MÁSTER EN LINGÜÍSTICA INGLESA: NUEVAS APLICACIONES Y COMUNICACIÓN

INTERNACIONAL

Facultad de Filología

Universidad Complutense de Madrid

The issue of accessibility: linguistic reduction and simplification of subtitles for deaf children

Author: Layla Ferrández Melero

Supervisor: Juan Pedro Rica Peromingo

Date: September 2013

RESUMEN

La presente investigación pertenece a la rama de Traducción Audiovisual y Subtitulado, en concreto subtítulos para sordos. El objetivo de este trabajo es reducir y simplificar subtítulos para niños sordos prelocutivos, ya que son ellos los que más dificultades tienen que abordar a la hora de enfrentarse a productos audiovisuales debido a niveles bajos de lectura.

Los avances tecnológicos han abierto la puerta al público sordo ampliando la accesibilidad a los medios audiovisuales como la Televisión Digital y la distribución de películas en formato DVD al integrar subtítulos para esta parte de la población. La accesibilidad está incluso sustentada por organismos internacionales como Naciones Unidas. Sin embargo, a pesar de encontrar grandes apoyos también encontramos grandes carencias.

Para el estudio de esta cuestión, se ha partido de tres áreas de estudio: a) la Traducción Audiovisual y el Subtitulado sientan las bases técnicas y dan a conocer el dinamismo del medio audiovisual. Para ello, se han estudiado los conceptos de norma y equivalencia (Toury, 1995), Teoría de la Relevancia (Wilson and Sperber, 2002) y limitaciones audiovisuales (Díaz Cintas and Remael, 2007; De Linde and Kay, 1999), haciendo hincapié en las limitaciones espaciotemporales que impone el medio. b) La Psicología permite aproximarse al conocimiento de los procesos cognitivos y de aprendizaje en niños sordos que han de tenerse en cuenta, así como las estrategias que utilizan para decodificar el lenguage aplicado al medio audiovisual; c) la Lingüística aporta las bases teóricas necesarias para conseguir una reducción y simplificacion apropiadas y adecuadas. Para ello, se han considerado aspectos lingüíticos como la cohesión, la semántica y el estilo del lenguaje, tomando como principal referencia a Halliday (1985; 2004).

Para el propósito de este trabajo se ha llevado a cabo el análisis de fragmentos de dos películas infantiles. Para ello, se ha elaborado un corpus que recoge información sobre los minutos analizados, número de subtítulos, líneas y palabras por minuto y tiempo (en segundos)

que cada subtítulo permanece en pantalla. Esto dio lugar a un análisis cuantitativo sobre los datos compilados y permitió concluir que el número de palabras por minuto y el tiempo que los subtítulos permanecen en pantalla son inapropiados por sobrepasar las medias establecidas para este tipo de subtitulado. En el consiguiente análisis cualitativo, los subtítulos fueron reducidos y simplificados dando lugar a una versión más asequible para un niño sordo. Los resultados prueban que los subtítulos que ofrecen las películas infantiles no son adecuados para niños sordos al duplicar en muchas ocasiones el número de palabras y la velocidad a la que pueden leer. De esta forma queda patente la necesidad y el potencial para desarrollar el tema con una mayor calidad.

INDEX

1. INTRODUCTION

The film industry has evolved tremendously in recent years and nowadays everyone can have access to audiovisual products. The arrival of digital television made possible a greater accessibility for the deaf and hard-of-hearing thanks to the inclusion of subtitles in many programmes from many channels. Nevertheless, in spite of this evolution, there is still something that is eluded: in general, the subtitles usually do not correspond to the needs of each and every type of audience. The audience concerned in this research is profoundly deaf children and the object of study is subtitles for the deaf and hard-of-hearing (SDH).

My hypothesis is that, taking into account the problems faced by deaf children during childhood when learning to read, subtitles in children's films can be reduced and simplified in terms of grammar and complexity of sentences and words, with little change of the overall meaning of utterances. The objective of this paper is to try to simplify subtitles as much and accurately as possible so that profoundly deaf children would find subtitles easier to read, the film easier to watch, the plot easier to follow, and it would be a good method to improve their reading skills with entertaining materials.

Traditionally, subtitling for the deaf have not been considered a completely translational process but we have to take into account that those subtitles are for people who have another mode of communication and, therefore, subtitles must convey the meaning of what is being said and fulfill a communicative aim. For the purpose of this study, translation will be seen as a branch of applied linguistics since the aim is to reduce and simplify sentences which might be difficult to process for deaf children rather than to translate from one language to another.

Something that is not taken into consideration when making SDH is the heterogeneity of the deaf community. And especially when it comes to children, the process of learning to read is quite different from that of their hearing peers. Therefore subtitles should be written according to

7

certain linguistic features and their cognitive processes. Nevertheless, the simplification of subtitles does not imply the idea of deaf children as virtually unable readers but as people who have an auditory deficiency that involves problems in the reading learning process. Besides, the reduction and simplification of subtitles does not mean either to slow down the learning process since deaf children do not get standard levels of literacy until adolescence or adulthood.

In many countries, deaf children do not have access to especial schools for the deaf, which forces them to learn as a hearing peer. This is one of the reasons why deaf children encounter more difficulties when learning to read. An impairment such as deafness should not be an obstacle to learning and entertainment. The reduction and simplification of subtitles could be used as a method to motivate deaf children to learn to read and as a method to improve their reading skills.

With regards to the structure, this research is divided into three main blocks: the theoretical background, the methodology followed and the analysis of data.

The first block consists of an approach to three main areas of study: Audiovisual Translation and Subtitling, Psychology, and Linguistics. There is a review of the audiovisual medium (De Linde and Kay, 1999, Karamitroglou, 2000) and its constraints, as well as an account for some concepts which are essential for the purpose of this research, such as Toury's notion of norms (1995), Nida and Taber's dynamic equivalence (1969), Williams and Sperber's Theory of Relevance (1986/1995) and transfer of language. A classification of subtitles is given (Díaz Cintas and Remael, 2007; Neves, 2005) and the conventions of subtitling for deaf audiences, in particular deaf children, are presented. Then, an explanation of the problems faced by deaf learners is given, in which issues such as cognitive processes, mode of communication and decoding strategies used by deaf people are dealt with. For this section, research conducted on the

8

matter was revised, such as that of Herrera (2009), De Linde and Kay (1999) and Peterson and Siegal (1999). Finally, some linguistic concepts are considered in relation to the objective of this research, such as cohesion and language style (Halliday, 1985, 2004).

The second block provides an explanation of the methodology followed and the elaboration of two corpora, which give way to quantitative and qualitative analyses, and to the posterior reduction and simplification of part of the subtitles of two films for children, *Aladdin* and *Up*.

The third block consists of the analysis of the data gathered through the elaboration of two corpora. The focus was put on the process of transadaptation that was carried out by reducing and simplifying the version of SDH offered in two Disney films. Due to the length of the analyses, part of them were added to the Appendix section (page 81). Then, the results of the analyses are presented and discussed, allowing to draw some conclusions. The SDH offered in audiovisual products is inappropriate in terms of number of words per minute and time rates subtitles remain on screen. A linguistic reduction and simplification of subtitles for deaf children is necessary so that accessibility is granted.

In the conclusions, a proposal for the improvement of subtitling for the deaf and hard-of-hearing is provided, as well as a prospectus for further research.

2. THEORETICAL BACKGROUND

In order to approach the issue of subtitling for the deaf several fields of study have to be taken into consideration: Audiovisual Translation and Subtitling, Psychology, and Linguistics.

2.1. AUDIOVISUAL TRANSLATION AND SUBTITLING

Audiovisual Translation emerged as an independent discipline at the beginning of the 20th century with the arrival of the *talkies*, films that incorporated sound (Karamitroglou 2000: 8). Until then,

9

silent films contained intertitles (descriptive titles of the main points of the plot and dialogues between characters) that later on, with the appearance of the talkies, became to be known as subtitles. The need to reach a wider audience from different countries led to the translation of subtitles into different languages (interlingual subtitles). However, these subtitles were made for hearing audiences, relegating the deaf community to a second place and overshadowing their needs as viewers. Little by little accessibility has gained importance and new products are available for "audiences who should not be seen as minorities but as one of the many parts of a fragmented reality" (Díaz Cintas and Anderman, 2009: 152). This is a very important point taking into account that "over 5% of the world's population – 360 million people – has disabling hearing loss (328 million adults and 32 million children)"[1]. In fact, accessibility was fully recognised as a right by the United Nations in the Convention on the Rights of Persons with Disabilities and Optional Protocol in 2003 (9-22):

Article 9

Accessibility

1. To enable persons with disabilities to live independently and participate

fully in all aspects of life, States Parties shall take appropriate measures to

ensure to persons with disabilities access, on an equal basis with others, to the

physical environment, to transportation, to information and communications,

including information and communications technologies and systems, and to

other facilities and services open or provided to the public, both in urban and

in rural areas.

Article 30

Participation in cultural life, recreation,

---

[1] http://www.who.int/mediacentre/factsheets/fs300/en/ (accessed on 25/07/2013)

leisure and sport

1. States Parties recognize the right of persons with disabilities to take part

on an equal basis with others in cultural life, and shall take all appropriate

measures to ensure that persons with disabilities:

(a) Enjoy access to cultural materials in accessible formats;

(b) Enjoy access to television programmes, films, theatre and other

cultural activities, in accessible formats;

Therefore, accessibility is a right and it is the country's responsibility to facilitate access to disable people.

The production of films in DVD formats has contributed to the spread of subtitles for both hearing (usually interlingual subtitles) and deaf audiences (usually intralingual subtitles). However, sometimes it is contradictory that a DVD bought in Spain contains subtitles for the deaf in another language, mostly English. This issue has been reported by Josélia Neves through the analysis of 200 DVDs rented in Portugal which contained intralingual SDH in English (38%), interlingual SDH (9%, German and Italian) and none of the films contained SDH into Portuguese (Díaz Cintas and Anderman, 2009: 152).

When subtitling for the deaf community, the procedure is sometimes not considered to be a translational process and some scholars seem to be reluctant to call this type of subtitling a translation; they prefer to refer to it as an adaptation. Gambier (2003, in Majcenovič Kline, 2011: 194) introduced the concept of *transadaptation* which is a term that "allows us to go beyond the usual dichotomy (literal/free translation, translation/adaptation) and take target audiences into consideration more directly". The fact is that the mode of communication of hearing and deaf people is completely different. Spoken language and sign language differ considerably: they have different structures, different syntax, different word order, configuration, semantics, and not all

words in a spoken language have correspondences in sign language. Moreover, the communication channels in films are different for these two audiences: whereas hearing people can watch a film paying attention to speech and image simultaneously, deaf people have to use the visual channel for subtitles and image in motion at the same time, which forces them to use the same channel alternatively. This is why I think that subtitling for the deaf could be seen as a type of translational process (Gambier's concept of transadaptation), for even though it is the same language (i.e. English) the mode of communication is not the same and the main purpose of subtitles is to reflect what is being said and what happens on screen so that the audience, deaf people in this case, do not miss anything. From this point of view, subtitles must fulfill a communicative goal.

2.1.1. Audiovisual Norms

With regards to Audiovisual Translation, it is important to take a look at Toury's notion of norms. According to him, "translation activities should be regarded as having cultural significance" (Toury, 1995: 53); therefore, norms are "intersubjective factors" involved in the socio-cultural constraints that affects a translation (Toury, 1995: 54) and have to do with "general values or ideas shared by a certain community – as to what is right and wrong, adequate and inadequate – into specific performance instructions appropriate for and applicable to specific situations" (Toury, 1995: 55). Norms vary in degree, that is, there are some norms that are more "rule-like" (or more objective) and others more "idiosyncratic" (or more subjective) (Toury, 1995: 54).   According to this definition of norms, the translator not only has to deal with linguistic aspects but also with the type of audience who the product addresses, in terms of cultural and social features (Ibid).

For this research and with regards to Toury's norms, the deaf community is heterogeneous and even though the culture is the same for source and target language audiences, perhaps the

12

social realm of both types of audiences is different. One of the problems that deaf children face during the learning process that cause bad reading skills might be due to communication barriers (Tzuriel and Caspi 1992: 247). Therefore, and for the purpose of this study, norms will be applied in a linguistic dimension, since norms apply to any type of translation, although the conditions will depend on the kind of text (Toury, 1995:57), and they operate "at every stage in the translating event" (Toury, 1995: 58).

The *initial norm* depends on the translator's choice, who has to decide if the translation will subscribe to the source text, language and culture (adequacy) or to the target text, language and culture (acceptability) (Toury, 1995: 56). In the case of subtitles for the deaf, the latter should be the dominant one since the language is the same and the differences between source and target audiences have to do mainly with social interactions and communicative modes. At this point, the translator should have, at least, notion of translation studies and sociology (Karamitroglou, 2000: 15). With deaf children, these notions should be related to their learning process and cognition; this is why the simplification of subtitles should subscribe to the target audience.

Within the whole set of norms, two main groups are distinguished: *preliminary* and *operational* norms. The former is divided into two subgroups: *translation policy*, which refers to the type of text; and *directness of translation*, which refers to the extent of appropriateness of a certain mediating language in the translational process. That is, would it be better if a deaf person with good reading skills would simplify subtitles taking into account his/her experience as a deaf child? (Toury, 1995: 58) None the less, questions about language domain are not the only factors that influence a translator.

Operational norms have to do with particular decisions during the translational process, as to what materials the translator will use to generate the target text, if the translation will follow a model-language through the imposition of source upon target language, or introduce the

13

translation into the target language through a combination of both (Toury, 1995: 59).

Thus, norms are patterns that the translator should take into consideration always bearing in mind the type of text to be translated and the type of audience who addresses, and in this case the problems that type of audience may have when reading.

2.1.2. Equivalence and Relevance Theory

Some concepts have always been of great concern in translation activities, such as that of *equivalence* and *relevance*.

According to Toury (1995: 86), equivalence is a "*functional-relational*" concept, directly associated with the notions of appropriateness and inappropriateness. Equivalence exists in relation to the process of translation (i.e. decision-making) and accounts for the different relations of the parts of a text. Nevertheless, "there is nothing that can be stipulated as a 'universal' criterion of appropriateness" (Toury, 1995: 249) and "there will always be more than one option" (Toury, 1995: 250). Consequently, the translator must be aware of the different choices and that "norms determine the (type and extent of) equivalence" (Toury, 1995: 61).

Translation may be seen as a way of communication since the aim is to express in a target language whatever has been said in a source language. In this sense, equivalence stands for the relationships between source and target texts and the translator should take into account that in the process of translating from one language to another, there might be items that are not interchangeable (Toury, 1995: 97). Therefore, ultimately, the equivalence in a translational event depends on the translator's subjectivity and decision-making, which makes the norm of equivalence belong to what Toury refers to as *idiosyncratic* norms (Toury, 1995: 54).

An interesting approach is that of Nida and Taber (1969: 24) and their theory of *dynamic equivalence*, which is defined "in terms of the degree to which the receptors of the message in the

14

receptor language respond to it in substantially the same manner as the receptors in the source language". However, they acknowledge that the response "can never be identical" due to the differences that may exist between source and target language audiences. Therefore, the translation should achieve virtually the same contextual effects as the original text, and the different audiences should be able to get the same interpretation of the text (Gutt, 1989: 112).

Another important concept is that of relevance. The concept of relevance derive from Grice's Co-operative Principle and maxims of conversation (Quality, Quantity, Relation, Manner) (Wilson and Sperber, 2002: 250) and his study of speech acts on *Logic and Conversation* (1975). The premise of the maxim of Quality is to be relevant. If we engage in a conversation, we should say as much information as needed; if we exceed the amount of information, we would be violating or flouting the maxim.

Wilson and Sperber developed a theory about the relationship between cognition and communication: the Relevance Theory (1986/1995). This theory is a psychological model for understanding cognitive interpretations of language through inferences, that is, "a communicator provides evidence of her intentions to convey certain meaning, which is inferred by the audience on the basis of the evidence provided" (Wilson and Sperber, 2002: 249). This model is opposed to the classical code model through which a message given in a particular code is decoded by an audience using the same code. They talk about the "recognition of intentions" and the inferential model, which serves as an explanation of how a particular audience infers the speaker's meaning (Ibid). According to them, relevance is a property of "thoughts, memories and conclusion of inferences" and "any external stimulus or internal representation which provides an input to cognitive processes may be relevant to an individual at some time" (Wilson and Sperber, 2002: 250). This means that relevance will depend on the stimuli, the input and the individual's background knowledge, since it is the connections existent between the new information and our

background knowledge which makes the generation of inferences possible (Wilson and Sperber, 2002: 251). The input will be relevant when its processing produces *positive cognitive effects* (i.e. a true conclusion; false conclusion are cognitive effects but not positive), which have to do with the individual's representation of the world (Ibid). In relation to this, *contextual implications* derive from the cognitive effects and allows the individual to establish information relations in a particular context (Ibid). Nevertheless, relevance is a matter of degree, thus there will always be a piece of information that an individual considers more relevant than others (Wilson and Sperber, 2002: 252).

The stimuli are also important. Wilson and Sperber talks about *ostensive stimulus*, which are designed to attract the audience's attention, focusing on the communicator's meaning (Wilson and Sperber, 2002: 255). According to this, a communicator provides a stimulus; that stimulus makes the audience engage in the communicative event and infer the meaning of what the communicator says. Wilson and Sperber refer to this as *informative intentions* (Ibid). In the case of subtitles, relevance theory should be in line with the action that takes place on screen. The stimulus, thus, does not only depend on the subtitler but on the narrative of the film, since image and dialogues are the main stimuli in an audiovisual product. The subtitler, then, as a communicator engaged in a communicative activity, has to be aware of the informative intention since the audience is meant to infer meaning from the subtitles, the image, and the film as a whole. According to Gutt (1989: 2), "the communicative success of a translation is determined […] by the causal interaction between stimulus, context and interpretation" of an individual.

Thus, subtitles must be informative (whether they are reduced or simplified for a certain audience); subtitles must contain the most relevant parts of dialogues so that the actual meaning of the utterances can be inferred; subtitles must be contextualised within the audiovisual framework, so that the audience comprehends the message.

2.1.3. Transfer of language

Another characteristic of audiovisual translation is language transfers. When translating from one language to another, language transfers take place inevitably and the translator must take decisions on what to write and what to omit. Language transfers are in fact "acknowledged as a true universal of translation" since it is "unrealistic to expect absolute regularities anyway, in any behavioural domain" (Toury, 1995: 57).

Subtitles are not written at the same time as film production, therefore subtitles are "later additions which must combine with the audiovisual make-up of the source film" (De Linde and Kay, 1999: 17). This means that the shift from oral to written language changes the narrative of the film (Ibid) since, as previously explained, watching a film with subtitles forces viewers to use the visual channel to process both image and subtitles, thus these processes cannot be simultaneous but in succession.

Subtitling is a type of written discourse and as such it has "its own lexico-syntactic patterns" (Halliday, 1994, in De Linde and Kay, 1999: 17), such a "simpler sentence structures and a higher density of content words" (Ibid). These patterns certainly affect the meaning of the message; therefore, apart from the transfer of language, there is a transfer of meaning as well.

2.2. CLASSIFICATION OF SUBTITLES

Díaz Cintas and Remael (2007) establishes a five criteria classification of subtitles: a) linguistic, b) time available for preparation, c) technical, d) methods of projection, and e) distribution format. With regards to the linguistic dimension, there is a traditional classification of three main types of subtitles: intralingual, interlingual, and bilingual. Within the intralingual subtitles, which refer to subtitles that stay in the same language, we find subtitles for the deaf and hard-of-hearing, for language learning purposes, for karaoke effect, for dialects of the same language, and for notices

and announcements (Díaz Cintas and Remael, 2007: 13-14). Interlingual subtitles entail the translation from one language to another and can address both hearers and deaf and hard-of-hearing (SDH) (Ibid).

2.2.1. Subtitling for the deaf and hard-of-hearing (SDH)

Subtitling is a "translation practice that consists of presenting a written text, generally on the lower part of the screen" that reproduces with more or less fidelity the dialogues of characters, "as well as the discursive elements that appear in the image, and the information that is contained on the sound track (songs and voice-off) (Díaz Cintas and Remael, 2007: 8). Subtitles for the deaf and hard-of-hearing also include paralinguistic or suprasegmental information that "contributes to the development of the plot or to the creation of atmosphere" and to the overall meaning of the film (i.e. noises, intonation, accents, rhythm, emotions) (Díaz Cintas and Remael, 2007: 14). Subtitling is a complex task and each line is written according to the "particular audiovisual context, styled according to the conventions of speech and writing, and edited with an eye on the structure of the film and reading characteristics or target viewers" (De Linde and Kay, 1999).

