first (micro-unit) omission there is compensation with the image, i.e. a digital clock telling the corresponding time on the top right of the screen, the second (macro-unit) omission is just partially compensated by an icon showing a rainy cloud positioned on the northern side of Britain. Moreover, those who prefer to read subtitles without counterchecking (i.e. by observing the map) will lose an important piece of information (especially if they are Cumbrian!).

The third type of omitted macro-units is essentially made of formulaic expressions, a strategy regularly applied by all respeakers. The most self-evident case is the omission of the transition clause pronounced by the reporter to signal that the news report is over and that is now the newsreader's turn. It normally contains the reporter's name and affiliation and the town s/he is reporting from. Moreover, this piece of information is given in a caption at the beginning of the live reportage. That is why, in the whole analysed text, all 57 formulaic expressions of this kind have been omitted, be they in a rapid or slow passage.

Finally, worth a mention is a quite common case of omission, which is transversal to the first two abovementioned: fusions, that is one or more clauses, contained in a period, having been eliminated and the preceding and the following ones juxtaposed or joint by cohesion items:

ST: who wanted to work part-time to look after her baby daughter. She went to court for indirect sexual discrimination against the airline after her request to cut her hours by half was turned down.
TT: who wanted (…)(…) to cut her hours by half was turned down.

In those cases it does not causes cohesion problems, even if it omits important pieces of information, it is a very useful strategy to bridge the gap between the ST and the TT.

Repetitions

Half of the macro-idea units have been faithfully repeated. By 'faithfully' it is here meant that the ST has been reproduced as it has been pronounced. The TT is then an orthographic transcription of the ST[8]. This is a clear evidence that the main concern of respeakers, and probably the best way to produce good quality subtitles, is to try and repeat the ST word for word. This will limit the respeaker mental effort to 'just' keeping the same pace as the ST and inserting punctuation and colours in the TT. However, this is only possible when speech rate is slow enough, lexical density, turn taking and video compensation are low enough, and given information is enough to guarantee no other constraint to respeaking. This condition is unsteady, though, and what is more, not even this ideal condition enables respeakers to produce verbatim subtitles for a period longer than five macro-idea units. It seems that keeping the same pace as the original is a cognitively consuming and not sustainable activity. Moreover, as it will be possible to realise later, speech-to-text recognition mistakes still have an impact on the TT (3.4%). If we add to this all cases of minimal quantitative expansions, omissions and compressions, it is easy to see how repetitions would account for an even more important percentage.

[8] As it will be possible to see later, the ST is often characterised by features of orality like false starts, auto-reformulations, hesitations, etc. In the case of repetitions, everything has been translated.

Expansions

Expansions and reductions count for less than one third of strategies. As has just been mentioned, respeakers tend to repeat the ST faithfully as much as they can and to omit entire macro-units in case of redundancy or of problems in dealing with the respeaking process. Just one third of macro-units are the object of some real manipulation (many are reduced and just some are expanded or corrected. 3.4% of macro-units, that is a rate of 1.04% on the total macro-units, contain a mistake once translated into the ST). Expansion is then the less employed deliberate macro-strategy (cfr. Gambier 2006) while respeaking (7% of the altered macro-units). The most obvious reason is the difficulty to add information or simply to explain condensed information under so strict time constraints. However, there are some cases where the respeaker adds characters to the TT as a result of either a 'semantic' or qualitative expansion (information is added to the ST) or of a mere quantitative expansion (just characters are added to the ST). Needless to say that almost two thirds of expansions are represented by the latter. This is because, while respeaking, it happens quite often not to remember exactly every single word. As a consequence, the introduction of morpho-syntactic synonyms or of cohesion items, or again changing the focus or the word order of a speech act are quite mechanic, almost unconscious operations. As for morpho-syntactic synonymy (like 'we'll' turned into 'we will', 'gonna' into 'going to', 'won't' into 'will not', or the introduction of grammatical words like 'that' instead of elliptic relative clauses, or again the rendering of 'thanks' and 'thank you' with 'thank you very much'), it accounts for 36% of all kinds of expansion; introducing cohesion items ('but', 'and', 'now', 'then', etc.) is also a very common strategy (26%); finally, the incidence of dislocations and focalisations[9] is less important than the previous, 2% of all kinds of expansions. This low figure is probably due to the big cognitive effort implied and to a relative uselessness this kind of operations implicate.

As far as qualitative or 'semantic' expansion is concerned, it is to be said that the majority of strategies is constituted by operations at the word or phrase level which do not produce big alterations to the ST. The most employed strategy is explication (18%), an umbrella term embracing sub-strategies like disambiguating acronyms ('IOC' turned into 'the International Olympic Committee'), completing a name ('Seb' and 'Steve Redgrave' turned into 'Sebastian Coe' and 'Sir Steven Redgrave' respectively), attenuating a generalisation ('a third of the members' turned into 'about a third of the members'), or adding words in order to make a sentence clearer ('spent time on buses' turned into 'spent time sitting in buses'). Another important strategy is lexical synonymy accounting for 14% of expansion strategies and embracing both verbs ('cannot' turned into 'are not allowed', 'ask' turned into 'request', etc.) and names ('remarks' turned into 'comments', 'galaxy' turned into 'huge amount'). Noteworthy is also the case of the respeaker correcting the ST (2.5% of expansions). Even though it is in principle strictly forbidden (cfr. Marsh 2005), it may happen that, while listening to a sentence containing a mistake, the respeaker corrects it either unconsciously ('changes is' is automatically translated with 'changes are'), or because the speech-to-text software would not recognise it as is the case of mispronounced or invented words. Finally, worth a mention is the only detected case of expansion at the sentence level:

ST: <u>Gunmen have settled a ferocious battle with police</u>

TT: <u>Reports say that people have started to fight with the police</u>

This example is extracted by the news summary, a quite easy move of BBC News to respeak since the subtitler has already listened to and understood the content of the ST. From this example,

[9] Even though focalisations have, in fact, an important impact on the perception of subtitles because they change the focus of a speech act, all cases of focalisation detected have really slight implications on the perception of the TT.

it is clear that the respeaker has not only introduced hedging[10] (absent in the original), but s/he has also lexically simplified the ST. However, it cannot be hypothesised that the respeaker reformulates the ST in order to make it accessible to the target audience. It is an isolated case representing less than 0.1% of the total macro-strategies. What can be said is that this example together with the abovementioned qualitative expansion strategies demonstrate that reformulating while respeaking is not only possible, but it also produces good results both in terms of comprehension of and accessibility to the TT. What is important is to understand the ST as soon as possible, so as not to augment the *décalage* between the ST and the TT.