2.2.2. Deaf audiences

As already mentioned, the deaf community is heterogeneous in terms of degree of hearing loss and etiology of deafness. For this research, the classification of hearing loss will be determined by the relation to language development in two main groups: prelingual and postlingual deafness (Neves, 2005: 78).

Prelingual deafness is usually acquired before an oral language is developed or from birth, and the causes are generally congenital; "it appears within the first two years of life, often meaning severe sensory, oral-aural and emotional deprivation" (Ibid). Their first language is sign

language, although the mode of communication not only depends on the type of deafness but on many other factors, such as "the type of deafness, psychological make-up, family profile, social context, geographic location and/or national educational systems" (Neves, 2005: 87). This decision is fundamental for the communicative and comprehension development of the child. These children are often profoundly deaf children and thus the process of learning to read is more complex.

Postlingual deafness develops after an oral language is acquired, "between the second and sixth year of life" (Neves, 2005: 78). Their first language is usually oral language since they might have residual hearing and thus be able to interact and communicate with the hearing community more easily. "The later the onset of hearing impairment, the greater linguistic competence will have been gained" (Ibid).

According to this simple classification of deafness, this research will focus on profoundly deaf children and the difficulties they face when learning to read.

2.2.3. Subtitling for deaf children

The main distinction of subtitles are those for the hearing and those for the deaf and hard-of-hearing. Within the type of subtitles for the deaf and hard-of-hearing, another important distinction must be made: subtitles for adults and subtitles for children. The needs of these two groups differ significantly in terms of their linguistic abilities (De Linde and Kay, 1999: 52). As it can be inferred, children's subtitles should be displayed for longer since their reading speed is much slower, especially in profoundly deaf children. Research on this issue showed that sixty words per minute was an appropriate number for children aged between 8 and 15 years old (Padmore, 1994, in De Linde and Kay, 1999: 52-57), although disregards other linguistic features, such as complexity of words (i.e. number of syllables) (ibid), and linguistic implications that

should be carefully considered.

One of the most difficult tasks when subtitling for deaf children is the reduction in the written version of dialogues. Not all linguistic items can be omitted since not all of them have the same charge of information. To reduce and to simplify subtitles linguistically, one has to have certain knowledge about how the medium works, the conventions of audiovisual translation and subtitling, SDH, and linguistic knowledge about language functions. Moreover, there are time conventions such as time that subtitles remain on screen, and at what point subtitles are displayed or disappear. Different techniques are used for this, such as lead and lag times that will be explained in more detailed in section 2.3.2. Synchrony.

A fact that should not be forgotten is that deafness may be caused by different reasons and not all children are going to process language information in the same way and take the same amount of time.

2.3. AUDIOVISUAL CONSTRAINTS

All types of subtitles must follow some conventions and the translator must be aware of certain parameters. The spatiotemporal constraints refer to the space limitations of subtitles and the time subtitles remain on screen. With regards to spatial restrictions, "subtitles will have some 32 to 41 characters per line in a maximum of two lines" (Díaz Cintas and Remael, 2007: 9). According to the Spanish law that regulates the conventions for teletext SDH, a line will have 35-37 characters (UNE 153.010, 2003: 5). However, the number of characters in a line in the case of subtitles for profoundly deaf children should be greatly reduced since spatial constraints are subjected to time restrictions as well.   These time restrictions are subjected at the same time to the synchronicity necessary between image, dialogue and subtitles. The 6-second rule (time that subtitles remain on screen) is widely accepted (Neves, 2005: 137-138) and has been traditionally applied by some

companies (Díaz Cintas and Remael, 2007: 23), although variation may happen. For example, d'Ydewalle *et al.* (1987, in Neves, 2005: 138) suggests the use of a 9-second rule for the deaf and hard-of-hearing viewers. However, this suggestion was probably made thinking of adult deaf and hard-of-hearing people. As the deaf community is so heterogeneous, it is difficult to establish just one reading speed rate for all deaf viewers. According to Luyken *et al.* (1991, in De Linde and Kay, 1999: 6; Neves, 2005: 137) the average reading speed of a hearing person is about 150 to 180 words per minute (De Linde and Kay, 1999: 11), or 70 to 74 characters in six seconds (Díaz Cintas and Remael, 2007: 23). The average reading speed of adult viewers is 66%, therefore subtitles have to be "reduced by approximately a third" (De Linde and Kay, 1999: 11); for children, the time is even longer (double compared to that of adults). These facts do not allow verbatim subtitles (Ibid) since the reduction is necessary, especially for subtitles for deaf children. On the contrary, the Spanish law for teletex SDH establishes that subtitles must be as literal as possible, and reduction can only be made in exceptional cases (UNE 153.010, 2003: 11).

According to the Spanish law, subtitles must be subjected to aesthetics characteristics and reduction will be applied if speech is fast or time rates do not allow a subtitle to maintain the literal form of speech. Only in this case, strategies can be used to reduce number of words, with no omission of concepts (UNE 153.010, 2003: 12) but substitution of difficult expressions and vocabulary in children programmes. The time rates established by the law are based on characters per seconds: 1,82 seconds per 35 characters in a line (150 words per minute), or 3,64 seconds per 35 characters in two lines (150 words per minute). The law also recognises that these time rates could be prolonged when necessary (UNE 153.010, 2003: 9-10) and establish another time rate for deaf people with literacy problems (a great percentage of the Spanish deaf population): 12 characters per second (95 words per minute) (UNE 153.010, 2003: 12). However, these time rates disregards part of the deaf community needs. According to Pereira and Lorenzo (2005: 23),

subtitles consisting of one line should remain on screen for five or six seconds, and subtitles consisting of two lines should be displayed for nine to eleven seconds (prelingual deaf children). Nevertheless, the law recommends to include two versions of SDH in the teletext (for prelingual and postlingual deaf people) but as Pereira and Lorenzo state, the recommendation is a kind of utopia since the market does not usually take into account all demands of the population and the law does not take responsibility for that choice (Ibid).

2.3.1. Dynamism of the medium

Audiovisual products are characterised by the dynamism of the medium and the importance of synchronization. Subtitled products have three main components: speech, image, and subtitles (Díaz Cintas and Remael, 2007: 9). These three components need to be coordinated and subtitles "must appear in synchrony with the image and dialogue" (Ibid). As subtitles are "later additions", the process of "subtitling is constrained by the synchrony between image and sound" (Ibid).

2.3.2. Synchrony

In the case of deaf and hard-of-hearing viewers, the synchrony between image and subtitle is very relevant and it might be annoying if there is no a constant pace between one line and the next one. De Linde and Kay (1999: 15) argue that frustration may take place when watching "silent moving mouths" or when subtitles do not appear and the deaf viewer looks at the subtitle area. Also if a subtitle remains for too long on screen, the viewer will tend to re-read it and thus it can produce confusion with respect to the following subtitle (Ibid). This is related to *lead* and *lag times*. These terms refer to the "lapse in time between the appearance of a subtitle and the start of a corresponding speech segment" (Ibid). Lead time occurs when the subtitles precedes the speech; and lag time when a subtitle follows the speech. Even though synchronization is very important

in an audiovisual product (i.e. to mark a pause in the speech), lead and lag times sometimes happen. And actually I think that it would not be a problem if subtitles appeared at the beginning of a shot (leading) so that the deaf viewer would have more time to process and comprehend the subtitle and the message. Nevertheless, this statement would require further empirical research, since synchronicity is essential in audiovisual products for the comprehension of messages.

The Spanish law, for example, says that on-set and off-set times must always coincide with beginning and end of a character's speech, if possible. Especially for intralingual subtitling for people with residual hearing since they can use lip-reading (UNE 153.010, 2003: 10). However, Pereira and Lorenzo (2005: 24) consider appropriate to use early on-set times and late off-set times to facilitate the reading.

The same situation takes place with changes of shots. Subtitles are meant to remain on screen while the a character is speaking but sometimes subtitles over-run shot changes, which can create a disturbing feeling in the viewer (De Linde and Kay, 1999: 16).

2.3.3. Locating speakers

Another characteristic of the dynamism of the audiovisual medium is that of the identification of speakers. This may become a problem for deaf viewers in a variety of ways: when a character is talking off-scree, when there is a narrator speaking or unknown voices, when there is a group of people talking, or when speech continues while a shot change (Ibid). To solve this problem, several techniques are used: different fonts for different characters; tag names next to the subtitle, different positions of subtitles (right and left); or colours.

The use of different fonts or colours will depend on the number of characters in the film. I think it creates confusion and an extra effort to remember fonts and colours for each character. Moreover, the use of colours is not random. Baker *et al.* (1984, in De Linde and Kay, 1999: 15)

carried out a research in the University of Southampton and suggested that the order should be white, yellow, cyan and green, and avoid magenta, red and blue. On the contrary, the law in Spain for teletext subtitles establishes another order: yellow, green, cyan and magenta; white colour is used for secondary characters, the news and live programmes, and documentaries (UNE 153.010, 2003: 6-7).

The subtitles that are placed in different positions on the screen (usually below the character who is speaking) can also be difficult because the area of subtitles would not be fixed, thus the viewer would need to look for the subtitle first and then read it. The Spanish law, for example, does not establishes only one method but offers the alternative of placing the subtitles beneath the character who is speaking (UNE 153.010, 2003: 8). This may create frustration for the reason previously cited, and it does promote the heterogeneity of the conventions for subtitling that should be avoided. Nevertheless, this technique results more problematic if the screen is big (i.e. cinema) since the bigger the screen is, the more movement (eyes and head) the viewer needs to make.

The use of tags with the character's name seem to be the most appropriate even though it would not be in line with the spatiotemporal constraints which subtitles are subjected to. However, the tag would not be necessary to be read every time it appears since the viewer would get familiar with the name and would recognise the word instantly. Therefore, the eye would recognise the letters as a whole, forming a word, and with a gaze the name would be identified.

Tags with the character's name would also clarify who is speaking in the case of shot-reverse-shot sequences (De Linde and Kay, 1999: 31). They are meant to reproduce the dynamics of any conversational interaction between two people: the camera frames one character and then the other, so a sequence of camera movements and characters on screen are displayed. For the deaf, this type of shots can be very confusing because a character who is not speaking can

be on screen (i.e. to see his/her reaction to what another character is saying) or the succession of shots is too quick. Hence, tags with the character's name could work here as well as a means of clarification and identification of characters.

2.4. PROBLEMS FACED BY DEAF LEARNERS

2.4.1. Cognitive processes in deaf children

Traditionally, deaf people have been thought to have low reading skills due to the lack of phonetic information necessary to process language. However, research on cognitive processes have shed some light on the issue and on the importance of dactylology and short term memory (Herrera, 2009).

There are two methods by which we process language: direct and indirect models. In the direct model, through a parallel processing (simultaneous), readers have access to internal lexicon by using semantics. That is, the reader relies on orthography to facilitate perception of words that have not been yet processed which constitutes the input to semantic recognition (Herrera, 2009: 80). The indirect model consist of a serial processing, letter by letter, that allows the identification of words through a phonetic code by using grapheme-phoneme correspondences to access words and meaning (Ibid).

2.4.2. Inner speech and recoding strategies

According to De Linde and Kay (1999: 19), the main difference between hearing and deaf people's reading is related to the concept of *inner speech*. As inner speech is closely associated with phonological coding, deaf people make use of different cognitive strategies so that text can be converted into meaning.

Inner speech is displayed in two ways: through an articulatory process (*subvocalization*) and

by "mental representations of speech which give rise to the experience of hearing sounds" (*phonological coding*) (Ibid). However, as reading does not necessarily imply an articulatory process or vocalization (that is, it can be phonologically coded), it is thought to be less important than the phonological coding for the identification of meaning (De Linde and Kay, 1999: 20). Inner speech is important in the reading process but the fact that profoundly deaf children cannot access to that phonological information does not mean that they cannot recode and process a text. Deaf people use different recoding strategies; De Linde and Kay (1999: 22) examine four possible methods: articulatory codes, dactylology, sign language and no coding.

Profoundly deaf people have never heard a sound, which does not imply a complete restriction to the phonological system. They can access through articulation and lip-reading, although the latter might be limited due to the complexity to differentiate similar pronounced sounds (Ibid). However, this method is not even similar to their natural language, therefore it is difficult to assess whether it supports comprehension or just identification of words (De Linde and Kay, 1999: 24).

Another method is dactylology (manual alphabet) or fingerspelling. In sign language, fingerspelling is used for certain words, such as proper names or new words that do not have a sign (De Linde and Kay: 22). This method in which deaf people can fingerspell letter by letter allows them to translate from oral language to their manual alphabet and, thus, recode words through orthography (De Linde and Kay, 1999 23). As deaf people fingerspells words and can acquire vocabulary in this way, this technique could aid comprehension (De Linde and Kay, 1999: 24).

Sign language can also be used as a recoding technique. It is thought to be the easiest method since sign language is the natural language of most deaf people and "working in a primary language has advantages for short-term memory and comprehension" (De Linde and Kay, 1999:

26

25). They have no problems with homophones or tongue-twisters but they may have some difficulties when there is no correspondence sign of a word or there are similar signs in terms of handshape or configuration (De Linde and Kay, 1999: 23-24).

The last option is no recoding at all. Research on logographic languages, such as Chinese or Japanese, have shed some light in the relationship between printed words and inner speech. Even though logographic languages are not completely devoid of inner speech, logographic languages and especially sign language are proofs of the fact that a language can exist without phonetic components (De Linde and Kay, 1999: 24).

All these techniques store information in short term memory, which has been proved to play an important role in the comprehension of language and reading. Fingerspelling and sign language are effective memory codes, even though the main aid these techniques offer is identification of words rather than comprehension (De Linde and Kay, 1999: 25). Nevertheless, deaf people usually make use of a combination of techniques to access identification, comprehension and meaning of words (Ibid). Further research should be carried out to know how these recoding techniques are applied in the reading of subtitles. Therefore, no assessment can be drawn in relation to subtitled audiovisual products.

2.4.3. Grapheme-phoneme correspondence

The grapheme-phoneme correspondence is considered to be essential for spelling. It allows readers to store individual word information and to identify new words or pseudo words which do not have a pronunciation pattern (Herrera, 2009: 81). The grapheme-phoneme correspondence is related to *phonological awareness* which is the capacity to analyse sounds and associate them with abstract categories of sounds and orthography (Herrera, 2009: 80). Phonological awareness implies the conscious access to phonology and the cognitive manipulation of those phonological

27

representations which improve reading skills (Herrera, 2009: 81). Research on hearing children show that they use the grapheme-phoneme correspondences to decode words through a phonological coder (Ibid).

An interesting finding is that of Barbara Dodd (1980, in Herrera, 2009: 82) who researched on deaf children' use of phonological codes. She concluded that deaf children can use phonological codes when graphic information is not available. Therefore, deaf children use both phonological and visual codes since the development of phonological codes is not exclusively auditory but it can derive from visual information as well (lip-reading, dactylology, orthography, etc.).

2.4.4. The importance of dactylology

Dactylology has been proved to be a permanent codification system used by deaf people even though there is no apparent relation between sign and orthography (Herrera, 2009: 83). Research on deaf people's reading skills show that deaf students who use dactylology have better reading skills than those who do not use it (Ibid).

Treiman and Hirsh-Pasek (1983, in Herrera, 2009: 83) researched on deaf children's use of dactylology. The results showed that both hearing and deaf children are able to segment words in different units: hearing children segment spoken words in phonemes whereas deaf children segment dactylology words in cherology[2]. Therefore, as deaf children comprehend that words consist of segments, they can develop knowledge about the grapheme-phoneme correspondence (Lyebaert 2000, in Herrera, 2009: 83). That is, deaf children use the relation between dactylology and orthography to establish correspondences between cherology and graphemes.

Knowledge about the grapheme-phoneme correspondences encourages the acquisition of

---

[2] *"Quereimas"*. The description and analysis of the distinctive units used in the sign language of the deaf (configuration of hands in sign language) http://www.thefreedictionary.com/cherology

reading skills in at least three ways: first, the use of the correspondences help readers to decode unknown words; second, phonological strategies allow them to acquire knowledge about written words (letter by letter); and third, it allows them to retain that information in short term memory, which has a strong influence on learning processes and the use of language (Herrera, 2009: 85).

2.4.5. Short term memory

The processing and storage of information related to language and learning process takes place in short term memory. Together with attention and perception, short term memory is one of the fundamental components of basic psychological processes (Herrera, 2009: 85). As it has been previously argued, short term memory is involved in the recoding strategies used by deaf children to compensate for the lack of auditory information.

Hearing children have more difficulties when memorising rhyming words or words consisting of more than two syllables. Deaf children, on the contrary, tend to remember the same amount of words whether they are rhyming or polysyllabic. This is due to the different phonological coding used by these two groups (Herrera, 2009: 85). Many scholars consider the phonological codes an important factor for reading comprehension in the hearing population and this led to research on the memory capacity of deaf people, which is said to be inferior compared to that of hearing people (Ibid).

It is also thought that in the reading process, hearing people see graphemes but retain phonemes, that is, we use acoustic-articulatory codes which deaf people use only if they are fluent in oral language (thus, hard-of-hearing people or postlingually deaf people who have some residual hearing). Therefore, profoundly deaf children must use other mediating methods, such as visual codes (Ibid).

Research has proved that some deaf children rely on dactylology to identify letters and words

that are retained in short term memory (Herrera, 2009: 87). In this same line, Odon, Blanton and McIntyre (1970, in Herrera, 209: 87) suggested that deaf people have tend to remember words that have correspondence in sign language. Therefore, the use of their own linguistic system (dactylology and sign language) to decode written letters and words through visual codes is essential to improve their spelling and reading skills, since they can establish alphabetic strategies of reading (Herrera, 2009: 85). Nevertheless, research on short term memory in deaf people who sign have showed that dactylology and signs have a different lexical organization and thus, the information retained in short term memory depends on the stimulus. Both stimuli are spatial but they differ in the way information is presented. That is, in signs handshape and movement co-occur (words consist of one or more signs); in dactylology handshapes are sequential (consecutive handshapes to form a word). Hence, dactylology is similar to oral language due to the fact that they share a sequentially construction (one handshape/sound after the other).

Nevertheless, due to the heterogeneity of the deaf community, there is not only one way of decoding written language and retain that information in short term memory. However, research on this issue prove that those deaf people whose first language is sign language have advantages when retaining linguistic information (Herrera, 2009: 88), usually through visual codes. Hence, the education deaf children receive and the mode of communication they learn is one of the most important factors for their cognitive development: teaching sign language during infancy helps deaf children to develop their memory capacity and the production of words (Ibid).

2.4.6. Mode of communication and reading skills

The problems that deaf children face during the learning process might be due to communication barriers. According to Marschark *et al.* (2000: 1068), more than 90% of deaf children have hearing parents and most of times hearing parents do not use sign language to communicate with

their children. This prevents profoundly deaf children from a normal day-to-day communication (Ibid). Social interaction is very important since by "engaging in conversations, children come to construct representations of mental states" (Peterson and Siegal, 1999: 126). These representations are closely related to the *theory of mind* that normally developing children acquire when they are 4 (Ibid). The theory of mind stands for the ability to ascribe mental states to oneself or others (i.e. intentions, desires, and consequences of a certain behaviour). The lack of theory of mind is usually attributed to children with autism, although deaf children also have problems with the conceptualization of mental states. According to Peterson and Siegal (1999: 126), "a child born profoundly deaf is likely to show deviations from the normal developmental course of language and communication". In their research, participants were autistic children, deaf children with different modes of communication and environments, and hearing children. The participants carried out false-belief tasks and the results showed that the differences between deaf children who signed and deaf children who used an oral communication did not differ that much in the results of the tasks. However, autistic children and deaf children from hearing parents encountered more problems. Peterson and Siegal concluded that the mode of communication of deaf children and their environments (hearing parent who use oral language and deaf parents who use sign language) "makes little difference to the developmental outcome" (Peterson and Siegal, 1999: 128).

In Barca *et al.* (2013) a research on visual word recognition was carried out with hearing and deaf participants who used different modes of communication (deaf people who used sign language and deaf people who used oral language to communicate). They state that phonological coding is necessary to acquire high levels of literacy and reading skills because it is the phonological coding which gives access to the meaning of words and, therefore, to reading comprehension (Barca *et al.*, 2013: 1). The results showed that there were no significant

differences between the three groups of participants except for the lexicality by deaf signers, who relied on whole word recognition. This means that the mode of communication influences the identification of lexical items and thus, the recognition of words.