Reductions

Reduction is the most used and recognised strategy (cfr. Chaume 2004, Bruti and Perego 2005, Gambier 2006). As has already been said, it accounts for 89.5% of the total altered macro-units. It is composed of two sub-strategies, omission and compression. The former is the deleting of one or more micro-idea units or lexemes within a macro-idea unit. As is the case of expansions, it can be semantically more or less important. For this reason, it is further subdivided into qualitative, or semantic, and quantitative, or non-semantic, omission. Qualitative omission is essentially composed of the deleting of meaningful lexemes or phrases. Quantitative omission is the deleting of grammatical words, of features of the speech, of lexemes not useful to the semantic meaning of a unit ('that' → 'Ø', 'thank you' → 'thanks', 'you see' → 'Ø', 'it's, it's, it's very interesting' → 'it's very interesting', 'do you think that much protesters, many protesters will come to court' → 'do you think that many protesters will come to court', etc.), and of words which are redundant from the multimodal standpoint; the latter, compression, is the changing of the form of a macro or of a micro-unit in order to make it shorter. It is also further subdivided into two categories, qualitative and quantitative compression. Qualitative compression is composed of several sub-strategies like reformulation, vertical and horizontal synonymy, and focalisation. Quantitative compression is also composed of reformulation, vertical and horizontal synonymy, and focalisation. The basic difference with qualitative compression is the absence of any semantic difference produced by this kind of strategies.

As far as qualitative, or semantic, omission is concerned, it represents 5.2% of reduction strategies. Most of times (69% of qualitative micro-units omissions), it implicates the deleting of parts of a micro-idea unit and consequently an over-generalisation of the macro-idea unit it is part of, as the two cases in the following example:

ST: Scientific studies have found links to an increased risk of asthma and allergies, which laboratory tests have linked to allergies such as asthma and even certain types of cancer.

TT: (…) Studies have found links to an increased risk of asthma and allergies, which (…) tests have linked to allergies such as asthma and even certain types of cancer.

However, many are also the cases of entire micro-idea units having been deleted (31%). The strategy often brings in a total loss of a piece of information, which is not compensated by the video component (78% of semantic micro-units omissions). Moreover, the deleted micro-units are generally positioned at the end of the sentence. This may mean that the respeaker shadows the ST until the speaker passes to the next macro-idea unit. So as not to overcharge her/his short-term memory, s/he prefers to eliminate rhematic (i.e. new) information, as in the following:

ST: The Government has been an enthusiastic supporter of Internet for business and education

[10] *Hedging* is a rhetoric strategy used by the speaker to keep her/his distance from what s/he is saying, so as to back, or not to take full responsibility for what s/he is saying (cfr. among the first Lakoff 1972 and Halliday and Hasan 1985).

TT: The Government has been an enthusiastic supporter of Internet for business (…)

Sometimes (22% of cases), the deleted micro-idea unit can be inferred by context in its broadest sense (both verbal and non verbal). It is usually redundant information and by means of a manifest reasoning, the respeaker leaves it out, to the benefit of both her/his cognitive workload and the one of her/his audience. The following is a clear example of what has just been mentioned:

ST: The controversy started when an opposition website published this photograph, alleging the bearded man was Mr Ahmedinejad

TT: The controversy started when an opposition website published this photograph, alleging the (...) man was Mr Mahmoud Ahmedinejad

In this case, a photograph is shown with three men, two of them being bearded men. One of them is red circled and it is precisely that man whom the journalist is talking about. Apart from the ambiguity of saying 'the bearded man' (since there are two bearded men, the reference is still not clear), here the respeaker has opted for an over-generalisation immediately compensated by the visual component. So, even if this strategy implicates a semantic loss, this loss is compensated by the visual component. This is a clear case of collaboration between the audio and video components of a TV product. As Rundle puts it, subtitling is to be considered as "an interpretative key which is added to the original dialogue (and all the other communicative channels of the film) in a form that allows us to absorb both at once and use one to understand the other" (2008: 107). This is all the more true with intralingual respeaking and real-time subtitling.

As for quantitative omission, it represents 32.6% of reduction strategies. It is the most used reduction strategy and the main reasons are quite obvious: when the ST is a spoken-spoken text[11] (not written to be read aloud, but wholly *impromptu* or just mentally pre-prepared), all features of orality (basically repetitions, false starts, hesitations, mispronounced words, fillers and auto-reformulations) can be easily omitted to the benefit of both the respeaker cognitive workload and the TT readability (35.2% of cases); since both the ST and the translation process are oral, it is possible that all non-semantically and non-grammatically relevant items (fatisms, appellatives, deictic items, grammar lexemes, etc.) are omitted while reproducing the single units (47.8% of cases). If we consider the following examples, it is possible to realise that since these items are omitted because reproducing them would cost too much compared to the 'usefulness' of their transcription:

ST: Thank you James for...
TT: Thank you (...) for...

Here, respeaking the ST wholly would mean to say "THANK YOU COMMA JAMES COMMA FOR...". Omitting the appellative into question corresponds to a sensible gain in time and effort ("THANK YOU FOR..."). Here is a second example:

ST: He said that it is quite clear that...
TT: He said (…) it is quite clear that...

Omitting 'useless' grammatical words is a frequent technique (29,2% of non-semantic omissions), but as we have seen before, it is also possible that they are added in the TT (23,3% of non-semantic expansions), or simply repeated. It is not possible to say, then, that omitting 'useless'

[11] Cfr. Cortelazzo 1985.

grammatical words is a general rule, as it is the case for the previous kind of quantitative omissions. The reason for this to happen is only the abovementioned: speaking and respeaking are two oral and transient (cfr. Gottlieb 2005: 16) activities linked by the short-term memory of the respeaker. The ST is not unerringly graved in the mind of the respeaker: low signal transmission quality, high grammatical intricacy, high lexical density, speech turns, different speech rates, orality features, stress, fatigue, etc., all contribute to making the ST an unsteady entity to the subtitler, who will have difficulties in faithfully rendering every single grammatically coded sound.

The last case of quantitative omission is constituted by lexeme or phrase or even group omission. It is the case here of lexemes in a micro-idea unit or entire micro-units not contributing to the semantic load of the macro one, as in the following:

ST: we determined as a council three priorities
TT: we determined (...) three priorities

Who speaks is a member of the local council. She has been introduced as a member of the local council and has spoken about what the council has done since the beginning of her speech. Reiterating that the word 'we' is to be intended as 'the council' is not an informative unit and omitting it does not mean to deprive the audience of a piece of information. This is the reason why more than a half of the total lexical omissions (51.9%) has been categorised as quantitative omissions.

Finally, worth a mention is the case of fusions. As in the previous case, it is a strategy which is transversal to the abovementioned. It never implicates a loss of information, but it makes grammar less intricate and consequently subtitles shorter:

ST: there where some locals from Edinburgh who were involved
TT: there where some locals from Edinburgh (…) involved

In this case, as in many others, the relative clause is omitted and the information it contained has been 'glued' to the main clause.

As far as compression is concerned, it is also subdivided into qualitative and quantitative compression. Qualitative compression constitutes 30% of total reduction strategies. It is mainly divided into two sub-strategies: word compression (vertical and horizontal synonymy, 61.5% of the total semantic compression strategies) and sentence compression, 38.5% of the total semantic compression strategies. Lexical synonymy is the most used sub-strategy: in most of cases, it causes a generalisation of the idea unit into question as in the following cases of hyperonymy:

ST: in favour of a female pilot...
TT: in favour of a woman...

Here, the respeaker is subtitling a news explaining that a female pilot has been fired by the company for which she was working because she wanted to look after her baby daughter. The idea that the woman is a pilot is not very useful information. What is important here is the concept that the woman has been fired. However, eliminating this micro-idea deprives the audience of a piece of information which has not been compensated by context or other components. Hyperonymy is not only used to compress names, but also verbs. Even in these cases it causes a generalisation not compensated in a second moment or by contextual information. As for the following,

ST: so they realise what are their needs
TT: so they know what are their needs

synonymy erases the cognitive process behind the result: 'knowing their needs'. The reasons for this strategy are not clear. There are not so many similar cases and probably it is not the result of conscious operations. Probably, the respeaker has received the idea and has delivered it not as s/he remembered it but as s/he understood it. Other cases of vertical synonymy are very rare. As far as hyponymy is concerned, the reason why it is not employed is quite clear: going into details is not so obvious in a real-time activity. The respeaker does not know more than the speaker. The only detected examples are cases where the information surplus could be inferred by context or was clearly given by the ST immediately after:

ST: the case will be heard at the employment appeal tribunal
TT: the appeal will be heard at the employment tribunal

Apparently, the respeaker expands a four-character word ('case') into a six-character one ('appeal'). In fact, the word 'appeal' appears immediately after. The respeaker, then, either hears the word 'appeal', replaces the word 'case' with 'appeal', realises that 'appeal' should appear as a specifier of tribunal, and erases it from the compound; or profits from the suggestion offered by the ST and uses it as a way to reduce the TT. As for horizontal synonymy, it is mainly lexical synonymy. Again, the incidence of this sub-strategy is very low and the reason is obviously the relatively low 'effectiveness' of such an operation. Translating a word with an exact synonym is only useful when it comes immediately to the respeaker mind and if brings in a clear gain in terms of characters ('local people' translated with 'locals', 'attempts' with 'try', etc.). A last noteworthy example of quality words compression strategy is the following case of hyponymy:

ST: And in a separate instant, at least four people have been killed
TT: And in a separate attack, several people have been killed

Here, the respeaker has reformulated the ST not to reduce it (quantitative reduction is limited to a character), but because s/he has preferred being clearer than the journalist. An ethical question then rises: is it correct to say more than what has been said by the journalist? Let's pretend that the broadcaster's policy is to report news the most neutral way possible: is 'attack' as neutral as 'instant'? Or does it suggest that somebody has militarily modified the *status quo* because of political, religious, or whatever reasons?

The other quality compression sub-strategy, sentence compression, is mainly composed of reformulations, lexicalisations, and of focalisations, as in the following:

ST: his support has been absolutely critical
TT: he's given huge support

Or again:

ST: that's why London has gone creating an athletes commission asking the athletes: what do you want out of a London bid?
TT: that's why the bid has (…) asked athletes what they want out of a London bid

It is not a very used strategy (its incidence on the total reduction strategies is less than 1%) even if the gain in terms of characters is evident.

As far as quantitative compression is concerned, it is also composed of word compression and of sentence compression. Compared to qualitative word and sentence compression, the nature of this sub-categorisation is the absence of a real semantic relevance on the rest of the macro-idea unit it is part of. As for word compression, synonymy is again the most employed sub-strategy.

Hyperonymy, accounting for 15.4% of the total quantitative compression strategies, is quite common and is usually dictated by logical reasoning by the respeaker, as in the following:

ST: if they concentrate on the smoking and the alcohol-related cancers
TT: if they concentrate on the smoking and drinking cancer

Similarly to other cases, a word ('alcohol-related') is here replaced by a synonym ('drinking') morphologically more similar to the preceding element of the list it is part of ('smoking'). Conversely, hyponymy is less frequent (1.3% of the total non-semantic compression strategies), and the reason is intuitively the same as in the case of qualitative compression: specifying is more difficult than generalising. Furthermore, it does not produce any appreciable result on the TT. That is why, only in those cases it really results in a sensible gain of characters, it is employed. Here is another example:

ST: He has not been the asset that some would have liked the French bid to be
TT: It has not been the asset that some would have liked him to be

A journalist is reporting the news that French President Jacques Chirac has behaved in a diplomatically incorrect way at the meeting with the IOC committee to promote Paris as the 2012 Olympic host. While 'the French bid' clearly attenuates the responsibility of the President's behaviour, 'him' concentrates more on him as a member of the French bid team. The last sub-category within synonymy as a quantitative word-compression strategy, horizontal synonymy, plays an important role with an incidence of 7.4% on the total amount of quantitative reduction strategies. It includes operations like lexical synonymy ('going on' translating 'happening', 'today' for 'in the day', 'locals' for 'local people', 'some' for 'a series of', etc.), morpho-syntactic synonymy ('he's going to be meeting' translated by 'he'll meet', 'over the course of' by 'on', 'Buckingham' by 'Buck', 'United Nations' by 'UN', etc.), and anaphoric reference ('her' instead of 'Homolka', 'they' instead of 'London team', etc.). More interesting is the case of quantitative sentence-compression strategies, which is further subdivided into horizontal synonymy, reformulation, anaphoric reference, and reformulation. As in the case of qualitative sentence-compression strategies, they account for a lower percentage on the total quantitative reduction strategies (1.5%). However, their use brings in an impressive gain of time, space and cohesion, as in the following examples:

ST: David Lomas is reported to be in a stable condition in hospital
TT: David Lomas is said to be stable in hospital

ST: This is a 45' presentation which is going to be crucial, isn't it? A 45' presentation and…
TT: This is a 45 minute presentation which is going to be crucial, isn't it? Yes, and…

ST: We're going to hear from Steve Redgrave, we're going to hear from Matthew…
TT: We're going to hear from Steve Redgrave and Matthew…

ST: Our policing plan for policing this event has been…
TT: Our response has been…

The abovementioned examples not only show the effectiveness of the use of such strategies, but they also pave the way for general guidelines to be regularly applied, especially during very rapid passages.