On account of this and despite of Peterson and Siegal research, the different communicative environments to which deaf children are exposed from the very early stages of childhood are, in fact, very relevant for their language development and later comprehension of written discourse. It has been proved (De Linde and Kay, 1999: 25) that those children whose primary mode of communication is sign language develop better reading skills in a lot less time than those who use an oral communication, perhaps due to the different recoding strategies they use to access the meaning of words.

2.5. LINGUISTIC IMPLICATIONS

Subtitles are influenced by the dynamism of the audiovisual medium. The shift from spoken to written language is not random; instead, the subtitler has to take into consideration linguistic factors such as "a necessary reduction in the amount of dialogue" (De Linde and Kay, 1999: 26). Spoken and written language have different features which influence "the transformation and the way that any omission affect the meaning of an utterance" (Ibid). Therefore, stylistic and structural characteristics, cohesive elements and other lexical units must be regarded in the process of simplifying subtitles for the type of audience concerned in this research, profoundly deaf children.

2.5.1. Language organization

According to Halliday (2004: 26) language organization responds to the function it fulfills in everyday life. There are two points of view: language as system and language as text. In order to

understand how to look at language from different perspectives, he introduces the concept of *instantiation*, that is, "the system of language is 'instantiated' in the form of a text" (Ibid). A text consists of any "instance of an underlying system, and has no meaningful existence except as such" (Ibid). That is, no matter its intrinsic value, any language experience is considered to be a text, whether it is a trivial happening or a historical event. Therefore, system and text are related to each other through instantiation in the form of a cline in which there are different degrees and system and text constitute the two poles of the cline: system as the overall potential and text as a particular instance (Halliday, 2004: 27); in between, all the types of texts are different "ways of using language in different contexts" (Ibid). The two poles of the cline are "phases of one and the same phenomenon" rather than a dichotomy (Halliday, 2004: 524) and the way we see this phenomenon depends on the perspective we adopt. Hence, the system of a language is instantiated as text and, at the same time, text is the process of instantiation. Halliday (Ibid) thinks of a text as "an ongoing process of meaning" through the cline of instantiation, and the creation of meaning is what he refers to as *logogenesis* (Halliday, 2004: 530). Thus, logogenetic patterns are local grammatical selections that allows us to unfold a text semantically (Halliday, 2004: 531).

Halliday states that "writing is not the representation of speech sound […] although every writing system is related to the sound system of its language" (Halliday, 2004: 7), in the sense that their relationship is not direct. Instead, the sound system and the writing system are related to another level of organization in language: the level of wording or *lexicogrammar* (Ibid). Both systems are the "modes of expression by which the lexicogrammar of a language is represented" (Ibid). In English, for example, lexicogrammar is organised in clauses, phrases, words, and morphemes (Halliday, 2004: 9). However, depending on the type of text, the sound system can be phonologically relevant. According to Halliday (2004: 531), there are registers in which

33

"logogenetic patterns at the level of phonology construe patterns at the level of lexicogrammar or semantics". This could be the case of dialogues converted into subtitles due to the fact that there are features of speech that cannot be easily transcribed into written discourse (i.e. intonation).

2.5.2. Semantics

With regards to meaning, Halliday distinguishes four components in the semantics of every language: experiential, interpersonal, logical and textual. According to him, "every sentence in a text is multifunctional", that is, any word or sentence can be analysed from different points of view and every time one semantic component can be inferred (Halliday, 1985: 23). Experiential meaning derives from our own experience which shapes our representation of the world; interpersonal meaning derives from the process of social interaction; logical meaning derive from "a small network of fundamental logical relations" that exist in every natural language; textual meaning is "what makes it into a text", that is, different features (i.e. the semantic and grammatical balance, the thematic structure, rhythm and intonation) that form the texture of language (Halliday, 1985: 18-23). This means that different kinds of meaning can be encoded in the same sentence and we will infer that meaning depending on the point of view we assume, in terms of function of language (Halliday, 1985: 20).

2.5.3. Cohesion

To reduce dialogues in their written form implies grammatical decisions which are subjective since it is the subtitler who has to take the decision. However, the subjectivity of this process is lessened if the reduction is made according to linguistic features such as textual cohesion. Cohesion is the relationship between elements of a text; usually cohesion is obtained through text-internal cohesive devices, which are very important for the comprehension of the text (De

Linde and Kay, 1999: 28).

Halliday differentiates four ways by which cohesion is created in English: conjunction, reference, ellipsis and substitution, and lexical organization (Halliday, 2004: 533).

Conjunctions are lexical units that link whole clauses and includes conjunctions proper (conjunctions) and continuity (no conjunction but markers that show relations between clauses) (Halliday, 2004: 534). Conjunctions serve as a way to establish logical relations between adjacent elements (i.e. clauses, paragraphs) (Halliday, 2004: 536). There are four types of conjunctions proper: additive (and, or); adversative (but, however); causal (so, consequently); temporal (then, finally) (Halliday, 1985, in De Linde and Kay, 1999: 29).

With regards to reference, the basic referential cohesive devices are elements that refer to other elements in the text anaphorically (backwards) or cataphorically (forwards). Within these two groups of referential devices, there are also exophoric referents (outside the text) or endophoric (inside the text) (De Linde and Kay, 1999: 28). If there is a succession of references, that is a reference chain (Halliday 2004: 536).

When applied to subtitles, these referential relationships can be portrayed on the screen as well, since the image can also provide referents. In this line, we could talk about referents inside the screen and outside the screen. De Linde and Kay (1999: 30) argue that there are many exophoric references outside the screen, which forces the viewer "to alternate between linguistic and visual sources". Apparently, De Linde and Kay do not think that this alternation of source canals is positive. However, I think that in order to simplify subtitles (as much and as accurately as possible) and taking into account that deaf viewers use the visual channel all the time for both image and subtitles, the alternation could work for the processing of information (reduced subtitles with references inside the screen). It is a way of linking image and text, and create an interrelation between the two.

Ellipsis and substitution are devices that work at the level or wording (Halliday, 2004: 536) and make reference to elements that can be found in the text (or image). Ellipsis is the omission of certain parts of a structure that can be assumed from a previous sentence. Substitution is the replacement of one item by another and it works as a "systemic variant" of ellipsis; thus, as Halliday (2004: 536), I will be referring to both as ellipsis. Ellipsis establishes a relationship between words, clauses and smaller items creating continuity and allowing "to focus on what is contrastive" (Ibid). It is usually restricted to contiguous passages and affects nominal, verbal, and clausal groups (De Linde and Kay, 1999: 29).

Something to take into account when substituting or omitting a word or group of words is that the previous sentence where the information to be substituted or omitted has been properly read and comprehended. Only like that, the sentence with a substituted or omitted element can be process as having the same semantic charge (as the previous one where the whole piece of information is given).

Lexical cohesion works at the level of lexis and establishes relations between lexical items (Halliday, 2004: 535) which are semantically related in some way (De Linde and Kay, 1999: 30). These lexical items can be a single word or a group of lexical units (Halliday, 2004: 536). There are two types that occur frequently: reiteration and collocation (De Linde and Kay, 1999: 30).

Reiteration is displayed through different devices, such as repetition, synonyms, subordinates and general references. Collocations are elements that occur together and it can be any lexical item. Due to the fact that there is a high number of instances, they are not easy to identify and their appearance is influenced by the context of a certain text as well (Ibid). Therefore, context is relevant to get acquainted with the content of the audiovisual product and to contextualise the subtitled utterances.

Cohesive devices are fundamental for the comprehension of a text and especial care is

36

necessary when omitting, reducing and simplifying subtitles. Every line must be cohesively linked and meaning must be preserved taking into consideration that "the cohesive selections in a text form logogenetic patterns" (Halliday, 2004: 535). And as happens with reference and reference chains, these patterns form logogenetic chains (of reference, ellipsis and lexical cohesive links) (Ibid); if there is a logogenetic chain, this chain could "become part of the instantial system that develops as the text unfolds" (Ibid). Cohesion contributes to the readability of a text while fulfilling a rhetorical function (De Linde and Kay, 1999: 31).

2.5.4. Language style

Apart from considering cohesion and semantics, language style is also important in the transformation from spoken to written language. The main difference is the lexico-syntactic features that affects each mode of communication; for example in written language (subtitles) there will be a higher lexical density and simpler sentences (Halliday, 1994, in De Linde and Kay, 1999: 26), which produces a "greater economy of expression" (De Linde and Kay, 1999: 26).

According to De Linde and Kay, subtitles are written representation of dialogues and thus, they must maintain some "oral flavour" according to "the need to condense utterances" (Ibid). It is important, then, that the written form of a dialogue includes the same information. The reduction and condensation of utterances makes the subtitles contain a higher lexical density due to the tendency to nominalise verbs (De Linde and Kay, 1999: 27). This is what Halliday refers to as *grammatical metaphor* (Halliday, 1985, in De Linde and Kay, 1999: 27) since it alters the state of events, which, consequently, will have semantic effects as well.

3. CORPUS AND METHODOLOGY

This paper deals with an approach to intralingual subtitles for the deaf and hard-of-hearing in a

process of audiovisual transadaptation of films for children. For the analysis of data, a quantitative analysis was carried out through the compilation of two corpora that include number of subtitles, lines and words per minute, and time rate. Then a qualitative analysis was carried out with regards to vocabulary, synchrony, identification of speakers, paralinguistic information and reduction of dialogues.

3.1. CORPUS

In order to gather the data for the analysis, I elaborated two corpora corresponding to the SDH of two Disney films: *Aladdin* and *Up*. The former is called 'ALADDIN 13 MIN' and consists of the subtitles that appear during the first thirteen minutes of the film. The latter is called 'UP 23 MIN' and consists of the subtitles displayed during the first twenty three minutes of the film. The reason to decide what films should be used was based on the fact that Walt Disney Pictures and Pixar Animation Studios have released a considerable amount of children's films that are known worldwide and both are the market leader. I decided to pick up an old Disney film and a recent Pixar one due to the fact that they differ in some audiovisual aspects, such as technology used in the process of creation of the films, way of subtitles appearing on screen, and way of presenting the story.

3.2. METHODOLOGY

The procedure to collect the data consisted of watching both films and deciding how many minutes were to be covered: thirteen minutes of *Aladdin* and twenty three minutes of *Up*. The first intention was to analyse the same amount of minutes but after watching the films, I realised that even though the genre is the same, the way to present the story is completely different: *Aladdin* relies more on songs and dialogues, whereas *Up* relies more on visual effects. There are

parts in *Up* that are told visually, which might result very helpful for deaf children since they use the visual channel for everything. When watching a film, deaf people process both image and subtitles with the visual channel; thus, if part of the story is told through images with no subtitles (only paralinguistic information), children may get more engaged and motivated, as opposed to films like *Aladdin* where there are lots of songs with extended lyrics. Therefore, the type of entertainment of both films differs greatly: *Aladdin* appeals more to the hearing sense through the use of songs (as most of the old Disney films) and dialogues, while on the contrary *Up* appeals more to the sense of sight through visual effects and design. This is why the analysis of *Aladdin* contains fewer minutes than that of *Up*, because the difference in total number of words in thirteen minutes of the former and twenty three minutes of the latter was only two hundred words. The reason to divide subtitles per minute derive from the average number of words established for the different types of audiences.

Once I included in the corpus the minutes to be analysed, I wrote down all the subtitles (with their corresponding lines) that appeared in that period of time and counted the words and time (in seconds) that subtitles remain on screen. Then, a table was elaborated for each minute that was analysed; these tables (Table 1 to 13; Table 16 to 37) are included in the Appendix section (p. 81) due to the length of the analysis. It is important to remark that numbers and contracted forms were counted as one word; in the case of contractions, this decision was based on the fact that contracted forms are read and process as one word and the number of letters decrease and the word to identify is shorter. Also, words linked with dashes were counted as one word as well, with an exception (*lighter-than-air*, Table 17) because it is rather a whole comparative form. At the same time, attention was paid to lead and lag times (on-set and off-set times) although it is not reflected in the quantitative analysis but briefly commented in the qualitative analysis. To measure the seconds, a chronometer was used and, to get a valid estimation, each subtitle was

timed at least three times (the dissimilarity was never higher than 0.3 seconds and taking into account the measures collected, an average number was selected).

The next step was to compile the statistical data in Excel files to present the results with clarity. In each Table, the average time subtitles remain on screen was calculated. Subsequently, a qualitative analysis was carried out taking into consideration the linguistic implications exposed in the Theoretical Background and a further reduction of dialogues was made.

4. ANALYSIS

As already mentioned, quantitative and qualitative analyses were conducted so that data was presented with clarity to proceed to the reduction of dialogues.

4.1. QUANTITATIVE ANALYSIS

4.1.1. *Aladdin*

In *Aladdin,* thirteen minutes were analysed and compiled in thirteen tables (one per minute), which can be found in the Appendix section (Tables 1 to 13; p. 81) due to the length of the analysis. Additionally, two supplementary tables were elaborated: one table with total number of words per minute (Table 14, below), and another table with total number of subtitles, lines and words in the amount of time that was analysed (Table 15, below).

4.1.1.1. Words per minute

The first incongruity we find is that the average number of words per minute is not an appropriate rate. As explained in section 2.3. Audiovisual Constraints, the average number of words established for hearing adults is 150-180 words per minute; the average number of words for hearing children is 90 words per minute; and the average number of words for deaf and hard-of-hearing children is 60 words per minute. I could accept a margin up to ten words more

per minute in the case of deaf children due to the difficulties that reduction of dialogues involve.

MINUTE	TOTAL NUMBER OF WORDS
00-01	68
01-02	99
02-03	131
03-04	62
04-05	77
05-06	80
06-07	114
07-08	162
08-09	103
09-10	22
10-11	106
11-12	77
12-13	124

Table 14. Total number of words per minute in *Aladdin*.

As shown in the table above, there are only four instances in which the number of words do not exceed an appropriate rate. In Table/minute 3, 7, 8, 9, 11 and 13 (Appendix section; p. 81), the difference is so conspicuous that it almost reaches the number of words per minute established for a hearing adult viewer.

TOTAL NUMBER OF SUBTITLES	TOTAL NUMBER OF LINES	TOTAL NUMBER OF WORDS
223	298	1224

Table 15. Total number of subtitles, lines and words in thirteen minutes of *Aladdin*.

In Table 15, the numbers shown are pretty high to belong to only thirteen minutes of film, in particular the total number of words.

4.1.1.2. Time rate

Subtitles are not displayed for long enough. As the average time that subtitles remain on screen shows, the higher time rate is 3,43 (Table 1). In the first thirteen minutes of the film, there are three songs (Table 1 and Table 2, Table 8 and Table 9, Table 12, respectively) in which no

reduction of dialogues has been made. Moreover, the rhythm is too fast and the succession of shots is so quick that there is not enough time for reading the lyrics. For example, as shown in Table 1, roughly the same amount of time is used for subtitles that consist of different numbers of words: a subtitle consisting of ten words (*Where it's flat and immense / And the heat is intense*) is displayed for 3,34 seconds whereas a subtitle consisting of two words (*Arabian nights*) is displayed for 3,64 seconds. It is true that in songs, sometimes subtitles remain for longer on screen due to the singing (prolongation of words). However, the results show that time rates are inconsistent as well where there is no singing. According to the result shown in Tables 1 to 13, the most striking examples are the following.

In Table 5, a subtitle consisting of twelve words is displayed for 4,64 seconds (*The rest of the treasure / is yours, but the lamp is mine*), whereas a five-word subtitle is displayed for 4,01 seconds (*A diamond in the rough*).

In Table 7, a subtitle consisting of eleven words is displayed for 2,64 seconds (*Trouble? No way, You're only / in trouble if you get caught*), whereas a subtitle consisting of three words is displayed for 2,90 seconds ([man] *Stop! Thief!*).

As we can see, there is no pattern to decide for how long subtitles should remain on screen. In section 2.3. Audiovisual Constraints, an account for the 6-second rule and the suggestion of a 9-second rule for deaf and hearing impaired children was given. No rule is followed and none of the subtitles are displayed for longer than 5 seconds (exception: in Table 6, 5 seconds for an eight-word subtitle, *Seek thee out / the diamond in the rough*).[3]

4.1.2. *Up*

In *Up*, the first twenty three minutes were analysed and collected in twenty two tables that can be

---

[3] The rest of the examples can be found in the Appendix section (p. 81).

found in the Appendix section (p. 81) due to the length of the analysis (Tables 16 to 37; in minute 09-10 there are no subtitles, so no table was elaborated). Two supplementary tables were also made, which include total number of words per minute (Table 38) and total number of subtitles, lines and words in the twenty three minutes that were analysed (Table 39).

4.1.2.1. Words per minute

Again, the number of words per minute surpass the number of words established for this type of subtitles probably because no reduction has been made. In seven occasions, the number of words is higher than a hundred, which makes the process of reducing subtitles very complicated. However, there are twelve cases in which the number of words per minute is appropriate (inferior to sixty). It is important to note that *Up* is a Pixar animation film and this type of films tends to rely more on the image as opposed to speech. This is why there are six minutes in which the story is told visually (minute 07-08 to 12-13), and subtitles consist of paralinguistic information only. Along the film, there are many occasions in which this way of communicating is used, which resembles the mode of communication of deaf people who use the visual channel to process language.

MINUTE	TOTAL NUMBER OF WORDS
00-01	27
01-02	161
02-03	120
03-04	121
04-05	82
05-06	94
06-07	108
07-08	8
08-09	2
09-10	0
10-11	1
11-12	12
12-13	8
13-14	77

14-15	135
15-16	119
16-17	152
17-18	75
18-19	22
19-20	26
20-21	57
21-22	11
22-23	10

Table 38. Total number of words per minute, *Up.*

As the table above shows, there are seven cases in which the number of words per minute surpass a hundred words, which is highly inappropriate. However, there are eleven cases in which the number of words is inferior to sixty words per minute, which fit the word rate established for subtitles for deaf children. As already explained, this is due to the reliance on image (over subtitles) of animation films.

TOTAL NUMBER OF SUBTITLES	TOTAL NUMBER OF LINES	TOTAL NUMBER OF WORDS
243	338	1428

Table 39. Total number of subtitles, lines and words in 23 minutes of *Up.*

The table above shows the total numbers of subtitles, lines and words in the first twenty three minutes of the film. The numbers are still high (compared to those of *Aladdin* in thirteen minutes) but the difference of time analysed in *Up* and *Aladdin* is only ten minutes and the difference of total number of words is not as high as it could be expected (204 words).

4.1.2.2. Time rate

As the quantitative analysis shows (Tables 16 to 37 in the Appendix; p. 81), the time subtitles remain on screen is not long enough for a deaf child to read, being the higher time rate 3,08 seconds (Table 19). Not only the number of words in a minute is important but the time those

words remain on screen (i.e. part of the film where there is only paralinguistic information). It is true that it seems to be a kind of pattern for the paralinguistic information consisting of one word, which tend to remain on screen for a whole second. Nevertheless, apart from paralinguistic information and the parts of the film where there are no dialogues, there is no pattern for the display of subtitles according to number of words. For example, in Table 18, an eleven-word subtitle remains on screen for 2,15 seconds (*NEWSREEL ANNOUNCEMENT: And so, / the explorer's off to clear his name*) while a subtitle consisting of nine words is displayed for 4,27 seconds (*and good luck capturing / the monster of Paradise Falls*).

In Table 19, a subtitle consisting of eight words remain on screen for 4,33 seconds (*Visibility unlimited. / Enter the weather in the logbook*), whereas a subtitle consisting of twelve words is displayed for 3,63 seconds (*It's a beautiful day. / Winds out of the east at 10 knots*). However, in minute 03-04, there is an exceptional case in which a subtitle consisting of eleven words remain on screen for 6,15 seconds.

In Table 35, two subtitles consisting of ten words each remain on screen for 1,95 seconds in one case (*I'll meet you at the van in just a minute*), and 4,1 seconds in another case (*I wanna say one last goodbye / to the old place*).[4]

4.2. QUALITATIVE ANALYSIS

4.2.1. *Aladdin*

As the quantitative analysis shows (Tables 1 to 13 in the Appendix; p. 81), subtitles in *Aladdin* are inconsistent. That is, there is no pattern in terms of time that subtitles remain on screen or number of words displayed per minute. The qualitative analysis was elaborated through the results obtained in the quantitative analysis and aspects such as reduction of dialogues,

---

[4] The rest of the examples can be found in the Appendix section due to the length of the analysis.

vocabulary, synchrony and paralinguistic information are dealt with in this section.