Mistakes

As has already been said, both human mistakes and mistakes by the software, accounting for 3.4% of the total manipulated micro-units, have not been considered as specific strategies because they are not voluntary operations. However, they result in an alteration of the ST and sometimes they can also undermine its comprehension by the audience. As a general rule, it can be said that in case of a mistake, the TT comprehensibility is determined by three 'subjective' factors (the TV viewer attention, her/his familiarity with the news item, and her/his rapidity in detecting the mistake and in processing the sense of the macro-unit it is part of) and by three objective ones: the seriousness of the mistake itself, ('the athletes' instead than 'they need' is harder to understand than 'two much' instead than 'too much'), the degree a mistake is 'visible' (it is easier to detect and try to interpret n evident mistake like 'I'm not going to dis parish anybody' instead than 'I'm not going to disparage anybody', rather than a mistake which is plausible both in its form and in its content like 'China has fallen in love with the Netherlands' instead than 'China has fallen in love with the Net'), and the degree the semiotic and semantic contexts the mistake is produced in are able to disambiguate it. It is indeed much easier to infer the original text in the first example rather than in the second:

TP: So you've got cancer of the lung, the pharynx, the larynx, cancer of the mouth and the lip.

TA: So you've got cancer of the lung, far inches, the larynx, cancer of the mouth and the lip.

TP: There isn't unanimous support for this bid from the British public

TA: There isn't nam support (…) from the British public

However, precisely because disambiguating a mistake is mainly a subjective operation, the following categorisations and examples will not be considered as more or less serious mistakes, but according to their nature.

First of all it is necessary to make an essential distinction between mistakes due to speaker- (high speech rate, fast and numerous turn takings, unexpected technical words, idiolectal pronunciation, etc.), to channel- (low signal input, environmental noise, etc.), and to respeaker- (stress, fatigue, misuse of the correct technical device, etc.) related factors. Since it is quite complicated to exactly establish when a mistake is due to channel-related factors, it has been decided to group them into two different types of mistakes: software mistakes and respeaker mistakes. But before analysing the mistakes, it is probably interesting to note that misrecognitions by the speech-to-text engine never result in a non-word, for a very simple question: when 'transcribing' the oral input, the software processes it and finally matches it with its closest correspondent in the dictionary.

Now, let us consider the following example of software mistake:

ST: To add to that, the politics, the rumours, the conversations in corners and…
TT: To add to that, the politics, the Romans, the conversations in corners and…

In this example, the respeaker has probably not mispronounced the mid-text. Simply, the software, which does not make a semantic analysis at the sentence level, has taken the oral input and has recognised the word 'rumours' on the basis of the three main consonant sounds constituting it, that is /r/, /m/, and /z/. The result is a clear mistake, since 'Romans' is totally out of context. To understand what is hidden behind this mistake, the TV viewer has to wait for some seconds. After that, the same macro-idea is expressed and translated as follows:

ST: Matthew referred to rumours and counter rumours

TT: Matthew referred to the Moors and counter rumours

Again, the software has misrecognised the oral input but the TT offers a good key to correctly interpret this mistake and the previous one, that is the second element of the list, 'counter rumours', which could hardly come after any other word but 'rumours'. Another interesting case to mention concerns misrecognised monosyllables, which have been considered as software mistakes and not as human mistakes, for one simple reason: speech recognition technology is not yet sensible enough to make a real distinction between very close words, like 'oh' and 'off', 'to' and 'true', etc. not to cite homonyms ('to', 'two', and 'too'; 'there', 'they're', and 'their'; 'fast and' and 'fasten'; etc.), which have also an important incidence on the total software mistakes. A final word is worth the case of involuntary human mistakes, having therefore been considered as software mistakes. While respeaking, it is necessary to dictate punctuation, too. Now, it is possible that the software takes a word for a punctuation mark

TP: The point I've been trying to make

TA: The. We're trying to make

or vice versa, as in the following case:

ST: on my left, David Hemery.
TT: on my left, David Hemmery come up

As for the latter type of mistakes, human mistakes, it is possible to say that the mistake is the respeaker's fault if it is possible, from the text or from common knowledge, to understand that there was a chance to have a proper rendition of the ST. The following is a clear example of a mistake due to a drop of attention by the respeaker:

ST: Everybody is saying it's too close to call and nobody is prepared to predict the result
TT: Everybody is saying it's too close to call and anybody is prepared to predict the result

The respeaker either does not understand (and consequently does not faithfully repeat) 'nobody', or wishes to change the affirmative sentence into a negative one, but forgets to change the verb. A last possibility is that the software has not recognised the word 'nobody' or 'anybody isn't' correctly and the example is to considered as a case of software mistake. Another mistake indisputably attributed to the respeaker is the case of different information provided. The following is a clear example of that:

ST: You can see more police here in any five minutes than I've seen in the past ten years
TT: You can see more police here in any five minutes than I've seen in the past five years

In the reported case, the respeaker has probably been influenced by the preceding micro-unit ('in any five minutes'), while replacing 'ten years' with 'five years'. At the end of the day it cannot but be considered as a human mistake.

A last example of human mistake is the case of spelling mistakes. To avoid this kind of mistakes, the respeaker disposes of various tools which allow her/him to disambiguate possible homonyms. So, all mistakes that can be attributed to a misuse of the correct tool are to be considered as human mistakes. The simplest of these tools is vocal functions allowing to format a word. To avoid that the software recognises words in their general-dictionary form and not in the form which is needed in a given context, like 'standstill' (and not 'stand still'), 'set-up' (and not 'set up'), and 'State' (and not 'state'), the respeaker should dictate 'ONE WORD STANDSTILL', 'SET

HYPHEN UP', and 'CAPITAL STATE'. Another useful tool is the so called house-style. If the subtitling company imposes a given format to given words for given programmes (President and not president for BBC Parliament, 'UN' and not 'U. N.' for BBC News, 'offside' and not 'off-side' for BBC Sports), the respeaker has to make a list of all the words s/he wishes be written in a form different from the one the software generally recognises them, to activate this list of house-styles when needed and the software will automatically transcribe the word as it is recorded in the list into question. House-styles cannot be used to solve the preceding cases of misrecognition, though, because they are general words that can appear in the two forms in any kind of programme, and activating a house-style may be dangerous. The last tool the respeaker can count on to get what s/he wishes is the macro. Proper names like Butt or Cruz are usually transcribed as 'but' and 'cruise'. Once again, it is not possible to record them in a house-style list, because their homophones would be automatically excluded. Macros solve the problem by allowing the operator to have both spellings on command. The respeaker has to make a list of all proper names having a homophone in the general dictionary and attribute to each of them a 'word-macro', that is a label constituted by the word itself (Butt or Cruz in this case) followed by the word 'macro'. Once having recorded them, s/he will only say Butt-macro or Cruz-macro and s/he will immediately get the proper name on the screen. As for the common name, it will appear as soon as the respeaker dictates it.