4.2.1.1. Reduction of dialogues

In the first thirteen minutes of the film, there is no significant reduction of dialogues. In fact, there are only four instances where something from the dialogues has been omitted (words that appear in brackets).

The first instance (Table 2) is the omission of three words in a subtitle consisting of thirteen words which is displayed for 3,74 seconds: *and the finest merchandise this side / of the river Jordan, on sale today (come on down)*.

In the second and third instances (Table 6) the omissions are repetitions. In the first case, the repetition is an echo in a subtitle consisting of eight words which is displayed for 5,00 seconds: *Seek thee out / the diamond in the rough (the diamond in the rough)*. In the second case, repetition is omitted in a subtitle consisting of six words which is displayed for 2,50 seconds: *Just forget it. / Look at this (Look at this)*.

The fourth instance (Table 6) is the omission of three words in a subtitle that consists of thirteen words which is displayed for 4,48 seconds: (*That's an incredible...*) *I think I'm gonna have a heart attack / and die from that surprise*.

Going back to Table 15, the total number of words (in thirteen minutes) is 1224. The total number of words omitted (in thirteen minutes) is 14. Therefore, further reduction is necessary, taking into account that, as shown in Tables 1 to 13 (Appendix, p. 81), the number of words per minute in most cases surpass the number of words established for subtitles for deaf children.

4.2.1.2. Further reduction

Something to take into consideration when reducing subtitles in *Aladdin* is that in the first

thirteen minutes there are three songs. One of the features of these songs is rhyming. Due to the

fact that deaf children tend to remember the same amount of words whether they are rhyming or

not, this feature will not be taken into account. Another important feature of songs is rhythm.

Rhythm usually marks musical sounds although there is also linguistic rhythm; in English,

linguistic rhythm is construed on the basis of stressed and non-stressed syllables. However, as

reducing dialogues involves a higher lexical density, rhythm is not easy to maintain and will not

be the focus; the focus will be to simplify subtitles as accurately as possible in a linguistic

dimension. As subtitles have been divided per minute, I will use the same distribution for this

section. Due to the length of the analysis, only the transadaptation of the first three minutes will

be presented; the rest of the analysis can be found in the Appendix section (p. 81).

Minute 00-01 / Table 1: 68 words; reduction of 9 words.

1. *Oh, I come from a land / From a faraway place*
2. *Where the caravan camels roam*
3. *Where it's flat and intense / And the heat is intense*
4. *It's barbaric but hey, it's home*
5. *When the wind's from the East / And the sun's from the West*
6. *And the sand in the glass is right*
7. *Come on down, stop on by / Hop a carpet and fly*
8. *To another Arabian night*

-
1. *Oh, I come from a faraway land*
2. *Where the caravan camels roam*
3. *It's flat and immense / And the heat is intense*
4. *It's rough but hey, it's home*
5. *When the wind's from the East / And the sun's from the West*
6. *And the sand in the glass is right*
7. *Stop on by / Hop a carpet and fly*
8. *To another Arabian night*

 In the first line, the prepositional phrase *from a faraway place* can be converted into an

adjective placed before the first noun that appears, *land*. In this way, the meaning of the original

line is not lost and the number of words is reduced.

 In the third line, there is a cohesive conjunction, *where*, which can be omitted because the

previous line has already set the semantic relation (*where the caravan camels roam*) between the *land* and the succeeding description of that land. Therefore, no text-internal link is necessary since it is a case of continuity. *It* is an anaphoric reference to the *land* and we could considered it to be endophoric as well since the image on screen is a vast desert.

In the fourth line, *barbaric* could be replaced by *rough* since the meaning of the former originally made reference to another previous sentence (Original song: *Where they cut off your ear if they don't like your face*).[5] Thus, as the lyrics are describing the land and its climate, I think it is more appropriate to use an adjective that is normally used for such descriptions.

In the seventh line, the omission of *come on down* can be made since its meaning can be inferred by the following phrase *stop on by*. To stop on by in a place, first of all you need to go to that place, and the sense of the whole sentence is that of (going and) staying.

Minute 01-02 / Table 2: 99 words; reduction of 18 words.

1. *Like Arabian days*
2. *More often than not / are hotter than hot*
3. *In a lot of good ways*
4. *Arabian nights*
5. *'Neath Arabian moons*
6. *A fool off his guard / Could fall and fall hard*
7. *Out there on the dunes*
8. [camel panting]
9. Ah, salaam, and good evening / to you, worthy friend.
10. Please, please, come closer.
11. Too close. A little too close.
12. There.
13. Welcome to Agrabah,
14. City of mystery,
15. Of enchantment,
16. and the finest merchandise this side / of the river Jordan, on sale today.
17. Look at this. Yes.
18. Combination hookah and coffeemaker. / Also makes julienne fries.
19. Will not break. Will not…
20. It broke.

-

---

[5] http://www.imdb.com/title/tt0103639/alternateversions (accessed on 14(08/2013)

1. *Like Arabian days*
2. *Which are hotter than hot*
3. *In many good ways*
4. *Arabian nights*
5. *Beneath Arabian moons*
6. *A fool off his guard / Could fall hard*
7. *Out there on the dunes*
8. [camel panting]
9. Ah, good evening / worthy friend.
10. Please, come closer.
11. A little too close.
12. There.
13. Welcome to Agrabah,
14. city of mystery,
15. of enchantment
16. and the finest merchandise this side / of the river Jordan, on sale today.
17. Look at this.
18. Combination pipe and coffeemaker. / Also makes fries
19. Will not break…
20. It broke.

In the second line, the first part of the subtitle (*more often than not*) could be omitted since it implies that *Arabian days are* usually *hotter than hot*, therefore the frequency of that action is "higher than high", which could be interpreted as "always". At the same time, this part of the subtitle could be substituted by a relative pronoun (*which*) that makes reference to *Arabian days*, linking the two parts of the subtitle by a conjunction proper.

In the third line, a synonym of *a lot of* (many) can be used, reducing the number of words and maintaining the overall meaning of the sentence.

In the fifth line, the shortened version of the preposition 'beneath' (*'Neath*) is used because of the rhythm of the song and could give way to confusion; hence, the preposition *Beneath* should be used.

In the sixth line, the second part of the subtitle contains a repetition, *Could fall and fall hard*. Although the sense of the sentence is that 'anyone could not only fall but fall hard', the meaning is that 'anyone could fall hard'. Thus, one of the repeated verbs can be omitted and the meaning

of the sentence is somehow preserved.

In the ninth line, there is a foreign word (*salaam*) I would omit because it could be confusing for children to be reading words they do not know when they are already making a big effort to read subtitles. Moreover, *salaam* is a greeting and there are two ways of greeting in the line, so one could be omitted. Another omission could be made, when the character says *good evening to you, worthy friend*, it is apparent that he is addressing viewers since he is looking at the camera, hence, *to you* could be omitted with no change of meaning.

In the tenth line, *please* is repeated two times. One of them can be omitted.

In the eleventh line, the character says *Too close. A little too close*. The omission of the first part of this sentence does not affect that humour of the second part and the image as well.

In the eighteenth line, the word *hookah* can lead to confusion since it is a foreign word and could be substituted b a simpler word that children are more likely to know (*pipe*). In the second part of the line, the kind of fries the object can make is shown on screen, so we are talking about an endophoric on-screen reference that allows the omission of that word in the subtitle.

In the nineteenth line, there is a repetition which is a case of lexical cohesion. The effect that repetition causes is noticeable when heard since the character is saying *will not break, will not…* (interruption because the object actually breaks) *it broke*. That effect is also achieved with the image in which the viewer sees how the object breaks, that is why I think the omission of the second *Will not…* could be made.

Minute 02-03 / Table 3: 131 words; reduction of 28 words.

1. Ohh! Look at this.
2. I have never seen / one of these intact before.
3. This is the famous / Dead Sea Tupperware.
4. Listen. Ah, still good.
5. Wait. Don't go.

6. I can see that you're only interested / in the exceptionally rare.
7. I think, then, you would be / most rewarded to consider this.
8. Do not be fooled / by its commonplace appearance.
9. Like so many things, / it is not what is outside,
10. but what is inside that counts.
11. This is no ordinary lamp.
12. It once changed the course / of a young man's life.
13. A young man who, like this lamp, / was more than what he seemed.
14. The diamond in the rough.
15. Perhaps you would like to hear the tale?
16. It begins on a dark night…
17. where a dark man waits
18. with a dark purpose.
19. [horse nickers]

-

1. Ohh! Look at this.
2. I never saw / an intact one.
3. This is the famous / Dead Sea Tupperware.
4. Look. Ah, still good.
5. Wait. Don't go.
6. I see you're only interested / in the exceptionally rare.
7. I think, then, you would like this.
8. Don't be fooled / by its common appearance.
9. It is not what is outside,
10. but what is inside that counts.
11. This is no ordinary lamp.
12. It, once, changed / the life of a young man
13. who, like this lamp, /was more than what he seemed.
14. The diamond in the rough.
15. Perhaps you want me to tell the tale?
16. It begins on a dark night…
17. where a dark man waits
18. with a dark purpose
19. [horse nickers]

In the second line, the change of the verb tense (from past perfect to past simple) is due to the need to reduce number of words. As sign language construction of tenses is simple (past, present, future), I do not think the change in the verb tense would be a problem in terms of meaning. Moreover, the adverb *never* indicates that on no occasion that has happened; therefore, the adverb *before* can be omitted although it is usually used in this type of sentences as a kind of collocation *never... before* (i.e. Never seen this before). As the object the character is talking about appears

on screen, we have an endophoric on-screen reference that allows to substitute *one of these intact before* by *an intact <u>one</u>*.

In the fourth line, the character makes reference to the hearing sense, which I think it is inappropriate; therefore, *Listen* can be substituted by *Look*.

In the sixth line, the modal verb *can*, which indicates possibility or probability under certain circumstances, and the relative pronoun *that* can be omitted for the purpose of reducing number of words.

In the seventh line, the conjunction proper *then* should be maintained since its function is to create a cohesive temporal link. However, the second part of the subtitle (*most rewarded to consider this*) can be substituted by a single word that preserves the sense of what the character is saying (*you would <u>like</u> this*).

In the eighth line, the word *commonplace* can be substituted by a shorter word that has the same meaning, *common*.

In the ninth line, the beginning of the sentence *Like so many things* could be considered to be a violation of Grice's Relation Maxim since it does not add any necessary piece of information. In the twelfth and thirteen lines, changes can be made so that the number of words is reduced while maintaining the sense and meaning of both subtitles. In line twelve, a change in word order makes possible to substitute a repetition in line thirteen: *12. the life of a young man / 13. (a young man) who… .*

In the fifteen line, the character makes reference to the hearing sense again and the question he makes can be reformulated so that the viewer, instead of hear the story (*Perhaps you would like to hear the tale?*), is told the story (*Perhaps you want me to tell the tale?*).

4.2.1.3. Vocabulary

With regards to vocabulary, there are four instances in which foreign words are used: *salaam, hookah, nom de plume* and *effendi (last two in italics)* (although they may be found in English dictionaries[6]). However, children might not know what these words mean, probably because they never need to use them. Moreover, one of the decoding strategies deaf children use is related to their primary mode of communication (mostly dactylology and sign language). That is, deaf children translate from oral language to their manual alphabet and recode words though orthography. For them, it is easier to remember written words if there is a correspondence of that word in signs (2.4.5. Short term memory); if not, they may fingerspell that word to access the meaning. However, if reading is already a hard task for them, reading foreign words must be tedious. Therefore, I would omit foreign words since the aim of simplifying subtitles for deaf children is to make them easier so that they can read everything and comprehend every word.

4.2.1.4. Synchrony

Synchrony is one of the most difficult audiovisual constraints since it is influenced by and influences different aspects of a subtitled audiovisual product. To begin with, the quick pace of dialogues and subtitles in *Aladdin* makes it difficult to coordinate them and additionally leave some time so that subtitles can be read. Needless to say that, as previously argued, the time subtitles remain on screen is not enough, especially if no reduction is made.

There are techniques used in audiovisual media that prolong or shorten the time subtitles are displayed. These are lead time and lag time. In the film, there is a tendency to leave subtitles on screen when a character has already finished talking, thus increasing the off-set time of subtitles.

---

[6] http://www.thefreedictionary.com/salaam; http://www.thefreedictionary.com/nom+de+plume; http://www.thefreedictionary.com/effendi (accessed on 12/08/2013)

53

In the parts where there is singing instead of speaking, the off-set times last for longer, but for the rest of subtitles, apparently there is no pattern.

Lead times occur with a relative frequency, although most of times the on-set time is not very significant, that is, subtitles never precede speech for a whole second. There is an exception of an instance that has been mentioned when talking about reduction and omission of subtitles. There is a subtitle in which three words were omitted (*That's an incredible…*) *I think I'm gonna have a heart attack / and die from that surprise* (Table 6). As soon as the characters starts talking, the subtitle is displayed, giving way to a perfect synchrony. However, as the words omitted are at the beginning of the subtitle, this could be a case of leading time.

Especial attention has to be paid to lag times. There are three cases in the first thirteen minutes of *Aladdin* in which lag times occur. Sometimes, lag time can be due to a mistake in synchrony as it happens in one of the cases: a character is speaking and before the next shot begins, the character starts saying what the following subtitle shows, giving way to lag time and creating confusion in the viewer.

4.2.1.5. Locating speakers

In *Aladdin* different methods are used to locate speakers when they are speaking off-screen or when the speech of two characters appear in the same subtitle. For the former, the solution in the film is to write the name of the character in square brackets, which can be a bit confusing since the paralinguistic information is also written in square brackets and is positioned in the same place as subtitles. For the latter, the solution in the film is to write what each character says in a different line (that is, a subtitle with two lines) but, instead of writing the name of the character in square brackets, a dash precedes the speech. This can also be confusing since there is no distinction of whose character is saying what.

4.2.1.6. Paralinguistic information

In *Aladdin*, paralinguistic information is written in lower case letters which is not appropriate because subtitles and tag names are written in low case letter as well. Moreover, paralinguistic information is displayed in square brackets like tag names, hence making the reading and distinction of the two more difficult.

Regarding the type of paralinguistic information, in thirteen minutes of film, most noises and sounds are transcribed and the music is marked by placing a musical note at the beginning of the subtitle.

4.2.2. *Up*

The quantitative analysis of twenty three minutes of *Up* proves that subtitles are inconsistent. As it happens with *Aladdin*, there is no apparent pattern with regards to time subtitles remain on screen or number of words displayed in a minute. In this section, the qualitative analysis allows to review the reduction of dialogues, vocabulary, synchrony and paralinguistic information.

4.2.2.1. Reduction of dialogues

As already mentioned, no reduction has been made from oral to written language and speech is transcribed word for word. The beginning of the film (*NEWSREEL ANNOUNCEMENT*) is quite fast, both speech and subtitles, which consist of too many words as well. Due to the length of the analysis, only the transadaptation of the first three minutes will be presented; the rest of the analysis can be found in the Appendix section (p. 81).

Minute 00-01 / Table 16: 27 words

1. NEWSREEL ANNOUNCEMENT: Movietown / News presents Spotlight on Adventure.
2. What you are now witnessing
3. is footage never before seen / by civilised humanity,
4. a lost world in South America.

Here no reduction would be necessary although some changes could be made. For example, the first subtitle has an endophoric on-screen reference (*Movietown News presents Spotlight on Adventure*), thus it could be omitted allowing the viewer to focus on the image only so that there is no need to alternate between subtitle and image.

Minute 01-02 / Table 17: 161 words; reduction of 48 words.

1. Lurking in the shadow / of majestic Paradise Falls,
2. it sports plants and animals / undiscovered by science.
3. Who would dare set foot / on this inhospitable summit?
4. Why, our subject today, / Charles Muntz!
5. The beloved explorer lands / his dirigible, the Spirit of Adventure
6. in New Hampshire this week
7. completing a yearlong expedition / to the lost world.
8. This lighter-than-air craft / was designed by Muntz himself
9. and is longer than 22 prohibition / paddy wagons placed end to end.
10. And here comes the adventurer now.
11. Never apart from his faithful dogs,
12. Muntz conceived the craft / for canine comfort.
13. It's a veritable floating palace / in the sky,
14. complete with doggy bath / and mechanical canine walker.
15. And, Jiminy Cricket, do the locals / consider Muntz the bee's knees.
16. And how!
17. Adventure is out there!
18. (PEOPLE CHEERING)
19. NEWSREEL ANNOUNCEMENT: But what / has Muntz brought back this time?
20. Gentlemen, I give you / the monster of Paradise Falls!
21. (PEOPLE GASP)
22. NEWSREEL ANNOUNCEMENT: / And, golly, what a swell monster this is!

-

1. Majestic Paradise Falls
2. A place with undiscovered plants and animals.
3. Who would dare explore / this inhospitable summit?
4. The beloved explorer Charles Muntz!
5. He lands his dirigible / the Spirit of Adventure
6. in New Hampshire this week
7. after a yearlong expedition.
8. Muntz himself designed this airship
9. It is longer than 22 paddy wagons.
10. And here comes the adventurer.
11. Always with his faithful dogs,
12. Muntz built the craft / for canine comfort.
13. It's like a floating palace
14. With doggy bath and mechanical walker.

15. Jiminy Cricket! The locals consider Muntz / the bee's knees.
16. And how!
17. Adventure is out there!
18. (PEOPLE CHEERING)
19. What has Muntz brought this time?
20. Gentlemen, the monster of Paradise Falls!
21. (PEOPLE GASP)
22. Golly, what a swell monster this is!

In the first line, there is information that could be omitted since the most relevant part is the name of the place the newsreel announcement is talking about: *majestic Paradise Falls.* This reduction allows to change the word order of subtitles in line two and reduce one word.

In the third line, the idiom *set foot on* could be replaced by a single word with a similar meaning, *explore*.

Lines four to seven could be reduced by changing the word order of these four subtitles. Two words from line five could replace line four: *(The beloved) Charles Muntz!* As *the beloved* has already been used, in line five the sentence could begin with a personal pronoun subject (*He*).

Line six could remain the same and line seven could be reduced by omitting the last part of the sentence (*to the lost world*). The verb *completing* could be replaced by an adverb (*after*) to make a simpler sentence.

Line eight could be turned from a passive into an active construction and *airship* could replace *this lighter-than-air craft*.

In line nine, the description of the dirigible makes reference to paddy wagons used in the prohibition era, which is additional information that could be omitted. The use of a conjunction proper (*and*) is not necessary since there is continuity (design and description of the dirigible), thus it could be replaced by a personal pronoun subject (*It*).

In line ten, the only omission possible is the adverb of time *now*.

In line eleven, *never apart from* could be replaced with the opposite structure (*always with*)

to reduce one word.

In line twelve, the verb *conceived* could be replaced by a simpler one, *built*, since the sentence makes reference to the construction features of the airship.

Line thirteen could be simplified by a common structure used in English: *It's like a floating palace*. The phrase *in the sky* could be omitted since the viewer can infer that a floating palace must be in the sky (on air).

In line fourteen, *complete* could be omitted since with the preposition *with* alone, there is no transfer of meaning. The adjective *canine* could also be omitted since there is already a reference to the type of comforts (*doggy*).

In line fifteen, I think it is important to include the expression *Jiminy Cricket* since it could be familiar to children, as well as the idiom *the bee's knees*.

In line nineteen, the conjunction proper *but* could be omitted since no cohesive link is necessary; and the phrasal verb *brought back* could be simplified to just *brought* for the purpose of reducing a word. The reference to *NEWSREEL ANNOUNCEMENT* could be omitted because there is no other character talking and paralinguistic information appear two times, so there is little possibility of confusion between speakers.

In line twenty one, as Muntz on screen is presenting his discovery, the sentence *I give you* could be omitted. And in line twenty three, the cohesive link *and* could be eluded since there is continuity between line twenty one (the presentation of the monster) and line twenty three (*what a swell monster this is*). Again, the reference to *NEWSREEL ANNOUNCEMENT* could be omitted for the same reasons as the previous instance.

Minute 02-03 / Table 18: 120 words; reduction of 28 words

1. But what's this? Scientists cry foul.
2. The National Explorer's Society / accuses Muntz
3. of fabricating the skeleton.

4. No!
5. NEWSREEL ANNOUNCEMENT: / The organization strips Muntz
6. of his membership.
7. (GASPS)
8. NEWSREEL ANNOUNCEMENT: Humiliated, / Muntz vows a return to Paradise Falls
9. and promises / to capture the beast alive!
10. I promise to capture the beast alive,
11. and I will not come back until I do!
12. (CROWD CHEERING)
13. NEWSREEL ANNOUNCEMENT: And so, / the explorer's off to clear his name.
14. Bon voyage, Charles Muntz,
15. and good luck capturing / the monster of Paradise Falls!
16. (IMITATING AIRPLANE)
17. NEWSREEL ANNOUNCEMENT: Here's Charles Muntz
18. piloting his famous dirigible
19. (HORN HONKING)
20. He hurdles Pikes Peak.
21. He hurdles the Grand Canyon.
22. (CARL GRUNTS)
23. He hurdles Mount Everest.
24. (GRUNTS)
25. He goes around Mount Everest.

-

1. But what's this? Scientists suspect.
2. The National Explorer's Society / accuses Muntz
3. of fabricating it.
4. No!
5. NEWS: They remove Muntz's membership
6. (GASPS)
7. Humiliated, / Muntz promises
8. to capture the beast alive!
9. I promise to capture the beast alive,
10. And won't return until I do!
11. (CROWD CHEERING)
12. NEWS: So Muntz is off to clear his name.
13. Farewell
14. and good luck capturing / Paradise Falls monster!
15. (IMITATING AIRPLANE)
16. NEWS: Here's Charles Muntz
17. piloting his famous dirigible
18. (HORN HONKING)
19. He hurdles Pikes Peak.
20. And the Grand Canyon.
21. (GRUNTS)
22. He hurdles Mount Everest.
23. (GRUNTS)
24. He goes around Mount Everest.

The first line begins with a conjunction proper that cannot be omitted since the sequences of shots is much clearer with a cohesive link (as opposed to continuity). In the second part of the subtitle, the collocation *cry foul* could be replaced by a single word (an intransitive verb) with a similar meaning (*suspect*).

Line two cannot be reduced since there has not been yet a reference to *The National Explorer's Society*. But in line three, *the skeleton* could be referred to as *it* since there is an endophoric reference on screen (the image of the skeleton) and the skeleton of the monster is what the news is talking about.

In line four, one of the protagonist (Carl) makes an exclamation, thus in line five *NEWSREEL ANNOUNCEMENT* should be included since a character has just said something and if no reference to the news is made, there might be a misunderstanding. However, *NEWSREEL ANNOUNCEMT* could be reduced to *NEWS*, saving space to reduce the number of words and lines of the subtitle and making the reference shorter so that the reading of the word is faster. The subject of the sentence (*The organization*) is an anaphoric reference to *The National Explorer's Society* that could be reduced to one word by using the personal pronoun *They*. At the same time, lines five and six could be condensed into one (line 5 in the simplified version) thanks to the reduction of *NEWS* and a change of verb (*strip Muntz of his membership*) that allows the use of a Saxon genitive and the reduction of two words (*remove Muntz's membership*).[7]

In line eight (line 7 in the simplified version), reference to *NEWS* could be omitted since the previous subtitle is paralinguistic information (from now on, NEWS will be omitted when possible but only mentioned if it is necessary to include it in the subtitle). For the purpose of reducing number of words, lines eight and nine could be merged: to capture the beast alive, it is

---

[7] NOTE that as a subtitle was reduced the number of lines in the original version and in the simplified version are not the same.

obvious that Muntz has to return to Paradise Falls, therefore the line *Muntz vows a return to Paradise Falls* could be eluded, allowing to bring together the subject (*Muntz*) and the predicate in line 9 (*promises to capture the beast alive*).

Line eleven could be reduced by omitting the subject (since Muntz is still talking and on-screen and) and by using the contraction *won't* (instead of *I will not*). The phrasal verb *come back* could be reduced to one word (*return*).

In line thirteen, there are two cohesive links (*And so*), which can be reduced to just one (*So*). The subject (*the explorer*) could be referred to as *Muntz*, since one word would be reduced and names are easier to identify since they appear repeatedly throughout the film.

In line fourteen, a foreign expression is used (*Bon voyage*) which could be replaced by an English one to facilitate the comprehension of the expression (*Farewell*). The name *Charles Muntz,* although it would be easier to identify, could be omitted for the purpose of reducing words and because there is continuity between lines thirteen, fourteen and fifteen. In line fifteen, a change in word order (*the monster of Paradise Falls > Paradise Falls monster*) would reduce two words.

In line seventeen, *NEWS* should be included since there is a change of scene and the image on screen is no longer related to the newsreel announcement.

In line twenty one, instead of repeating *he hurdles*, a cohesive link (*and*) could be used to reduce one word. However, in line twenty three, *he hurdles* should be repeated because this line and line twenty five are linked by humour, so I think it is important the reiteration this time.

4.2.2.2. Vocabulary

Regarding vocabulary, there are two considerations to make. First, there is a foreign expression (*Bon voyage*) that should be replaced by an English one with which children might be more familiar with (i.e. Farewell). And second, the beginning of the film takes place when Carl was a

kid, so a long time ago, and the newsreel announcement contains vocabulary that could be perceived as old-fashioned. I think that it would be appropriate to adapt words and expressions to others more up to date.

The rest of vocabulary of the film does not seem to be difficult and it might result easier compared to that of *Aladdin*.

4.2.2.3. Synchrony

Subtitles in *Up* are often uncoordinated. There is a tendency to remove subtitles before speech has finished, that is, there are many cases (fifteen instances) of early off-set times which must be avoided. As the time subtitles remain on screen is not long enough, to remove subtitles early is not appropriate. There are also cases in which longer off-set times occur (twenty instances). Even though the latter occurs with more frequency, the number of early off-set times is high.

Lag times and lead times also happen but there is no significant difference (three instances of lag time or late on-set time; two instances of lead time or early on-set time).

4.2.2.4. Locating speakers

In *Up* there are two techniques used to locate speakers when there might be confusion about who is speaking. Tag names are written in capital letters followed by a colon and are used when it is not clear what character is talking. However, this method is overused and sometimes it is not necessary due to the image on screen or the context of a particular scene or shot. When the speech of two characters appear in the same subtitle, they are written in two different lines and a dash precedes the dialogue, without any further reference to who is speaking (no tag names).

4.2.2.5. Paralinguistic information

In *Up*, paralinguistic information is abundant and well presented. It is displayed in capital letter and in brackets, so it is easy to differentiate paralinguistic information from dialogues or tag names (no brackets but a colon). The type of paralinguistic information is quite complete and every noise and sound is transcribed. The only sound that is not reflected on subtitles is music.

5. RESULTS AND DISCUSSION

In this section, an account of and a commentary on the results regarding reduction of number of words of subtitles of both films are presented. To display the results in a clear way, the two tables that appear below were elaborated (Table 40 and Table 41), which show the number of words that have been reduced and the total number of words that subtitles would have if dialogues were simplified.

It is important to note that reduction not only consist of deleting words, phrases and sentences randomly, but consciously and taking into consideration linguistic implications and the constraints imposed by the audiovisual medium. It is also important to take into account that no previous reduction had been made to the subtitles; that is, every word heard in the speech is transcribed for the subtitled versions of both films. Consequently, the process of reducing subtitles becomes more complex, since subtitles are supposed to be already condensed when transcribed from oral to written language, and a further reduction should be made for deaf audiences, especially deaf children due to their low reading levels.

TABLE (No.)	NUMBER OF WORDS	NUMBER OF REDUCED WORDS	TOTAL NUMBER OF WORDS
1	68	9	59
2	99	18	81
3	131	28	103

4	62	-	62
5	77	6	71
6	80	22	58
7	114	24	90
8	162	-	162
9	103	-	103
10	22	-	22
11	105	29	76
12	77	13	64
13	124	41	83

Table 40. Number of words reduced in *Aladdin*.

In the table above, the four blank spaces in the column NUMBER OF REDUCED WORDS is due to two reasons. First, in Table (No.) 4 no reduction was necessary since sixty two words per minute is an acceptable number of words for deaf children to read, as in Table (No.) 10 which contain twenty two words. And second, Tables (No.) 8 and 9, as already explained, contain the lyrics of a song that I found impossible to reduce due to the vocabulary used, the rapid pace of the film and the quick rhythm of the song. Moreover, in both tables, the number of words per minute exceeds greatly the number of words established for deaf children subtitles, which adds complexity to the process.

Something that must be remarked is that the number of words per minute will always depend on the distribution of those words (in lines and subtitles) and exceptionally on the time they remain on screen. On the other hand, it is not true that the more words a minute contains, the more words can be reduced. To exemplify this, we can go back to Table 40 and look at two instances: in Table (No.) 3 there are 131 words with a reduction of 28 words which gives a result of 103 words per minute; in Table (No.) 13 there are 124 words with a reduction of 41 words which gives a result of 83 words per minute. The reason why is that, regardless of the number of words per minute in the original version, reduction is dependent on the meaning that utterances convey and on the amount of relevant, new and essential information that should be preserved. Therefore, attending to all these aspects, not all subtitles can be reduced in the same way and with

the same amount of words.

In the original version of subtitles, there were six cases in which the number of words surpassed a hundred words per minute (Tables (No.) 3, 7, 8, 9, 11 and 13) and only three cases in which the number of words per minute was appropriate (Tables (No.) 1, 4 and 10). In the reduced version, three cases exceeded a hundred words per minute (Tables (No.) 3, 8 and 9), which include the song I could not simplify. Nevertheless, in five cases reduction was made inasmuch as to achieve an adequate number of words per minute (Tables (No.) 1, 4, 6, 10 and 12).

The total number of words in thirteen minutes is 1224 and the total number of words after reducing subtitles is 1034, that is, 190 words were reduced.

TABLE (No.)	NUMBER OF WORDS	NUMBER OF REDUCED WORDS	TOTAL NUMBER OF WORDS
16	27	-	27
17	161	48	113
18	120	28	92
19	121	31	90
20	82	23	59
21	94	19	76
22	108	24	84
23	8	-	8
24	2	-	2
25	1	-	1
26	12	-	12
27	8	-	8
28	77	17	60
29	135	38	97
30	119	21	98
31	152	54	98
32	75	9	66
33	22	-	22
34	26	-	26
35	57	-	57
36	11	-	11
37	10	-	10

Table 41. Number of words reduced in *Up*.

In Table 41, the blank spaces are due to the fact that the corresponding subtitles in those minutes

have an appropriate number of words and no further reduction was necessary. In Tables (No.) 23,24,25,26 and 27, only paralinguistic information is displayed and remain on screen for a reasonable amount of time, as already argued. In Tables (No.) 33, 34, 35, 36 and 37, dialogues are combined with image to the extent that the story is told in a more dynamic way that allows the viewer to feel at ease with the development of the plot since there are fewer subtitles to read and s/he can focus on the image.

The original version of subtitles contained seven cases in which more than a hundred words per minute was exceeded (Tables (No.) 17,18,19,22, 29, 30 and 31) which was cut down to only one case in the reduced version (Table (No.) 17). In the same line, the original version contained eleven cases with an appropriate number of words per minute (Tables (No.) 16, 23, 24, 25, 26, 27, 33, 34, 35, 36 and 37) that was increased to fourteen cases in the reduced version (Tables (No.) 20, 28 and 32).

The total number of words in twenty three minutes is 1428 and the total number of words after reducing subtitles is 1117, that is, a reduction of 311 words was achieved.

As Table 40 and Table 41 show, reduction of dialogues is not an easy task but it is possible. In some cases, more omissions can be made as the results prove. The extent to which reduction can be made is not indicated by the number of words a subtitle contains. In fact, there is no indicator but bearing in mind that reduction should be made as much and as accurately as possible with the minimum loss of meaning, but at the same time taking into account that a slight transfer of meaning is virtually inevitable since some words are deleted, synonyms are used, phrases and sentences are reformulated and word order is changed to make simpler sentences.

With regards to the type of techniques that were used to reduce and simplify subtitles, an account on the grammatical categories that were altered is given below.

66

ALADDIN

In thirteen minutes of *Aladdin*, 190 words were reduced and in thirty cases, words, phrases and sentences were simplified. The main techniques used are omission, substitution (reduction) and synonyms, and change of word order and verb tense.

Regarding omissions, there are three main methods: omission of words, phrases and sentences for the purpose of reducing number of words; omission based on reiterations; and omission based on endophoric on-screen referents.

There are twenty nine cases in which words, phrases and sentences were omitted for the purpose of reducing number of words. Within this type of omissions, there are different grammatical categories, being the most frequent the omission of phrases (six cases), adverbs (three cases) and subject-verb sentences (three cases).

Adverbs: *where* (Table 1); *before* (Table 3); *here* (Table 7).

Phrases: *come on down* (Table 1); *more often than not* (Table 2); *like so many things* (Table 3); *the rest of* (Table 5); *obviously less than* (Table 6); *come on* (Table 11).

Subject-verb sentences: *I think… die* (Table 6); *I suppose* (Table 11); *you've got* (Table 13).[8]

With regards to the omissions based on reiterations, there are fourteen cases. The most frequent cases are phrases (three instances), verbs (two instances), adverbs (two instances), and sentences (two instances).

Verb: *could fall* (Table 2); *will not…* (Table2).

Adverb: *please* (Table 2); *too close* (Table 2).

Phrases: *A young man* (Table 3); *street rat* (Table 11), *the lamp* (Table5).

Sentence: *I just don't believe it* (Table 6); *with him, weren't you, Rajah? / You were just playing*

---

[8]   The rest of instances can be found in the Appendix section, due to the length of the analysis.

(Table 13).

The cases of words omitted due to endophoric on-screen references are four: phrase, *to you* (Table 2); adjective, *julienne* (Table 2); proper name, A*bu* (Table 11); adjective, *both* (Table 13).

Substitution was considered from two points of view: on the one hand, substitution of phrases and sentences (eleven cases), and on the other hand substitution through the use of synonyms (thirteen cases). Some examples are shown below, the rest of instances can be found in the Appendix section (p. 81).

Substitution of phrases and sentences: *one of these intact > an intact one* (Table 3); *most rewarded to consider this > would like this* (Table 3); *Perhaps you'd like to hear the tale? > Perhaps you want me to tell the tale* (Table 3).

Synonyms: *barbaric > rough* (Table 1); *a lot of > many* (Table 2); *hookah > pipe* (Table 2); *listen > look* (Table 3). The last example was considered to be a synonym although it is a change of verb because, as films are made for hearing audiences and subtitles are made for a deaf audience, a change of verbs related to the senses could be seen as a parallel word according the needs of the deaf audience.

With regards to changes in word order that involve omission of words as well, there is only one case involving a prepositional phrase and an adjective: *from a land, from a faraway place > from a faraway land* (Table 1).

And finally, there is still another technique to reduce number of words that implies a change of verb tense. There are two instances: *I've never seen > I never saw* (Table 3); *I'm not going to be around forever > I won't be around forever* (Table 13).

As this classification shows, the most frequent methods to reduce number of words is omissions, substitutions and synonyms. It is true, that even though the number of instances is

higher in synonyms (which simplifies subtitles rather than to reduce them), the technique that allows to delete more words is omission for the purpose of reducing number of words, closely followed by omission of reiterations. In the analysis, an account of the reasons to omit words, phrases and sentences was given, and in some cases, it is inevitable that in order to make a sentence simpler, a transfer of meaning may occur. Nevertheless, these transfers of meaning are slight changes in the sense or overall meaning of utterances. Besides, the subtitles cannot be separated from image since they influence and complement each other. That is, subtitles cannot exist without the image because context (provided by the image) is very important to understand any change made in written language.

UP

An amount of 311 words were reduced from the total number of words that appeared in twenty three minutes of the film. The main techniques used are omission, substitution (reduction) and synonyms, and change of word order and verb tense.

With regards to omissions, there three main techniques used were: omission of words, phrases and sentences for the purpose of reducing number of words; omission based on reiterations; and omission based on endophoric on-screen referents.

There are eighty three cases of words, phrases and sentences omitted for the purpose of reducing number of words. There are different grammatical categories, being the most frequent the omission of sentences (twenty four instances), phrases (twelve instances) and interjections (fifteen instances). Some examples are given below, the rest of instances can be found in the Appendix section (p. 81).

Sentences: *Lurking in the shadows of* (Table 17); *I give you* (Table 17); *vows a return to Paradise Falls* (Table 18); *Hold together, old girl* (Table 19); *Let's take her up to* (Table 19); *Don't you know* (Table 19); *What's wrong?* (Table 20); *Do it!* (Table 21).

Phrases: *our subject today* (Table 17); *to the lost world* (Table 17).

Interjections: *Why* (Table 17, Table 32); *Yes* (Table 19, Table 29); *Well* (Table 20, Table 22); *Good* (Table 22).

Adjectives: *lighter-than-air* (Table 17); *prohibition* (Table 17); *complete* (Table 17); *canine* (Table 17); *poor* (Table 31).

Conjunctions proper: *And* (Table 17 x3, Table 18 x2, Table 29); *But* (Table 17); *Only* (Table 22).

Adverbs: *here* (Table 19); *just* (Table 20); *off the street* (Table 20); *All right* (Table 20); *where* (Table 20); *right* (Table 22); *there* (Table 28); *quite* (Table 29).

Proper names: *Charles Muntz* (Table 18); *ELLIE* (Table 21 x2); *Mr Fredricksen* (Table 31); *EDITH* (Table 32).

Nouns: *Lightning* (Table 19); *Hail* (Table 19).

Subjects: *You* (Table 29); *I...* (Table 30).

Verb: *went* (Table 20).

With regards to substitution and synonyms, there are seventeen instances of substitution and thirteen instances of substitution through the use of synonyms. Some examples are shown below, the rest of them can be found in the Appendix section (p. 81).

Substitution: *The beloved > He* (Table 17); *completing > after* (Table 17); *It's a veritable floating palace > It's like a floating palace* (Table 17); *the skeleton > it* (Table 18); *The organization > They* (Table 18); *the explorer > Muntz* (Table 18).

Synonyms: *set foot on > explore* (Table 17); *craft > airship* (Table 17); *Never apart from > Always with* (Table 17); *conceived > built* (Table 17).

Regarding change in word order (six cases) and change of verb tense (one instance), some examples are given below, the rest can be found in the Appendix section (p. 81).

Change in word order: *it sports plants and animal undiscovered by science > (a place with)*

undiscovered plants and animals (Table 17); *Charles Muntz. The beloved explorer > The beloved*

Charles Muntz (Table 17); *Thought you might need a little cheering up. I got something to show*

you > I wanna show you something. It will cheer you up (Table 21).

Change in verb tense: *I'm going to move > I'll move* (Table 22).

The presentation of results allows to get a picture of the difficulties involved in the process of linguistic reduction and simplification in subtitles for the deaf and hard-of-hearing. The procedure followed to reduce subtitles was based on linguistics aspects and was subjected to audiovisual constrains, which not always permit to achieve the expected outcome. That is, there are cases in which, even though the aim is to simplify every piece of dialogue that appears in the film, reduction can be made to a certain extent. One of the reasons why there seems to be a limit is what Toury acknowledged as a true universal of any translational process, the transfer of language. This transfer of language presupposes, as Halliday stated, ineludibly a transfer of meaning, which is due to the methods used to simplify subtitles. For example, the change in word order or the omission of certain words, phrases and sentences may have consequences in terms of meaning, intention and sense that an utterance conveys; however, the result may be satisfactory if simpler sentences (with the slightest transfer of meaning, if possible) are achieved. One of the most important points is that after reducing a sentence, the overall meaning must be preserved so that there is no misunderstanding and the sentence can be comprehended. The idea of reducing subtitles with no transfer of meaning cannot be taken for granted because the smallest change in a sentence will undoubtedly have effects on the perception of dialogues, subtitles and image (plot).

As to my reduction and simplification of subtitles, I found the task quite complex and sometimes the result was not as successful as expected. The method that was used the most (omission) is perhaps the most difficult one, for it is one of the techniques that more consequences may cause to the overall meaning of a sentence. Omissions were classified into

three different types: omission for the purpose of reducing words, omissions of reiterations, and omissions of words that have an endophoric on-screen references. The first type of omissions refer to words, phrases or sentences that were not very relevant for the plot, development and understanding of the film. However, sometimes, if two phrases were adjacent and their meaning was similar, omission for the purpose of reducing number of words was applied. The second type, omissions of reiterations, was applied to mostly all repetitions that appeared which were not relevant or did not convey a great deal of meaning. Repetitions can happen within the speech of one character or between two characters; the former is usually easier to omit, but the latter may have a charge of meaning hard to elude. Finally, the third type of omission has to do with endophoric on-screen references that allow to omit that piece of subtitle while enables the viewer to focus (at least for longer) on the image, instead of on the subtitles only. This is something that happens very often in *Up* due to the reliance on the image of animation films.