3.3. Strategic analysis of BBC News moves

In the previous paragraph, it has been possible to see the average occurrence of every single strategy or sub-strategy on the text as a whole. However, in order to better understand the reasons for a strategy to happen, let us now briefly focus on each main move and have a detailed analysis of their incidence. According to the detected differences, it will be finally possible to derive some conclusions on the causes and consequences of what happen in a respeaker booth while subtitling live BBC News.

Headlines

The headlines are characterised by a lower rate of grammatical intricacy and a higher rate of both lexical density and speech rate than the average. And, almost all sentences follow the basic S-V-O syntactical structure. A strategic analysis of this move reveals that, on average, macro-unit omission accounts for 18.2%, that is a bit less than the average (18.9%). This is due to the absence of formulaic expressions and of 'omittable' units. Omitting a unit means indeed omitting an entire news item or an important part of it. All detected macro-unit omissions produce indeed the erasing of a part of the news item they are part of. However, this piece of data is not sensibly lower than the average. This probably means that higher average speed counter-balances the absence of formulaic expressions. On the contrary, macro-unit repetition is slightly more than the average, 48.2% against 47.4%. A reason for that may be that the headlines content is partially unknown to the respeaker, who consequently cannot reformulate or erase as much as in other moves.

Finally, alterations' incidence on the strategies total is more or less the same as the average (33.6% against 33.7%). The same is true for macro-unit expansion (8.7% against 7%), reduction (88.3% against 89.5%) and mistakes (3% against 3.4%). What differs is the distribution of the sub-strategies within these percentages. Semantic and non-semantic expansions constitute 75% and 25% of expansions respectively, against 35% and 65% on average, that is quite the opposite. A possible reason for such a low incidence of non-semantic expansions is lack of time (consequent to high speech rate) not allowing for turning verbs from their contracted form into their standard one. Since expansions are few, every case of semantic expansion has more incidence on the expansions total than the average. Moreover, most of detected examples of semantic expansion are positioned at the end of the unit they are part of. This may mean that the respeaker profits of pauses between headlines to give subtitles a better form. As for reduction, a distinction is to be made between micro-unit omission and macro- and or micro-unit compression. The total influence of reduction

strategies does not differ sensibly from the average (88.3% against 89.5%). However, while micro-unit omission reflects the average almost totally (semantic omission and non-semantic omission represent 13.7% and 86.3% respectively against an average of 13.8% and 86.2%), micro-unit compressions follow the same trend as expansions with 65% of semantic compression and 35% of non-semantic compression against 50.5% and 49.5% respectively on average. The reason for this to happen is intuitively the same as in the case of expansions: there is no time for reducing grammar words and their incidence on the total becomes far inferior than what happen in other moves. A final mention is worth the case of mistakes in this move. Again, their rate on the total alteration strategies is similar to the average one, but their internal distribution is different: 40% of human mistakes and 60% of software mistakes against 62.2% and 37.8% respectively on average). This is a bizarre piece of data, because all factors may let us think that the respeaker is more stressed than in other simpler moves: high speech rate and lexical density, new information, the beginning of a new work turn for the respeaker, etc. However, the fact that the respeaker has just started her/his turn may also mean that s/he is not stressed because s/he has got the time to relax while her/his colleague was working, thus allowing her/him to have more energy to face this challenging situation. Another reason may be the high percentage of software mistakes. It is to be mentioned, indeed, that all speech-to-text recognition software suffer from an input overcharge, which causes a less accurate processing by the software and consequently more mistakes. Since this move is quite dense, the software make more mistakes due to an overcharged workload. On the contrary, the fact that the incidence of all mistakes is lower than in the other moves is an evidence that the software is not so much disturbed by monosyllables, which are less in number than in other more grammatically intricate moves.

News reports

In this analysis, pre-recorded news reports and live reportages are considered separately even if they are part of the same move and may be either embedded one into the other or juxtaposed one after the other. However, their linguistic natures are quite different. Similarly to the headlines, news reports are generally characterised by low grammatical intricacy and high lexical density. On the contrary, the flow of speech is slightly slower. This is due to image compensation, which is not present in the headlines. Because news reports have a massive impact on the strategies average (almost two fifths of the programme is composed of pre-recorded – and edited – news reports), the incidence of strategies and of sub-strategies within this move reflect the average more than the headlines. However, some differences are worth a mention. Macro-unit omission is 2.6% lower than the average, the reason being lower speech rate. This is confirmed by figures about macro-unit repetition, 3% more than the average. Besides, since there is more time to repeat, why omitting?

As a consequence of that, altered macro-units correspond more or less to the average: 33.3% (against 33.7% on average). Again, distribution within this macro-strategy confirms that this move is quite simpler to respeak than the average ST. Expansions account for 10.4% of the total altered strategies, that is 3.4% more than the average. This is an evidence of the fact that, with more time to ideate the TT and more pauses between single steps, the respeaker has the possibility to disambiguate every obscure word or sentence. What is interesting here is that non-semantic expansions are more than the average (68.4% against 65%). The main reason for that is that this move is pre-prepared, so semantically well structured. Consequently, the respeaker intervention on the ST is mainly at the morpho-syntactic level, and not on the lexical-semantic one. Another reason may be the higher lexical density characterising every single macro-unit than the average. The greatest amount of lexemes brings then to reducing the ST. And this is not in contrast with what has just been said, that more time is available to ideate the TT. Even if there is more time and more pauses, it is also true that there is more TT between pauses to ideate, so more information to be processed. As far as reductions are concerned, they follow the abovementioned trend. From the one hand, they have an incidence which is inferior than the average, 87.7% against 89.5%; from the other hand, compressions have a greater impact on the total reduction strategies than mistakes and micro-units omission. The reason is not to be found in a lack of micro-units omission, but on the

aforementioned factors: lack of time and high amount of lexemes per macro-unit. Since there is more time than the average and since there is more text to be processed than the average, the respeaker cannot but reformulate and sum units up. A noteworthy figure is the distribution of sub-strategies within compression. Semantic compression plays indeed a much more important role than the average, with its 58.6% against 50.5% on average. This difference is mainly dictated by the lexical nature of the ST, being more dense than really live texts, so more 'semantically condensable' by the respeaker. On the other side of the fence, non-semantic compression is 8.1% less important than the average. The reason is the other side of the same coin: grammatical intricacy. Since the ST is pre-prepared, or partially pre-prepared, grammar is less complex than a live reportage and the respeakers can reformulate and sum up at their wish, by blending and compounding both micro- and macro-units. As for micro-unit omission, they are less represented than the average (-0.7%). Again, as in the case of macro-strategies omissions vs. repetitions, time plays against this strategy: since there is time to reformulate, why omitting? Moreover, when an omission is necessary, it will have a semantic impact on the TT (semantic micro-unit omissions have an incidence of 5% more than the average), to the detriment of non-semantic micro-unit omission). This is due to the fact that the text is lexically more important than the average. As has already been said, more text means more or even excessive workload. In this case, it is easier to erase some micro-units than eliminating pondered grammar words. Finally, mistakes have a sensibly lower incidence rate than the average, that is 1.9%, against 3.4%. The reason is again the quite easy task the respeaker is faced to. Moreover, mistakes concern almost exclusively the recognition of short words. This explains why the incidence of human mistakes is far less inferior than the average, 43.2% against 62.2%. A word is also to be spent on an operational aspect which further explains this figure: respeakers usually receive pre-prepared news reports beforehand, and consequently they can train both the software and themselves before going on-air.

Live reportages

This move is probably the most interesting and challenging one to respeak. It accounts for more than one third of the analysed macro-units and it is generally characterised by high grammatical intricacy, high lexical density (inferior to the one of pre-recorded news reports), many speech turns, high presence of orality features, and a signal transmission quality which is lower than the average one. What is more, content and form are usually unknown to the respeaker. In the end, a live reportage is an oral text, roughly pre-prepared, either mentally or orally or on the basis of some notes. However, what makes a live reportage unique in its genre is that it is not limited to the reporter summing up the news, but it is also composed of live interviews, press conferences, and other live events which have not been edited before going on-air. This means that the speaker may change all of a sudden, thus modifying the characteristics of the ST categorically: average speech rate, lexical density, grammatical intricacy, comprehensibility of the message, etc[12]. For all the abovementioned reasons, macro-unit omissions have a high incidence on the total strategies employed to subtitle this move, 21% against 18.9% on average; and repetitions have a low incidence, 45.1% against 47.4%.

On the contrary, the nature of the ST does not seem to have any influence on the total incidence of alterations (33.9% against 33.7%). However, what is striking is the difference of strategies and sub-strategies distribution within this macro-strategy. Expansions have indeed the lowest rate, 1.1%. This is probably due to the fact that new information is quantitatively far more than known information. As a consequence, the respeaker does not dare to add information, or simply characters, so as not to run the risk of losing some important information to come or to increase the divide between the ST and the TT. This is confirmed by figures about the incidence of non-semantic expansions on the total expansion strategies, 4.9% more than the average. Since the ST is spoken-spoken, sentences are characterised by more features of orality (contracted forms,

[12] In the following analysis, the peculiarities of every single live text have not been taken into account. They have all been considered as characteristics or steps of an average live report.

subject ellipses, etc.) than sentences in other moves. The respeaker finds easier and more natural to turn these orality features into their correspondent grammatically correct form, thus augmenting the incidence of non-semantic expansion on the total expansion strategies. As for semantic expansion strategies, they represent 30.1% of total expansion strategies, against an average of 35%. This is mainly due both to the incidence of non-semantic strategies and to the high amount of new information in the ST not allowing for any instinctive attempt to change it. If expansions are less represented than the average, reductions (91.4%) are not so overrepresented compared to mean reduction strategies (89.5%). This is due to the incidence of mistakes rate, which is far more than the average, 7.5% against 3.4%. Internal distribution between compressions and micro-unit omissions sticks even more to the average, 62.4% and 37.6% respectively against 62.2% and 37.8%. Similarly to what happens with news reports, respeakers subtitling live reportages tend indeed to compress more than to omit. This is because live reportages are characterised by lower lexical density than the average and every macro-idea unit is expressed with more words than the average sentence. It is not necessary then to omit, if there is time and space enough to say the same concept in other words. Once again, both non-semantic compressions and micro-unit omissions have greater incidence on their respective reduction strategies than the average (56.1% and 95.4% respectively against 49.5% and 86.2%). And also the reason is the same as in the case of non-semantic expansions, that is more grammar words than the average and consequently more possibility for the respeaker to compress or omit 'useless' or redundant micro-units or words. In the case of micro-unit omissions, the difference with the rest of moves is also the result of the incidence of orality features omissions, that is the erasing of all false starts, auto-reformulations, and hesitations. All these omissions are not semantic and account for more than a half of all micro-unit omissions. Finally, as has already been mentioned, mistakes are more frequent than the average (7.5% against 3.4% on average). And the reason is clearly the amount of new information in the ST and the stress derived by the difficulty to repeat all macro-units as much as the average. The majority of mistakes (68.3% against 62.2% on average) are indeed imputable to the respeaker. An other reason for this to happen is an operational one: the ST is live and the respeaker has not had the possibility to train the software on unknown words and proper names. Moreover, it is possible that even s/he has never heard a word before and then s/he has not a precise idea of its pronunciation and its spelling. As a consequence, the respeaker does not, or cannot, use the correct tool to avoid mistakes.

Weather forecasts

As demonstrated by the following data, weather forecasts are the most difficult move to respeak. Compared to the other moves, the news reporter speaks at an accelerated rate and the video component plays a vital role since it compensates the audio one. As a consequence, the respeaker has not only to keep the same pace as the speaker, but also to reduce the gap to a minimum so as not to produce subtitles referring to a region under the images of another region. The results show how this task is carried out by BBC respeakers. First of all, macro-unit omissions account for the highest percentage, 25.3%, 6.4% more than the average. This is a logical consequence of what has just been said. The most omitted macro-units are those summarising the forecasts for the State or region the different towns the reporter has just talked about, but it also happens that the respeaker cannot keep the same pace as the speaker and decides to leave something important out. Anyhow, images compensate almost wholly what is verbalised by the weather reporter. As a consequence of the incidence of macro-unit omissions, the one of repetitions is the lowest in its category, 32.6%, that is 14.8% less than the average.