As an alternative to omissions, substitution, synonyms and change of word order were applied when possible, always trying to maintain the sense and meaning of utterances. These methods allow to use parallel words, phrases, sentences and expressions that convey the same meaning. Synonyms were used for words that were thought to be more difficult for deaf children to understand and process, and also as an alternative to phrasal verbs or compound words that could be reduced to a single word, hence fulfilling two objectives: that of reducing number of words and that of simplifying sentences. Substitution was applied to words, phrases and sentences which could not be reduced to a synonym, but substituted by any type of reference (understood as a linguistic feature of cohesion) that made clear the connection between the different units of language involve in the substitution. And change of word order was applied to sentences that were possible to be simplified in terms of syntax. There are also cases in which word order can be applied to contiguous subtitles (more than one line) allowing to reformulate

sentences while simplifying their structure and reducing some words.

When applying these methods to the reduction and simplification of the dialogues of the films involved in this research some differences were found, which influence greatly the process of transadaptation. In general, incongruities happen in both films, although *Up* is apparently easier to deal with than *Aladdin*.

First of all, the language style used in *Aladdin* differs from that of *Up* in terms of vocabulary. In *Aladdin* there are many references to foreign words and expressions that were not reduced for the SDH included in the DVD. In *Up*, we only find one instance of a foreign expression, but it was not reduced for the SDH included in the DVD either. However, not only foreign words are difficult to process for deaf children but also old-fashioned and complex words that children might not be familiar with. In *Up*, vocabulary is more up to date than in *Aladdin*, mainly because *Up* was released in 2009 and *Aladdin* was released in 1992. Techniques such as substitution, synonyms and change of word order were easier to apply in *Up* due to the type of words used in the dialogues. Moreover, the settings are completely different and the story of the former is more up to date and real, so language style must be adjusted to the conventions of the time. Therefore, this is one of the reasons that might have influenced the difficulty of the simplification in *Aladdin*, in which 190 words were reduced in thirteen minutes of film, in contrast to *Up*, in which 311 words were reduced in twenty three minutes of film. The difference in the amount of minutes is not that significant since in *Up*, there are several scenes along the film in which no subtitles or just a few appear; in the twenty three minutes analysed, there are two occasions where this occurs, with a length of about ten minutes.

With regards to time rates and number of words per minute, neither of the films follow any pattern and they do not have appropriate time rates to display the amount of words per minute that appear. As the corpora show, the number of words that appear in the subtitles of both films is

73

too high due to the lack of transadaptation. Both films contain a great number of sentences consisting of too many words and are not displayed for enough seconds. No matter how many words a subtitle contains, the time they remain on screen is not enough for a deaf child to read. However, in *Up* seems to be a pattern for the paralinguistic information, which is displayed for at least one whole second most of times or even two seconds (for two or three words). There is a tendency to display subtitles for longer in *Up* and there more cases in which they remain on screen for 4 seconds than in *Aladdin;* there is even one case in which a subtitle (consisting of eleven words) is displayed for 6,15 seconds. In *Aladdin*, not even the subtitles where there is singing remain on screen for long enough, regardless of the quick rhythm of songs and succession of shots. There are also higher numbers of words per minute when there is a song (that is, throughout the whole film). This becomes a problem when trying to reduce subtitles because, just as they are subjected to certain constraints, lyrics have distinctive features which are difficult to deal with. In fact, one of the songs that appear in the first thirteen minutes (of around two minute length) was not reduced because I did not find the process feasible.

But what is it that makes a version of reduced subtitles to be a proper one? What is more relevant: to adjust the amount of words per minute to a reasonable number, to get the minimum transfer of meaning, or to achieve simpler sentence structures? The fact is that subtitles must subscribe to a combination of these three aspects. The truth is that sometimes reduction depends on a large scale on the total number of words per minute (the more words contained in a minute, the more words should be reduced and the more complex the process becomes). As already explained, a high number of words per minute does not facilitate the reduction and simplification of subtitles but just the opposite, as more information is meant to be condensed in fewer lines and words. The fact that no reduction had been made to the version of SDH found in both films makes the process a bit more complicated because one has to start from scratch. In the case of

Aladdin, songs should be mended and rewritten if necessary; in *Up* maybe the fragments of the story which are told visually force the incorporation of more information in the parts where there are speech and subtitles. Therefore, as no transadaptation was included in the version of SDH found in the DVD formats of both films, a proposal on how to improve this type of subtitles could be suggested.

First of all, it is conspicuous that reduction must be made because to include every word of speech in the subtitled version is not adequate, and the means to process these two types of information is completely different. Second, a simplification of dialogues should be carried out in terms of grammatical features, syntactic complexity and difficult words. Third, time rates should be prolonged considerably and some pattern should be established so that disparities like the ones found in *Aladdin* and *Up* (i.e. three seconds for a subtitles consisting of three words but also for a subtitle consisting of twelve words) are fixed. Fourth, especial attention should be paid to synchrony because, as it has been seen in the analyses, lead and lag times occur and affect the reading of subtitles as well. Perhaps early on-set times and late off-set times could be applied to a certain degree so that the viewer has more time to read the subtitle. However, synchrony is considered to be a very important constraint within the audiovisual medium and the reason to coordinate speech and subtitles is to avoid confusion (i.e. When does a character begins and finishes his/her speech?). Furthermore, synchrony in animation films might be more relevant due to the detailed design of characters whose facial features are similar to those of human beings due to three-dimensional image and so, vocalization allows lip-reading with more precision. Fifth, to locate and identify speakers, tag names should be written in capital letters followed by a colon (as in *Up*) because it resembles, from a formal point of view, literary conventions (theatre scripts in direct speech). At the same time, an overuse of these references should be avoided when there is an endophoric on-screen referent. Sixth, the paralinguistic information should be written in

75

capital letters as well and within brackets (as in *Up*) to clarify the distinction between speech (in lower case letter), tag names (in capital letters with a colon) and paralinguistic information (in capital letters within brackets). And last but not least, the position of subtitles must be always the same so that the viewer knows where to look. This prevents viewers from trying to find where the subtitle is positioned, which takes time and effort that otherwise would be focused on reading the information that appears on screen. In *Aladdin* all subtitles are placed in the lower part of the screen but in *Up*, there are a few subtitles which are placed in the superior part of the screen, which creates confusion in the viewer who has to find the subtitle first, diminishing the time for the reading of the line.

6. CONCLUSION

The deaf community is so heterogeneous that it is difficult to provide a proper insight on the ways deaf children decode written discourse, identify words or comprehend meaning. There are several methods which apparently are used in combination. The recoding strategies may vary from one person to another and from one moment to another as well. Therefore, it is difficult to state how easy or difficult deaf children are going to find subtitles. That is why the reduction and simplification of subtitles should be subjected to linguistic features, average reading speed and comprehension, always taking into consideration the different types of decoding strategies, reading abilities and learning process in profoundly deaf children.

Recent research state that thanks to the arrival of Digital Television and the new format to distribute audiovisual products, the DVD, deaf audiences have more accessibility to audiovisual media. However, many factors are eluded when subtitling for the deaf, especially for deaf children. Therefore the word accessibility loses part of its meaning in the process. As a matter of fact, no transadaptation was made in the films analysed and after subtitles were reduced and

simplified (proving right the initial hypothesis as to the possibility of reducing subtitles with little loss of meaning), there is still a need for further reduction, which could be combined with longer times of subtitles remaining on screen, and even with a deceleration of scenes where there is too much information to process and little time to do so.

The proposal to improve subtitles derive from the inadequacies found through the analysis of the two films involved in this research. When subtitling for a deaf audience, considerations such as number of words per minute and per line, time rates, vocabulary used, synchrony, identification of speakers and paralinguistic information must be taken into account. To proceed to the reduction and simplification of dialogues into written language, linguistic implications must be regarded carefully as they play a very important role in the process of transadaptation and influence understanding and comprehension of the message.

As to future perspectives, further research on the issue should be continued so that more light can be shed on the matter of accessibility. The idea for further research is to enlarge the corpus including more films with whole analyses, reduction and simplification of subtitles. With regards to its practical application, it would be very interesting to conduct a research with deaf children participants and see if through the reading of reduced versions of subtitles, there is a positive progression in comprehension and reading skills. Research on SDH and its practical application would help to achieve improvements in a field of study that has been disregarded until very recently. The history of SDH is rather short although thanks to technological developments accessibility is, little by little, reaching every corner in the world and providing specific types of audiences with audiovisual materials. It is important to bear in mind that the key word for such a research is accessibility and perhaps it would be advisable to establish patterns to follow when subtitling, as a whole, by consensus of the different countries that offer SDH.

REFERENCES

Barca L., Pezzulo G., Castrataro M., Rinaldi P., Caselli MC. 2013. *Visual Word Recognition in Deaf Readers: Lexicality is Modulated by Communication Mode.* PLoS ONE 8(3): e59080. Doi:10.1371/journal.pone.0059080. Vol. 8, Issue 3.

De Linde, Zoé and Kay, Neil. 1999. *The semiotics of subtitling*. Manchester: St. Jerome Publishing: Manchester, UK.

Díaz Cintas, Jorge and Anderman, Gunilla. 2009. *Audiovisual Translation. Language Transfer on Screen*/ edited by Jorge Díaz Cintas and Gunilla Anderman. Palgrave Macmillan: UK. Pp. 1-20; 151-170.   http://ymerleksi.wikispaces.com/file/view/Audiovisual+Translation.pdf (accessed on 15/07/2013)

Díaz Cintas, Jorge and Remael, Aline. 2007. *Audiovisual Translation: Subtitling*. St. Jerome Publishing: Manchester, UK. Pp. 1-33.

Gutt, Ernst-August. 1989. *Translation and Relevance*. PhD Thesis. University of London. http://discovery.ucl.ac.uk/1317504/1/241978.pdf (accessed on 20/07/2013)

Halliday, M.A.K. and Matthiessen, Christian. 2004. *An Introduction to Functional Grammar.* Oxford: Oxford University Press.

Halliday, M.A.K. and Ruqaiya, Hasan.   1985. *Language, context, and text: aspects of language in a social-semiotic perspective*. Oxford: Oxford University Press. Chapter 2, pp. 15-23.

Herrera F., Valeria. 2009. *Procesos cognitivos implicados en la lectura de los sordos*. Estudios Pedagógicos XXXV, Nº 1: pp. 79-92.

John Benjamins (1995), 53-69. http://www.tau.ac.il/~toury/works/GT-Role-Norms.htm (accessed on 27/01/2013) and

http://books.google.es/books?id=aNHENtMoqEIC&printsec=frontcover&hl=es&source=gbs _gesummary_r&cad=0#v=snippet&q=relevance&f=false (accessed on 13/07/2013)

Karamitroglou, Fotios. 2000. *Towards a Methodology for the Investigation of Norms in Audiovisual Translations*. Amsterdam-Atlantla: Edition Rodopi B.V., 1-17.

Majcenovič Kline, B. 2011. *Otherness – Challenge or Obstacle in Multimedia Translation*. Komunikacija i kultura online: Godina II, broj 2. Pp. 191-206.

Marschark, Marc *et al.* 2000. *Understanding Theory of Mind in Children who are Deaf.* J. Child Prychol. Psychiat. Vol. 4, No. 8. Pp. 1067-1073.

Neves, Josélia. 2005. *Audiovisual Translation: Subtitling for the Deaf and Hard-of-Hearing.* Theses and dissertations from the School of Arts. Roehampton University.

Nida, Eugene Albert and Taber, Charles Russell. 1969. *The Theory and Practice of Translation.* The Netherlands: Brill. Pp. 12-32.

Pereira Rodríguez, Ana María and Lorenzo Garcia, Lourdes. 2005. *EVALUAMOS LA NORMA UNE 153.010*. Puentes N.º 6, noviembre 2005. Pp. 21-26.

Peterson, Candida C. and Siegal, Michael. 1999. *Representing Inner Worlds. Theory of Mind in autistic, Deaf, and Normal Hearing Children.* Psychological Science. American Psychological Society. Vol. 10, No. 2, March 1999. Pp. 126-129.

Tomlinson-Keasey, Carol and Smith-Winberry, Cheryl. 1989. *Cognitive Consequences of Congenital Deafness.* The Journal of Genetic Psychology. Pp. 103-115.

Toury, Gideon. 1995. "The Nature and Role of Norms in Translation". In idem, *Descriptive Translation Studies and Beyond*. Amsterdam-Philadelphia: John Benjamins. Pp. 53-69.

UNE 153.010. 2003. *Subtitulado para personas sordas y personas con discapacidad auditiva. Subtitulado a través del teletexto*. Madrid: AENOR.

United Nations webpage. Convention on the Rights of Persons with Disabilities and Optional Protocol (2003) http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf

(accessed on 5/09/2013).

Wilson, Deirdre and Sperber, Dan. 2002. *Relevance Theory*. UCL Working Papers in Linguistics 14. http://www.phon.ucl.ac.uk/home/PUB/WPL/02papers/wilson_sperber.pdf (accessed on 20/07/2013)

World Health Organization webpage. http://www.who.int/mediacentre/factsheets/fs300/en/ (accessed on 15/07/2013)

APPENDIX

4. ANALYSIS

4.1. QUANTITATIVE ANALAYSIS

4.1.1. *Aladdin*

Corpus 'ALADDIN 13 MIN'. Quantitative analysis of thirteen minutes. Tables 1 to 13.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
00-01	10	3,42	*Oh, I come from a land / From a faraway place*
	5	3,2	*Where the caravan camels roam*
	10	3,34	*Where it's flat and immense / And the heat is intense*
	6	3,1	*It's barbaric but hey, it's home*
	12	3,43	*When the wind's from the East / And the sun's from the West*
	8	3	*And the sand in the glass is right*
	11	3,75	*Come on down, stop on by / Hop a carpet and fly*
	4	4,04	*To another Arabian night*
	2	3,64	*Arabian nights*

Table 1. Subtitles rate during the first minute of *Aladdin*.

9 SUBTITLES / 13 LINES / 68 WORDS – Average time subtitles remain on screen: 3,43 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
01-02	3	3,42	*Like Arabian days*
	8	3,5	*More often than not / Are hotter than hot*
	6	3,26	*In a lot of good ways*
	2	3,44	*Arabian nights*
	3	3,4	*Neath Arabian moons*
	10	3,97	*A fool off his guard / Could fall and fall hard*
	5	2,7	*Out there on the dunes*
	2	2,06	[camel panting]
	9	4,63	Ah, salaam, and good evening / to you, worthy friend.
	4	1,72	Please, please, come closer.
	6	1,71	Too close. A little too close.
	1	1,41	There.
	3	2,07	Welcome to Agrabah,

	3	2,26	city of mystery,
	2	1,75	of enchantment,
	13	3,74	and the finest merchandise this side / of the river Jordan, on sale today.
	4	1,5	Look at this. Yes.
	8	3,98	Combination hookah and coffeemaker / Also makes julienne fries.
	5	2,15	Will not break. Will not…
	2	1,31	It broke.

Table 2. Subtitles rate during the second minute of *Aladdin*.

20 SUBTITLES / 25 LINES / 99 WORDS – Average time subtitles remain on screen: 2,69 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
02-03	4	2,57	Ohh! Look at this.
	9	2,53	I have never seen / one of these intact before.
	7	1,86	This is the famous / Dead Sea Tupperware.
	4	3,37	Listen. Ah, still good.
	3	1,36	Wait. Don't go.
	11	3,51	I can see that you're only interested / in the exceptionally rare.
	11	3,97	I think, then, you would be / most rewarded to consider this.
	8	3,64	Do not be fooled / by its commonplace appearance.
	10	2,4	Like so many things, / it is not what is outside,
	6	2,92	but what is inside that counts.
	5	1,44	This is no ordinary lamp.
	10	2,86	It once changed the course / of a young man's life.
	13	4	A young man who, like this lamp, / was more than what he seemed.
	5	2,33	The diamond in the rough.
	8	1,98	Perhaps you would like to hear the tale?
	6	3,75	It begins on a dark night…
	5	2,75	where a dark man waits
	4	3,14	with a dark purpose.
	2	1,33	[horse nickers]

Table 3. Subtitles rate during the third minute of *Aladdin*.

19 SUBTITLES / 27 LINES / 131 WORDS – Average time subtitles remain on screen: 2,72 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
03-04	3	2,03	You are late.
	6	2,79	A thousand apologies, O Patient One.
	4	1,17	You have it then?
	11	3,26	I had to slit a few throats, / but I got it.
	1	2,11	Ah-ah-ahhh.
	2	1,33	The treasure.
	1	0,8	Ow!
	5	3,06	Trust me, my pungent friend.
	11	3,5	You'll get what's coming to you. / What's coming to you. Awk!
	4	2,79	Quickly! Follow the trail.
	1	1,08	Faster.
	2	1,4	[horse neighs]
	2	2,22	[wind howling]
	9	3,67	[Jafar] At last, after all / my years of searching…

Table 4. Subtitles rate during the fourth minute of *Aladdin.*

14 SUBTITLES / 17 LINES / 62 WORDS – Average time subtitles remain on screen: 2,22 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
04-05	4	2,5	the Cave of Wonders.
	4	2,09	Awk. Cave of Wonders.
	2	2,1	By Allah.
	6	3,97	Now, remember. / Bring me the lamp.
	12	4,64	The rest of the treasure / is yours, but the lamp is mine.
	8	3,98	[chuckles] / [Iago] Awk, the lamp. Awk, the lamp.
	7	2,8	Jeez, where'd ya dig this bozo up?
	1	2	Shh.
	2	2,08	[echoing rumble]
	6	4,64	Who disturbs my slumber? / [thief gasps]
	4	3,15	It is I, Gazeem
	3	1,65	a humble thief.
	2	1,5	Know this.
	5	3,48	Only one may enter here,
	6	2,6	one whose worth lies far within.

	5	4,01	A diamond in the rough.

Table 5. Subtitles rate during the fifth minute of *Aladdin*.

16 SUBTITLES / 20 LINES / 77 WORDS – Average time subtitles remain on screen: 2,94 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
05-06	7	2,08	What are you waiting for? Go on.
	2	3,19	[beast sighing]
	2	2,3	[roaring] / [screaming]
	1	1,38	No!
	8	5	Seek thee out / the diamond in the rough.
	1	3,04	[coughing]
	9	3,11	I can't believe it. / I just don't believe it.
	10	4,13	We're never gonna get / a hold of that stupid lamp.
	6	2,5	Just gorget it. / Look at this.
	7	2,75	I'm so ticked off that i'm moulting.
	3	3,54	Patience, Iago. Patience.
	6	3,72	Gazeem was obviously less than worthy.
	5	2,04	Oh, there's a big surprise.
	13	4,48	I think I'm gonna have a heart attack / and die from that surprise.

Table 6. Subtitles rate during the sixth minute of *Aladdin*.

14 SUBTITLES / 20 LINES / 80 WORDS – Average time subtitles remain on screen: 3,16 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
06-07	13	4,48	What are we gonna do? / We got a big problem here, a big…
	1	1,85	Yes.
	4	2,79	Only one may enter.
	6	2,3	I must find this one, this…
	4	2,6	diamond in the rough.
	3	2,9	[man] Stop! Thief!
	9	3,21	I'll have your hands for a trophy, street rat.
	7	2,52	All this for a loaf of bread?
	1	1,45	Whoa!
	1	1	[screaming]
	10	3,11	[guard] There he is! / You won't get away so easy!
	5	1,87	You think that was easy?
	1	1,02	[giggling]

84

	9	2,82	You two, over that way, / and you, follow me.
	5	2,13	We'll find him. / Morning, ladies.
	10	3,69	Getting into trouble a little early / today, aren't we, Aladdin?
	11	2,64	Trouble? No way. You're only / in trouble if you get caught.
	4	1,85	Gotcha. / I'm in trouble.
	3	1,08	And this time…
	2	2,13	[monkey squeaking]
	5	1,61	Perfect timing, Abu, as usual.