As for alterations, they have also the highest occurrence compared to the other moves, 42.1%, 8.4% more than the average. Expansions account for just 4.3%, that is 2.8% less than the average, and this is clearly due to what has already been said: the ST is too rapid and there is neither time nor space to expand. However, this figure is 3.2% more than live reportages (1.1%). This is apparently contradictory, because it has been said that weather forecasts are the move presenting the most of hindrances to a faithful rendition of the ST. This may be explained by the fact that,

compared to the whole text of BBC News, the amount of text of weather forecasts is far less than the one of live reportages. Every occurrence of expansion accounts then for much more in weather forecasts than in live reportages. Anyhow, the number of cases of expansions are very few on both cases and they may be considered as incidents and not as deliberate strategies. To this, data about internal distribution of expansion strategies (non-semantic expansions account for 73.5% and semantic ones for 26.5%, the highest and the lowest in their category) add another reason: contracted forms are turned into their standard spelling and some juxtapositions are rendered with linkers, while transitions are rendered with longer linkers. Concerning reductions and its internal distribution in reduction strategies and sub-strategies, data reflect again the general trend. Reduction strategies represent indeed 94.4% of alteration strategies, the highest figure in its category. However, if micro-unit omissions are 53.2% of reduction strategies, 15.4% more than the average, non-semantic micro-unit omissions are 8.3% less than the average (77.9% against 86.2%), and above all far less than what happens with live reportages (-17.5%). This is explained by the nature of the ST. While live reportages are spoken-spoken, weather forecasts are pre-structured texts which have been written to be read. As a consequence, orality features omissions account, in this move, for a very low percentage with respect to live reportages. Moreover, semantic micro-unit omissions in weather forecasts are relatively much more than in live reportages. As far as compressions are concerned, they correspond to the lowest figure in its category, 46.8%, 15.4% less than the average. This is because it is hard to imagine how would it be possible to summarise or reformulate very compact sentences in such a short time span. And this is also reflected by data about its internal distribution. Non-semantic compressions account for 40.1%, 9.4% less than the average. The main reason for that is that, since there is no time to compress, when the respeaker decides to do that, s/he does not manipulate grammar words, but lexical ones, using shorter Germanic origin words instead than Latin origin synonyms. Finally, data about mistakes are interestingly very different from what one may expect, just 1.3%, less than a half of the average (3.4%) and much less than live reportages (7.5%). An explication may come from other strategies and sub-strategies and from linguistic and operational causes. As has already been said, with respect to the other moves, macro-unit omissions are the highest in number, and compressions much less than micro-unit omissions. This means that there is not a great effort in reformulating, summarising, etc. compared to the average, and consequently less stress on the respeaker voice. Moreover, terminology related to the weather forecasts is more exclusive than the more general lexicon of the other moves. Words do not come out of the blue, since they are part of a closed terminology and can be guessed thanks to video compensation. As a consequence, mistakes are much more due to the software not recognising grammar words (71.9%, 9.7% more than the average), than to a human fault (28.1%).

News summary

News summary is a very interesting case of a relatively easy text to respeak. If weather forecasts are indeed the most difficult move to respeak, global data about news summary demonstrate that it is the easiest one (macro-unit omissions account for 14.5%, the lowest in its category; repetitions for 57.2%, the highest in its category; and alterations for 28.3%, the lowest in its category). As far as its form is concerned, it has some characteristics of the headlines and some of the news reports. As for the former, it is composed of a few sentences per news, high lexical density, low grammatical intricacy, and no video compensation to consider and respect; similarly to the latter it is characterised by a predominance of given information, consequently by no unexpected words and proper names, and by a relatively lower speech rate. Data about macro-unit omissions and repetitions confirm this last similarity: omissions account indeed for the lowest figure in its category, 14.5%, that is 4.4% less than the average, but only 1.8% less than the news reports; and repetitions for the highest figure, 57.2%, that is 9.8% more than the average but 6.8% less than news reports, which is not a thin difference. However, it is to be said that the ST of news summary is far shorter than the one of news reports, and it is easier to repeat units for a short time than for a much

longer time. This is also an evidence that the respeaker has not had big problems in subtitling this move.

Data about alterations are less clear-cut. They shift from a similarity to the headlines to a similarity to the news report. Expansions account for more or less the same percentage as the headlines, 8.8% (against 8.7% in the case of headlines), that is 1.7% more than the average. Similarly, semantic and non-semantic expansions are very different from the average, 68.7% and 31.3% respectively, (against 75% and 25% in the case of headlines), that is 33.7% more and less than the average. However, the reason is not only a lack of time allowing for turning verbs from their contracted form into their standard one, as in the case of headlines, but that the respeaker already knows the content of the ST (since s/he has already subtitled the headlines and both the news reports and the live reportages). S/he has then in mind many synonyms for all the concepts that will be covered in the news summary and, while respeaking the news summary, s/he will choose the most appropriate one without an excessive cognitive workload. As far as reductions are concerned, they represent 90% of the total alteration strategies, very close to the figures about both the news summary (87.7%) and the headlines (88.3%). On the contrary, internal distribution of both strategies and sub-strategies is very different from both moves. Micro-unit omissions represent 30.3% of total reduction strategies, that is 7.5% less than the average, 6.8% less than news reports and 14.3% less than the headlines. This is clearly because the respeaker knows the ST in advance and has the possibility to react to it more immediately. The only detected cases are micro-unit omissions. No case of word omissions has been identified. This means that entire phrases have been deleted, which means that both semantic and non-semantic items have been omitted in a similar way (semantic omissions represent 55.4% of total micro-unit omissions and non-semantic omissions 44.6%). Similarly, compressions account for 69.7% of reduction strategies, that is 5.5% more than the average, 5.3% more than the news reports and 13.4% more than the headlines. There is no other reason for this to happen, apart from what has already been said: a higher amount of given information than the other moves, and a consequent more rapid ideation of the TT by the respeaker. Internal distribution of semantic and non-semantic compression (46.7% and 53.3% respectively) is equally far from being similar to the one of headlines (65% and 35%) and to the one of news items (58.6% and 41.4%). Surprisingly, it is quite similar to the one of live reportages, that is 43.9% and 56.1%. However, the reason cannot be the same as in the headlines, that is to say a higher grammatical intricacy than the average. On the contrary, the main reason may be the same as in the case of micro-unit omissions: compressed are mainly both macro- and micro-units and not words. As a consequence, both semantic and non-semantic items are compressed in a similar way. Concerning mistakes, the global incidence is very low, 1.2%, which is the lowest figure in its category, and very close to the incidence of mistakes in the weather forecasts. The reason is similar to the case of weather forecasts, that is the absence of unexpected words coming out of the blue. However, software mistakes represent the majority of mistakes (58.9%), similarly to the case of the headlines. The reason is to be found on the fact that the news summary is generally the last move a respeaker subtitles. Both the operator voice and the software are overcharged and some mistakes that would naturally not be made appear on the screen.