Table 7. Subtitles rate during the seventh minute of *Aladdin*.
21 SUBTITLES / 28 LINES / 114 WORDS – Average time subtitles remain on screen: 2,33 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
07-08	7	2,27	Abu. / Come on. Let's get outta here.
	9	2,44	*Gotta keep one jump / Ahead of the bread line*
	6	1,8	*One swing ahead of the sword*
	7	2,65	*I steal only what I can't afford*
	2	0,97	*That's everything.*
	6	1,59	*One jump ahead of the lawmen*
	6	1,66	*That's all and that's no joke*
	6	3,04	*These guys don't appreciate I'm broke*
	4	2,08	*Riffraff. / Street rat.*
	5	2	*[guard] Scoundrel. / [man] Take that.*
	5	3,6	*Just a little snack, guys*
	7	3,64	*Rip him open / Take it back, guys*
	9	1,78	*I can take a hint / Gotta face the facts*
	7	2,11	*You're my only friend, Abu / [women] Who?*
	7	3,57	*Oh, it's sad Aladdin's hit the bottom*
	7	3,36	*He's become a one-man rise in crime*
	8	3,56	*I'd blame parents / Except he hasn't got 'em*
	8	1,75	*Gotta eat to live / Gotta steal to eat*
	10	2,3	*Tell you all about it / When I got the time*
	12	3,79	*One jump ahead of the slowpokes / One skip ahead of my doom*
	8	2,42	*Next time gonna use a nom de plume*
	3	0,97	There he is
	13	3,73	*One jump ahead of the hit men / One hit ahead of the flock*

Table 8. Subtitles rate during the eighth minute of *Aladdin*.
23 SUBTITLES / 35 LINES / 162 WORDS – Average time subtitles remain on screen: 2,48

seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
08-09	9	3,45	*I think I'll take a stroll / Around the block*
	4	1,72	[man] *Stop, thief / Vandal*
	2	1,66	*Abu! / Scandal*
	5	4	*Let's not be too hasty*
	6	3,9	*Still I think he's rather tasty*
	8	1,51	*Gotta eat to live / Gotta steal to eat*
	4	1,7	*Otherwise we'd get along*
	2	0,89	[guards] *Wrong*
	4	1,37	[main guard] Get him!
	4	1,6	He's got a sword!
	6	3,37	You idiots. / We've all got swords.
	1	1	[groaning]
	7	1,77	*One jump ahead of the hoofbeasts / Vandal!*
	8	1,89	*One hop ahead of the hump / Street rat*
	6	1,94	*One trick ahead of disaster / Scoundrel!*
	6	1,82	*They're quick, but I'm much faster*
	7	1,65	*Here goes, better throw my hand in*
	10	3,73	*Wish me happy landin' / All I gotta do is jump*
	1	1,66	[screaming]
	3	2	[guards] Yuck! Oy!

Table 9. Subtitles rate during the ninth minute of *Aladdin*.

20 SUBTITLES / 29 LINES / 103 WORDS – Average time subtitles remain on screen: 2,13 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
09-10	6	2,5	And now, esteemed *effendi*, we feast.
	1	1,64	All right.
	3	1,5	[Abu] Yum, yum!
	1	1,53	Uh-oh.
	1	2	[sighs]
	5	2,94	Here. Go on. Take it.
	1	1,75	[giggling]
	1	1,51	[groans]
	3	2,5	Ah, don't. Huh?

Table 10. Subtitles rate during the tenth minute of *Aladdin*.

9 SUBTITLES / 9 LINES / 22 WORDS – Average time subtitles remain on screen: 1,98 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
10-11	8	2	On his way to the palace, I suppose.
	5	2.8	Another suitor for the princess.
	3	2.7	[giggling] / [woman screams]
	8	2.71	[whinnying] / Out of my way, you filthy brats.
	1	1.27	Hey!
	12	2.52	If I were as rich as you, / I could afford some manners.
	6	2.95	Oh. I'll teach you some manners.
	2	1.5	[men laugh]
	1	1.36	[grimacing]
	4	1.77	Look at that, Abu.
	12	3.19	It's not every day you see / a horse with two rear ends.
	2	1.3	[crowd] Ooh!
	6	2.86	You are a worthless street rat.
	11	3	You were born a street, / you'll die a street rat.
	7	3.2	And only your fleas will mourn you.
	3	1.82	I'm not worthless.
	5	2.3	And I don't have fleas.
	7	4.47	[sighs] Come on, Abu. / Let's go home.
	3	3.6	*Riffraff, street rat*

Table 11. Subtitles rate during the eleventh minute of *Aladdin*.

19 SUBTITLES / 25 LINES / 105 WORDS – Average time subtitles remain on screen: 2,49 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
11-12	4	2.1	*I don't buy that*
	5	3.75	*If only they'd look closer*
	6	3.84	*Would they see a poor boy?*
	2	1.9	*No, siree*
	3	3.1	*They'd find out*
	4	3.55	*There's much more*
	2	3	*To me*
	8	4.3	[sighs] Some day, Abu, / things are gonna change.
	7	2.33	We'll be rich, live in a palace,
	7	4	and never have any problems at all.
	2	1.68	[rooster crowing]
	5	1.8	I've never been so insulted.

	10	3.5	Oh, Prince Achmed. / You're not leaving so soon, are you?
	5	2	Good luck marrying her off.
	2	2	Oh! Jasmine.
	2	2	[sultan] Jasmine!
	1	1.53	Jasmine!
	2	2	Jasmine! / [snarling]

Table 12. Subtitles rate during the twelfth minute of *Aladdin*.

18 SUBTITLES / 21 LINES / 77 WORDS – Average time subtitles remain on screen: 2,68 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
12-13	3	2.04	Confound it, Rajah.
	8	3	So, this is why Prince Achmed / stormed out.
	2	1.2	Oh, Father.
	9	2.85	Rajah was just playing with him. / Weren't you, Rajah?
	7	2.1	You were just playing / with that overdressed,
	5	2.63	self-absorbed Prince Achmed, / weren't you?
	2	1.4	[both laughing]
	2	1.14	[clears throat]
	12	4.3	Dearest, you've got to stop rejecting / every suitor who comes to call.
	10	3.48	The law says / you must be married to a prince…
	4	2	by your next birthday.
	4	1.55	The law is wrong.
	6	2.15	You've only got three more days.
	7	3.43	Father, I hate being forced into this.
	11	3.2	If I do marry, / I want it to be for love.
	1	2	Jasmine…
	5	2.95	it's not only this law.
	10	5	I'm not going to be around forever, / and well, I…
	10	3.5	I just want to make sure / you're taken care of.
	2	1.34	Provided for.
	4	2.6	Please try to understand.

Table 13. Subtitles rate during the thirteenth minute of *Aladdin*.

21 SUBTITLES / 29 LINES / 124 WORDS – Average time subtitles remain on screen: 2,56 seconds.

4.1.1.2. Time rate

According to the result shown in Tables 1 to 13, the most striking examples are the following:

In Table 1, roughly the same amount of time is used for subtitles that consist of different numbers of words: a subtitle consisting of ten words (*Where it's flat and immense / And the heat is intense*) is displayed for 3,34 seconds whereas a subtitle consisting of two words (*Arabian nights*) is displayed for 3,64 seconds. It is true that in songs, sometimes subtitles remain for longer on screen due to the singing (prolongation of words). However, the results show that time rates are inconsistent as well where there is no singing.

In Table 2, a subtitle consisting of thirteen words is displayed for 3,74 seconds (*and the finest merchandise this side / of the river Jordan, on sale today*), time that is, with no doubt, not enough for a deaf child to read. That means that each word needs to be read in 0,28 seconds.

In Table 3, a subtitle consisting of ten words is displayed for 2,86 seconds (*It once changed the course / of a young man's life*); a subtitle consisting of thirteen words is displayed for 4,06 seconds (*A young man who, like this lamp, / was more than what he seemed*); and a subtitle consisting of four words is displayed for 3,14 seconds (*with a dark purpose*).

In Table 4, a subtitle consisting of eleven words is displayed for 3,26 seconds (*I had to slit a few throats, / but I got it*), whereas a subtitle consisting of five words is displayed for 3,06 seconds (*Trust me, my pungent friend*).

In Table 5, a subtitle consisting of twelve words is displayed for 4,64 seconds (*The rest of the treasure / is yours, but the lamp is mine*), whereas a five-word subtitle is displayed for 4,01 seconds (*A diamond in the rough*).

In Table 6, a subtitle consisting of thirteen words is displayed for 4,48 seconds (*I think I'm gonna have a heart attack / and die from that surprise*), whereas a subtitle consisting of three words is displayed for 3,54 seconds (*Patience, Iago. Patience*).

In Table 7, a subtitle consisting of eleven words is displayed for 2,64 seconds (*Trouble? No way, You're only / in trouble if you get caught*), whereas a subtitle consisting of three words is

displayed for 2,90 seconds ([man] *Stop! Thief!*).

In Table 8, a subtitle consisting of nine words is displayed for 1,78 seconds (*I can take a hint / Gotta face the facts*), whereas a subtitle consisting of four words is displayed for 2,08 seconds (*-Riffraff. /* [both] *Street rat*).

In Table 9, a subtitle consisting of ten words is displayed for 3,73 seconds (*Wish me happy landin' / All I gotta do is jump*), whereas a subtitle consisting of five words is displayed for 4 seconds (*Let's not be too hasty*).

In Table 10, the same amount of time (2,50 seconds) are used to display a subtitle consisting of six words (*And now, esteemed effendi, we feast*) and a three-word subtitle (*Ah, don't. Huh?*).

4.1.2. *Up*

Corpus 'UP 23 MIN'. Quantitative analysis of twenty three minutes. Tables 16 to 37.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
00-01	8	3.97	NEWSREEL ANNOUNCEMENT: Movietown / News presents Spotlight on Adventure.
	5	0.97	What you are now witnessing
	8	2.25	is footage never before seen / by civilised humanity,
	6	1.68	a lost world in South America.

Table 16. Subtitles rate during the first minute of *UP*.
4 SUBTITLES / 6 LINES / 27 WORDS – Average time subtitles remain on screen: 2,21 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
01-02	8	2.1	Lurking in the shadow / of majestic Paradise Falls,
	8	2.92	it sports plants and animals / undiscovered by science.
	9	2.93	Who would dare set foot / on this inhospitable summit?
	6	3.36	Why, our subject today, / Charles Muntz!
	10	2.7	The beloved explorer lands / his dirigible, the Spirit of Adventure
	5	1.1	in New Hampshire this week
	8	2.78	completing a yearlong expedition / to the lost world.
	10	2.34	This lighter-than-air craft / was designed by Muntz himself

90

	12	3.72	and is longer than 22 prohibition / paddy wagons placed end to end.
	6	2.35	And here comes the adventurer now.
	6	1.64	Never apart from his faithful dogs,
	7	2.27	Muntz conceived the craft / for canine comfort.
	8	1.82	It's a veritable floating palace / in the sky,
	8	3.1	complete with doggy bath / and mechanical canine walker.
	11	3.19	And, Jiminy Cricket, do the locals / consider Muntz the bee's knees.
	2	1.25	And how!
	4	1.79	Adventure is out there!
	2	1.77	(PEOPLE CHEERING)
	10	2.15	NEWSREEL ANNOUNCEMENT: But what / has Muntz brought back this time?
	9	4.56	Gentlemen, I give you / the monster of Paradise Falls!
	2	1.26	(PEOPLE GASP)
	10	3.35	NEWSREEL ANNOUNCEMENT: / And, golly, what a swell monster this is!

Table 17. Subtitles rate during the second minute of *UP*.
22 SUBTITLES / 37 LINES / 161 WORDS – Average time subtitles remain on screen: 2,45 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
02-03	6	2.11	But what's this? Scientists cry foul.
	6	1.86	The National Explorer's Society / accuses Muntz
	4	1.55	of fabricating the skeleton.
	1	1	No!
	6	1.6	NEWSREEL ANNOUNCEMENT: / The organization strips Muntz
	3	0.92	of his membership.
	1	1	(GASPS)
	10	2.55	NEWSREEL ANNOUNCEMENT: Humiliated, / Muntz vows a return to Paradise Falls
	7	2.54	and promises / to capture the beast alive!
	7	2.43	I promise to capture the beast alive,
	9	2.57	and I will not come back until I do!
	2	1	(CROWD CHEERING)
	11	2.15	NEWSREEL ANNOUNCEMENT: And so, / the explorer's off to clear his name.
	4	1.6	Bon voyage, Charles Muntz,
	9	4.27	and good luck capturing / the monster of Paradise Falls!
	2	1.56	(IMITATING AIRPLANE)

	5	1.52	NEWSREEL ANNOUNCEMENT: Here's Charles Muntz
	4	2	piloting his famous dirigible
	2	1	(HORN HONKING)
	4	1.9	He hurdles Pikes Peak.
	5	1.55	He hurdles the Gran Canyon.
	2	1.23	(CARL GRUNTS)
	4	1.57	He hurdles Mount Everest.
	1	1	(GRUNTS)
	5	2.36	He goes around Mount Everest.

Table 18. Subtitles rate during the third minute of *UP*.

25 SUBTITLES / 31 LINES / 120 WORDS – Average time subtitles remain on screen: 1,79 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
03-04	6	2.18	Is there nothing he cannot do?
	7	2.04	Yes, as Muntz himself says, / "Adventure is…"
	7	3.41	ELLIE: Adventure is out there! / Look out!
	5	2.64	Mount Rushmore! Hard to starboard!
	8	3.32	Must get *Spirit of Adventure* / over Mount Rushmore!
	8	4.01	Hold together, old girl. / How're my dogs doing?
	2	1.63	(MIMICS BARKING)
	11	4.9	All engines, ahead full! / Let's take her up to 26,000 feet.
	6	2.37	Rudders 18 degrees towards the south.
	12	3.63	It's a beautiful day. / Winds out of the east at 10 knots.
	8	4.33	Visibility unlimited. / Enter the weather in the logbook.
	12	3.5	There's something down there. / I will bring it back for science.
	11	6.15	Aw! It's a puppy! Ah! No time! / A storm! Lightning. Hail.
	5	1.15	-What are you doing? / -Ahhh!
	8	2.29	Don't you know / this is an exclusive club?
	5	1.75	Only explorers get in here,

Table 19. Subtitles rate during the fourth minute of *UP*.

16 SUBTITLES / 27 LINES / 121 WORDS – Average time subtitles remain on screen: 3,08 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
04-05	15	3.82	not just any kid off the street / with a helmet and a pair of goggles.
	11	2.7	Do you think you've got what it takes? / Well, do you?

	1	1.35	(STAMMERING)
	6	2.22	All right, you're in. Welcome aboard.
	5	2.04	What's wrong? Can't you talk?
	4	1.71	Hey, I don't bite.
	3	1.4	(STATIC ELECTRICITY BUZZING)
	8	2.5	You and me, we're in a club now.
	12	3.5	I saw where your balloon went. / Come on. Let's go get it.
	3	1.5	My name's Ellie.
	3	1.05	There it is.
	1	0.8	(GULPS)
	3	1.42	Well, go ahead.
	2	1.37	Go on.
	2	1.11	(CARL SCREAMING)
	1	1.04	(THUDDING)
	2	2.29	(SIREN WAILING)

Table 20. Subtitles rate during the fifth minute of *UP*.

17 SUBTITLES / 20 LINES / 82 WORDS – Average time subtitles remain on screen: 1,87 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
05-06	1	1.06	(SHOUTS)
	1	1.11	Ow.
	2	1.01	Hey, kid!
	1	1.26	(SCREAMS)
	8	1.7	Thought you might need / a little cheering up.
	6	1.65	I got something to show you.
	9	2.4	ELLIE: I am about to let you / see something
	8	2.65	I have never shown / to another human being.
	4	1.95	Ever! In my life!
	9	3.26	You'll have to swear / you will not tell anyone.
	5	2	Cross your heart. Do it!
	4	2	ELLIE: My Adventure Book.
	3	1.3	You know him.
	1	0.94	(GASPS)
	3	2.28	Charles Muntz, explorer.
	9	2.93	When I get big, / I'm going where he's going.
	7	4.5	South America. / It's like America, but south.
	6	1.64	Wanna know where I'm gonna live?
	7	3.91	"Paradise Falls, a land lost in time."

Table 21. Subtitles rate during the sixth minute of *UP*.

19 SUBTITLES / 25 LINES / 95 WORDS – Average time subtitles remain on screen: 2,08 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
06-07	9	3.08	I ripped this right out of a library book.
	1	0.86	(GASPS)
	14	3.33	I'm gonna move my clubhouse there / and park it right next to the falls.
	6	2	Who knows what lives up there.
	5	1.44	And once I get there?
	12	2.91	Well, I'm saving these pages for / all the adventures I'm gonna have.
	12	4.42	Only I just don't know / how I'm gonna get to Paradise Falls.
	10	2.7	That's it! You can take us there in a blimp!
	7	2.33	Swear you'll take us! Cross your heart!
	11	3.93	Cross it! Cross your heart! / Good, you promised. No backing out.
	6	1.8	Well, see you tomorrow, kid. Bye!
	4	2.31	Adventure is out there!
	7	2.2	You know, you don't talk very much.
	3	1	I like you!
	1	1	Wow.

Table 22. Subtitles rate during the seventh minute of *UP*.

15 SUBTITLES / 20 LINES / 108 WORDS – Average time subtitles remain on screen: 2,35 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
07-08	3	1.5	(WEDDING MARCH PLAYING)
	2	1.9	(GUESTS CHEERING)
	1	1.9	(INAUDIBLE)
	1	3.33	(INAUDIBLE)
	1	4.3	(INAUDIBLE)

Table 23. Subtitles rate during the eighth minute of *UP*.

5 SUBTITLES / 5 LINES / 8 WORDS – Average time subtitles remain on screen: 2,58 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
08-09	1	1.11	(INAUDIBLE)
	1	1	(INAUDIBLE)

Table 24. Subtitles rate during the ninth minute of *UP*.

2 SUBTITLES / 2 LINES / 2 WORDS – Average time subtitles remain on screen: 1,05 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
10-11	1	0.8	(INAUDIBLE)

Table 25. Subtitles rate during the eleventh minute of *UP*.

1 SUBTITLE / 1 LINE / 1 WORD

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
11-12	2	2.32	(ALARM BUZZING)
	1	0.9	(GROANS)
	1	1.14	(GRUNTING)
	2	0.97	(JOINTS CRACKING)
	1	0.93	Hah!
	1	1.04	(GRUNTS)
	3	1.06	(SIGHS IN RELIEF)
	1	2.04	(WHIRRING)

Table 26. Subtitles rate during the twelfth minute of *UP*.

8 SUBTITLES / 8 LINES / 12 WORDS – Average time subtitles remain on screen: 1,3 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
12-13	2	2.1	(LOCKS CLICKING)
	3	1.3	(GRUNTS IN FRUSTRATION)
	3	2.06	(CONSTRUCTION WORKERS / SHOUTING)

Table 27. Subtitles rate during the thirteenth minute of *UP*.

3 SUBTITLES / 4 LINES / 8 WORDS – Average time subtitles remain on screen: 1,82 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
13-14	2	1.5	(MACHINES CLANGING)
	6	1.4	MAN: Stevie, throw me a deuce!
	6	2.3	(SCOFFS) Quite a sight, huh, Ellie?
	3	2.05	Uh! Mail's here.
	6	4.1	(SCOFFS) Shady Oaks Retirement. / Oh, brother.
	1	1	Hmm…
	8	2.3	Hey! Morning, Mr Fresricksen. / Need any help there?
	2	1.35	No. Yes!
	12	3.75	Tell your boss over there / that you boys are ruining our house.
	6	1.4	Well, just to let you know,
	13	2.65	my boss will be happy to take / this old place off your hands
	6	2.4	and for double his last offer!
	6	1.2	What do you say to that?

Table 28. Subtitles rate during the fourteenth minute of *UP*.

95

13 SUBTITLES / 17 LINES / 77 WORDS – Average time subtitles remain on screen: 2,1 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
14-15	8	1.75	Uh, I take that as a "no," then?
	11	3.18	I believe I made my position / to your boss quite clear.
	8	2.05	You poured prune juice in his gas tank.
	10	3.06	Yeah, that was good. / Here, let me talk to him.
	2	0.95	(BULLHORN BEEPS)
	10	4.6	*You in the suit. / Yes, you. Take a bath, hippie!*
	5	1.45	*I am not with him!*
	9	3.2	This is serious! / He's out to get your house.
	9	2.35	CARL: Tell your boss / he can have our house.
	4	2.07	-Really? / -When I'm dead!
	6	1.75	I'll take that as a maybe.
	9	1.4	ANNOUNCER ON TV: Order now, / you get the camera
	7	2.85	you get the printer, 4x optical zoom,
	6	2.45	Schneider lens, photo printer, SD card.
	3	1	(KNOCKING ON DOOR)
	6	2.7	"Good afternoon. My name is Russell.
	12	5	And I am a Wilderness Explorer / in Tribe 54, Sweat Lodge 12.
	9	2.53	Are you in need / of any assistance today, sir?"
	1	0.7	No.

Table 29. Subtitles rate during the fifteenth minute of *UP*.