4. Conclusions

The results of the reported strategic analysis of an eight-hour corpus composed of 14 episodes of BBC News are quite complex to interpret, because there are many factors and variants to consider. However, some general guidelines can be derived. First of all, BBC respeakers tend to repeat the ST as long as they are not too stressed or fatigued and the ST characteristics allow for that (speech rate below 180 wpm, good grammar, text cohesion and coherence, and good balance between lexical density and grammatical intricacy, given and new information). This trend is possible for almost a half of the text (47.4% of all idea units). An exception to this general rule are semiotically redundant idea-units (the visual component wholly compensate for the verbal one) and

formulaic expressions, which are usually understandable by a basic knowledge of the genre (5.2% of all macro-units) and consequently omitted. When the ST characteristics change, respeakers are forced to adopt different strategies so as to keep a high quality of the TT. As a general rule, even though it may happen that some macro-units are omitted (because of more rapid steps, higher lexical density, higher video compensation, subjective reasons, etc.) to the detriment of cohesion in the TT (13.7% of all macro-units), BBC respeakers always succeed in rendering the same ideas as the ST. To do so, they employ different alteration strategies (33.7% of all macro-units), depending on the sub-genre they are called to subtitle.

BBC News is made of interviews, press conferences, live reportages, pre-recorded news reports, headlines, weather forecasts, news summaries, and many other sub-genres. Each of them has its peculiarities and needs to be subtitled accordingly. A first big distinction is then to be made between spoken-written (written to be read) and spoken-spoken (*impromptu* or mentally prepared) texts. These two categories are not clear-cut. They have to be considered as the ends of a *continuum*, instead. All the abovementioned sub-genres are to be positioned along such a *continuum* according to different factors. First of all, speech rate is probably the most influencing and hindering factor, since more than 180 wpm are very difficult or even impossible to repeat (for the respeaker) and to process (for the software). Then, lexical density. When the ST is lexically denser than the average, the respeaker will tend to compress (62.2% of altered macro-units) or to omit (37.8%) some micro-units. In the first case, the respeaker may either sum up or reformulate, thus reducing both grammatical (49.5% of micro-unit compressions) and lexical morphemes (50.5%) contained in each unit. In the second case, the respeaker will try to limit micro-unit omissions (better, omissions of an entire micro-unit or of parts of it) to grammatical words (86.2% of omissions of parts of a micro-unit), so as not to omit important pieces of information (13.8%). Another important factor is grammatical intricacy. When the ST is grammatically more intricate than the average, the respeakers naturally reduce it by omitting 'useless' grammatical morphemes, by expanding a word to a word group, by coordinating and finally by lexicalising. A further factor influencing the strategy to be applied by respeakers is the balance between given and new information. If the ST provides more pieces of new information, the respeakers tend to stick more to the ST so as not to lose any important item. If speech rate is too high to admit such a strategy, the respeaker will tend more to omit some micro-units rather than summing a unit up or using synonyms. A last factor is the diamesic nature of the ST. If it is spoken-spoken, the respeakers will adapt it to the reading by omitting all features of orality (like false starts, repetitions, hesitations, auto-reformulations, fillers, etc.) and by expanding contracted forms to their standard ones.

Apart from describing the strategies used by BBC respeakers to subtitle the news real time, the reported analysis also highlights and defines an aspect that could be of interest to all those who focus on the still unresolved problem of the editorial policy real time subtitlers in particular should adopt to convey the ST to the deaf and the hard-of-hearing, the notion of idea unit (further subdivided into macro- and micro-unit). Talking about accessibility of pre-recorded subtitles, some users, subtitlers and researchers (cfr. Mereghetti 2006, Donaldson 2004 and to some extent Jensema 1998) believe that *verbatim* subtitling, i.e. an orthographic transcription of the ST, is the only way to offer full accessibility to an audiovisual text, while other studies (among others ITC 1999, Ofcom 2005, Neves 2005 and Eugeni 2007) demonstrate quite the opposite, that is that TV subtitles users would be better served if some or many adjustments to the form and content of the ST are made, so as to make subtitles readable and comprehensible. Both these positions are however criticised. The first position is indeed considered as impossible to apply because of reasons which are technical (it is very difficult to introduce a full transcription of the ST in the software and respect the space and time constraints it imposes) and linguistic (it is very difficult if not impossible to follow subtitles reading as a completely oral text from the cohesive, reading, and grammatical standpoint). If real time subtitling is considered, a further reason has to be added, namely the human one (it is impossible for the respeaker to speak at a too high speech rate and for the stenographer to type at a too high rate, without making more mistakes than the average); the second position is considered as

pietistic and patronising *vis-à-vis* a type of audience which has been considered for too long as cognitively and linguistically handicapped.

The reported analysis clearly shows that BBC respeakers tend to repeat the ST as much as they can. When the ST is too rapid, too oral or too lexically dense they adapt it to the diamesic characteristics of the TT by means of strategies altering either its form or its content or both. Now, while the altered form is clearly changed forever (most of times reduced), the altered content, apart from some macro-units omissions, is always rendered through other semiotic channels, linguistic compensation strategies or known information. At the macro-unit level, it has been observed that this way of working produces, *de facto*, a non rendition of the ST which is sensibly inferior than what data about the mere linguistic analysis report, that is 13.7% against 18.9%; and, at the micro-unit level, it produces a non rendition of the ST which is far inferior than the reported one (11.9% against 33.7%). If we add these two pieces of data, we get a percentage rate concerning repetitions (in the sense of rendering the content of every macro-unit) which is much higher than the reported one (concerning form and, allegedly, content), that is 74.4% instead than 47.4%, and, consequently, a percentage concerning non repeated units which is well inferior than the one derived by macro-units omissions and alterations put together, that is 25.6% instead than 52.6%.

This double focus on idea units (and no more on single words) and on content (and not just on form) allows for a revision of the abovementioned positions on the editorial policy to adopt while respeaking:

> -*verbatim* subtitling: the rendering of all macro-units' content of the ST, through form repetitions, explications, omissions and compressions;
> -*non verbatim* subtitling: the non exact rendering of some macro-units' content, through form and content explications, omissions and compressions.

As it is immediately comprehensible, the two positions are no more as distant as they have been described above and their difference not as clear-cut. From here, it is possible to try to make a step forward towards the definition of international standards, thus paving the way to the free circulation and exchange of subtitled programmes within countries speaking the same language or wishing to learn a foreign language.