19 SUBTITLES / 28 LINES / 135 WORDS – Average time subtitles remain on screen: 2,37 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
15-16	8	2.95	-I could help you cross the street. / -No.
	8	3.75	-I could help you cross your yard. / -No.
	8	3.2	-I could help you cross your porch. / -No.
	7	1.95	Well, I gotta help you cross something.
	4	1.8	No. Im doing fine.
	6	1.93	"Good afternoon. My name is Russell,"
	2	1	(CARL STAMMERING)
	8	1.95	-Kid… Kid. / -"And I am a Wilderness Explorer"
	10	3.1	-"in Tribe 54, Sweat Lodge 12." / -I… Slow down, kid!
	9	1.7	-"Are you in need of any assistance…" / -Thank you,

	8	1.6	-but I don't need any help! / -"… today, sir?"
	2	1	RUSSELL: Ow.
	1	1.1	Proceed.
	7	2.5	-"Good afternoon… " / -But skip to the end!
	8	3.3	See these? These are / my Wilderness Explorer badges.
	12	4.3	You may notice one is missing. / It's my Assisting the Elderly badge.
	11	4.2	If I get it, I will become / a Senior Wilderness Explorer.

Table 30. Subtitles rate during the sixteenth minute of *UP*.

17 SUBTITLES / 28 LINES / 119 WORDS – Average time subtitles remain on screen: 2,43 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
16-17	5	2.05	"The wilderness must be explored!"
	3	1.95	Caw, caw! Raar!
	3	1.1	(HEARING AID SCREECHES)
	8	2.5	It's gonna be great! / There's a big ceremony,
	11	3	and all the dads come, / and they pin on our badges.
	8	2.18	So, you want to assist an old person?
	8	3.05	Yep! Then I'll be / a Senior Wilderness Explorer.
	7	2.7	-You ever heard of a snipe? / -Snipe?
	3	1.53	Bird. Beady eyes.
	12	3.9	Every night it sneaks in my yard / and gobbles my poor azaleas.
	14	5.05	I'm elderly and infirm. I can't catch it. / If only someone could help me.
	11	3.3	-Me, me! I'll do it! / -I don't know. It's awfully crafty.
	12	2.6	You'd have to clap your hands / three times to lure it in.
	5	1.7	I'll find him, Mr Fredricksen!
	12	2.5	I think its burrow is two blocks down. / If you go past…
	6	3.1	Two blocks down. Got it! Snipe.
	3	1.9	Here, snipey, snipey.
	8	1.93	Bring it back when you find it.
	2	1	RUSSELL: Snipe!
	7	1.3	STEVE: Okay, keep her coming. / Keep coming.
	4	3	And stop. Stop. Stop!

Table 31. Subtitles rate during the seventeenth minute *UP*.

21 SUBTITLES / 20 LINES / 152 WORDS – Average time subtitles remain on screen: 2,44 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)

17-18	4	3.1	Why… Hey! Hey, you!
	9	1.5	What do you… / What do you think you're doing?
	8	2.23	-I am so sorry, sir. / -Don't touch that!
	11	1.6	No, no, no. / Let me take care of that for you.
	8	1.85	-Get away from our mailbox! / -Hey. Sir, I…
	7	1.4	I don't want you to touch it!
	1	1	Ow!
	1	1.45	(GROANING)
	2	1.55	(BREATHING HEAVILY)
	5	1.6	MAN: Steve, you all right?
	3	0.75	(POLICE SIREN WAILS)
	5	1.25	OFFICER EDITH: Sorry, / Mr Fredricksen.
	11	3.5	You don't look like / a public menace to me. Take this.

Table 32. Subtitles rate during the eighteenth minute of *UP*.
13 SUBTITLES / 19 LINES / 75 WORDS – Average time subtitles remain on screen: 1,75 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
18-19	16	3.45	The guys from Shady Oaks will be by / to pick you up in the morning, okay?
	6	2.2	What do I do now, Ellie?

Table 33. Subtitles rate during the nineteenth minute of *UP*.
2 SUBTITLES / 3 LINES / 22 WORDS – Average time subtitles remain on screen: 2,82 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
19-20	1	1	(SIGHS)
	2	1.25	Morning, gentlemen.
	8	2.85	Good morning, Mr Fredricksen. / You ready to go?
	1	0.9	(CHUCKLES)
	5	1.6	Ready as I'll ever be.
	9	1.8	Would you do me a favour / and take this?

Table 34. Subtitles rate during the twentieth minute of *UP*.
6 SUBTITLES / 8 LINES / 26 WORDS – Average time subtitles remain on screen: 1,56 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
20-21	10	1.95	I'll meet you at the van in just a minute.
	10	4.1	I wanna say one last goodbye / to the old place.
	8	2.25	Sure. Take all the time you need, sir.
	12	3.7	That's typical. He's probably / going to the bathroom for

			the 80th time.
	10	3.5	(SCOFFS) You think he'd take better / care of his house.
	2	1.4	(BOTH SCREAMING)
	3	1.7	(CAR ALAMR WAILING)
	2	1.65	(CARL LAUGHING)

Table 35. Subtitles rate during the twenty first minute of *UP.*
8 SUBTITLES / 11 LINES / 57 WORDS – Average time subtitles remain on screen: 2,53 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
21-22	10	4.6	So long, boys! I'll send you a postcard / from Paradise Falls!
	1	1	Heh!

Table 36. Subtitles rate during the twenty second minute of *UP*.
2 SUBTITLES / 3 LINES / 11 WORDS – Average time subtitles remain on scree: 2,8 seconds.

MINUTE	NUMBER OF WORDS	SECONDS	SUBTITLES (first line / second line)
22-23	5	2.3	We're on our way, Ellie.
	2	1.75	(MUSICAL TWANGING)
	1	0.68	(GRUNTS)
	1	1	(CHUCKLES)
	1	1.1	(SIGHS)

Table 37. Subtitles rate during the twenty third minute of *UP*.
5 SUBTITLES / 5 LINES / 10 WORDS – Average time subtitles remain on screen: 1,36 seconds.

4.1.2.2. Time rate

According to the results from Tables 16 to 37, the most significant instances are the following:

In Table 17, a subtitle consisting of ten words is displayed for 2,34 seconds (*This lighter-than-air craft / was designed by Muntz himself*) whereas a subtitle consisting of nine words is displayed for 4,56 seconds (*Gentlemen, I give you / the monster of Paradise Falls*).

In Table 18, an eleven-word subtitle remains on screen for 2,15 seconds (*NEWSREEL ANNOUNCEMENT: And so, / the explorer's off to clear his name*) while a subtitle consisting of nine words is displayed for 4,27 seconds (*and good luck capturing / the monster of Paradise Falls*).

In Table 19, a subtitle consisting of eight words remain on screen for 4,33 seconds (*Visibility unlimited. / Enter the weather in the logbook*), whereas a subtitle consisting of twelve words is displayed for 3,63 seconds (*It's a beautiful day. / Winds out of the east at 10 knots*). However, in minute 03-04, there is an exceptional case in which a subtitle consisting of eleven words remain on screen for 6,15 seconds, which it might not be sufficient but at least the 6-second rule seems to be applied.

In Table 20, a subtitle consisting of fifteen words remain on screen for 3,82 seconds (*not just any kid off the street / with a helmet and a pair of goggles*) and a subtitle consisting of two words is displayed for 2,29 seconds (*SIREN WAILING*).

In Table 21, a subtitle consisting of eight words is displayed for 1,7 seconds (*Thought you might need / a little cheering up*), whereas a subtitle consisting of four words remain on screen for 2 seconds (*ELLIE: My Adventure Book*).

In Table 22, a twelve-word subtitle consisting of twelve words remain on screen for 2,91 seconds (*Well, I'm saving these pages for / all the adventures I'm gonna have*) whereas a subtitle consisting of four words is displayed for 2,31 seconds (*Adventure is our there*).

Tables 23, 24, 25, 26 and 27 correspond to the part of the film that is told visually. Taking into account that paralinguistic information seems to have an appropriate time rate, there are no striking instances to highlight.

In Table 28, a subtitle consisting of thirteen words remain on screen for 2,65 seconds (*my boss will be happy to take / this old place off your hands*), whereas a subtitle consisting of three words is displayed for roughly the same amount of time, 2,05 seconds (*Uh! Mail's here*)

In Table 29, a subtitle consisting of nine words is displayed for 1,4 seconds (*ANNOUNCER ON TV: Order now, / you get the camera*) whereas a six-second subtitle is displayed for 2,7 seconds (*"Good afternoon. My name is Russell"*).

In Table 30, an eight-word subtitle remain on screen for 1,95 seconds (*-Kid… Kid. / -"And I am a Wilderness Explorer"*), whereas a subtitle consisting of four words is displayed for 1,8 seconds (*No. I'm doing fine*).

In Table 31, a subtitle consisting of three words remain on screen for 1,9 seconds (*Here, snipey, snipey*) and a subtitle consisting of eight words is displayed for 1,93 seconds (*Bring it back when you find it*).

In Table 32, an eleven-word subtitle is displayed for 1,6 seconds (*No, no, no. / Let me take care of that for you*) whereas a subtitle consisting of four words remain on screen for 3,1 seconds (*Why… Hey! Hey, you!*).

In Table 33, the two subtitles that appear do not last for long enough: a sixteen-word subtitle that is displayed for 3,45 seconds (*The guys from Shady Oaks will be by / to pick you up in the morning, okay?*), and a six-word subtitle is displayed for 2,2 seconds (*What do I do now, Ellie?*).

In Table 34, the most significant instance is a subtitle that consists of nine words and is displayed for 1,8 seconds (*Would you do me a favour / and take this?*).

In Table 35, two subtitles consisting of ten words each remain on screen for 1,95 seconds in one case (*I'll meet you at the van in just a minute*), and 4,1 seconds in another case (*I wanna say one last goodbye / to the old place*).

In Table 36, the most striking instance is a subtitle that consists of ten words and remain on screen for 4,6 seconds (*So long, boys! I'll send you a postcard / from Paradise Falls!*), which is not enough time to read the whole subtitle.

In Table 37, a subtitle consisting of five words is displayed for 2,3 seconds (*We're on our way, Ellie*) which is not enough time. The rest of subtitles consist of paralinguistic information, so there are no more significant instances.

4.2. QUALITATIVE ANALYSIS

4.2.1. *Aladdin*

4.2.1.2. Further reduction

Minute 03-04 / Table 4: 62 words. No reduction.

Minute 04-05 / Table 5: 77 words; reduction of 6 words.

In the fifth line, the first part of the subtitle could be reduced from *The rest of the treasure / is yours* to 'The treasure is yours'.

In the sixth line, Iago, playing the role of a normal parrot, repeats *Awk, the lamp* two times. Thus, one of the repetitions could be eluded.

Minute 05-06 / Table 6: 80 words; reduction of 22 words.

1. What are you waiting for? Go on.
2. [beast sighing]
3. -[roaring] / -[screaming]
4. No!
5. Seek thee out / the diamond in the rough.
6. [coughing]
7. I can't believe it. / I just don't believe it.
8. We're never gonna get / a hold of that stupid lamp.
9. Just forget it. / Look at this.
10. I'm so ticked off that I'm moulting.
11. Patience, Iago. Patience.
12. Gazeem was obviously less than worthy.
13. Oh, there's a big surprise.
14. I think I'm gonna have a heart attack / and die from that surprise.
-
1. What are you waiting for? Go on.
2. [beast sighing]
3. -[roaring] / -[screaming]
4. No!
5. Seek out / the diamond in the rough.
6. [coughing]
7. I can't believe it.
8. We'll never get that stupid lamp.
9. Look at this.
10. I'm so angry that I'm moulting.

11. Patience, Iago.
12. Gazeem was not worthy.
13. Oh, there's a surprise.
14. I'm gonna have a heart attack from that surprise.

In the fifth line, *thee* is a cataphoric referent that alludes to *the diamond in the rough,* which is the following part of the subtitle. The omission of that referent do not change the meaning of the sentence.

In the seventh line, the two sentences that form the subtitle are very similar, thus one of them can be deleted for the purpose of reducing number of words.

In the eighth line, a change in the verb tense to reduce one word do not affect the overall meaning of the sentence. In the second part of the subtitle, there might be a transfer of meaning when changing the verb: *get a hold of* does not exactly mean *to get* but the sense of the utterance is maintained.

In the ninth line, an omission of one of the sentences which does not add new information or has any effect in the overall meaning. The important part of this subtitle, which is linked to the following subtitle, is preserved.

In the tenth line, *ticked off* can be replaced by a synonym, such as *angry*, to reduce one word.

In the eleventh line, *patience* is repeated two times, thus one of them can be omitted.

In the twelfth line, a simpler sentence can be used instead of a comparative sentence to reduce some words.

In the thirteenth and fourteenth lines, some words can be omitted although there might be some transfer of meaning when eluding the verb *to die*.

Minute 06-07 / Table 7: 114 words; reduction of 24 words.

1. What are we gonna do? / We got a big problem here, a big…
2. Yes.
3. Only one may enter.
4. I must find this one, this…

103

5. diamond in the rough.
6. [man] Stop! Thief!
7. I'll have your hands for a trophy, street rat.
8. All this for a loaf of bread?
9. Whoa!
10. [screaming]
11. [guard] There he is! –You won't get away so easy!
12. You think that was easy?
13. [giggling]
14. You two, over that way, / and you, follow me.
15. -We'll find him. / -Morning ladies.
16. Getting into trouble a little early / today, aren't we, Aladdin?
17. Trouble? No way. You're only / in trouble if you get caught.
18. -Gotcha. / -I'm in trouble.
19. And this time…
20. [monkey squeaking]
21. Perfect timing, Abu, as usual.

-

1. We got a big problem, a big…
2. Yes.
3. Only one may enter.
4. I must find this…
5. diamond in the rough.
6. [man] Stop! Thief!
7. I'll catch you, street rat.
8. All this for a loaf of bread?
9. Whoa!
10. [screaming]
11. [guard] There he is! You won't escape so easy!
12. You think that was easy?
13. [giggling]
14. You two, that way, / you, follow me.
15. -We'll find him. / -Morning, ladies.
16. Already in trouble, Aladdin?
17. You're only in trouble if you get caught.
18. -Gotcha. / -I'm in trouble.
19. And this time…
20. [monkey squeaking]
21. Perfect timing, Abu, as usual.

In the first line, reduction was necessary thus the first sentence, which is a rhetoric question, was omitted. The second sentence is complemented by the image on screen so it is the most important part of the subtitle.

In the fourth line, *one* is a cataphoric referent that alludes to the following subtitle (fifth line),

the *diamond in the rough*, and thus it can be omitted.

In the seventh line, the first part of the line, *I'll have your hands for a trophy,* consists of too many words, thus it could be replaced by a single verb (*catch*) that is the inferred action of 'having your hands for a trophy'.

In the eleventh line, for the purpose of reducing words, the phrasal verb *get away* could be replaced by a one-word synonym, *escape*. The intensifier *so easy* cannot be omitted since it is linked to the next subtitle.

In the sixteenth line, the reduction from *Getting into trouble a little early / today, aren't we, Aladdin?* to *Already in trouble, Aladdin?* might have a transfer of meaning since the directness of the second one could be interpreted as an impolite way of asking when read. However, the image can supply for a wrong interpretation and serve as a reference.

In the seventeenth line, the less relevant part of the subtitle can be omitted and the most informative part (and the answer to the previous question in line sixteen), is preserved, maintaining the question-answer structure and retaining the meaning.

In Table 8 and Table 9 there is a song which contains 162 words and 103 words respectively, that is 265 words in two minutes. I find quite difficult to change and reduce the lyrics of this song and due to the quick pace of the shots in these two minutes, I think that to slow down the film where there are songs is the most appropriate.

In Minute 09-10 / Table 10, reduction is not necessary although there is a foreign word which should be omitted (*effendi*).

Minute 10-11 / Table 11: 105 words; reduction of 29 words.

1. On his way to the palace, I suppose.
2. Another suitor for the princess.
3. -[giggling] / -[woman screams]

105

4. -[whinnying] / -Out of my way, you filthy brats.
5. Hey!
6. If I were as rich as you, / I could afford some manners.
7. Oh. I'll teach you some manners.
8. [men laugh]
9. [grimacing]
10. Look at that, Abu.
11. It's not every day you see / a horse with two rear ends.
12. [crowd] Ooh!
13. You are a worthless street rat.
14. You were born a street, / you'll die a street rat.
15. And only your fleas will mourn you.
16. I'm not worthless.
17. And I don't have fleas.
18. [sighs] Come on, Abu. / Let's go home.
19. Riffraff, street rat

-

1. Another suitor for the princess
2. Going to the palace.
3. -[giggling] / -[screams]
4. -[whinnying] / -Out of my way, filthy brats.
5. Hey!
6. You could afford some manners.
7. I'll teach you manners.
8. [men laugh]
9. [grimacing]
10. Look at that, Abu.
11. A horse with two rear ends.
12. [crowd] Ooh!
13. You worthless street rat.
14. You were born and will die a street rat.
15. Only your fleas will grieve.
16. I'm not worthless.
17. And I don't have fleas.
18. [sighs] Let's go home.
19. *Riffraff, street rat.*

In the first two lines there are words related to one another (*palace, suitor, princess*). In order to reduce words, the order of the lines could be changed, being the first one *Another suitor for the princess*. As most of the relevant information has just been given, in the next line the necessary category of words is a verb of movement (*going*) to replace an action that involves movement, *on his way*. Due to the change in the order of these lines, the phrase *I suppose* could be omitted since

it is clear that the suitor of the princess is going to the palace.

In the third line the paralinguistic information given makes reference to a woman who screams, whose gender is not relevant for the plot, thus it can be omitted.

In the fourth line, the personal pronoun *you* could be eluded since there is an endophoric on-screen reference and it is clear who the character addresses.

In the sixth line, the reduction might have a transfer of meaning. In the original, Aladdin says *If I were as rich as you, I could afford some manners*, which is a hypothetical case in which Aladdin is seen as a good or better person than the suitor. Nevertheless, the sense of the utterance is to make clear that the suitor has no manners, which is achieved by reducing the line to *You could afford some manners*, while inferring that the suitor (apart from the image on screen) does have money.

In line eleven, the first part of the subtitle could be omitted since the utterance is a joke and humour is condensed in the second part of the sentence.

In line thirteen, two words could be omitted without changing the meaning, sense, or referent of the sentence.

In the fourteenth line, the sentence could be reduced, repetitions avoided and both sentences linked by a conjunction proper (*and*). The reiteration here emphasises the insulting words of the character but as *street rat* appears in the previous subtitle, one repetition could be omitted.
In line fifteen, the conjunction proper *and* could be omitted since there is continuity between line fourteen and line fifteen. To reduce a word, an intransitive verb (*grieve)* could replace the transitive verb *mourn*, to avoid the use of the personal pronoun object *you*.

In the eighteenth line, there is an endophoric on-screen reference (Abu), thus his name could be omitted, since it is clear that Aladdin is talking to him. The phrase *Come on* could be eluded since the sense of the utterance is given by the phrase *Let's go home.*

Minute 11-12 / Table 12: 77 words; reduction of 13 words.

1. *I don't buy that*
2. *If only they'd look closer*
3. *Would they see a poor boy?*
4. *No, siree*
5. *They'd find out*
6. *There's so much more*
7. *To me*
8. [sighs] Some day, Abu, / things are gonna change.
9. We'll be rich, live in a palace,
10. and never have any problems at all.
11. [rooster crowing]
12. I've never been so insulted.
13. Oh, Prince Achmed. / You're not leaving so soon, are you?
14. Good luck marrying her off.
15. Oh! Jasmine.
16. [sultan] Jasmine!
17. Jasmine!
18. Jasmine! / [snarling]

-

1. *I don't buy that*
2. *If only they'd look closer*
3. *Would they see a poor boy?*
4. *No, siree*
5. *They'd find out*
6. *There's so much more*
7. *To me*
8. [sighs] Some day, Abu, / things are gonna change.
9. We'll be rich, live in a palace,
10. and never have any problems at all.
11. [rooster crowing]
12. This is insulting.
13. Oh, Prince Achmed. / Don't leave so soon.
14. Good luck marrying her off.
15. Oh! Jasmine.
16. Jasmine! / [snarling]

At the beginning of this minute there is a song which consists of 25 words in half a minute and the time subtitles remain on screen is lengthened by the singing. Therefore, no reduction is necessary.

In line eleven, the subtitle could be reduced to three words which maintain the sense and

assertiveness of the utterance.

In line twelve, the second line could be reduced to four words which preserve the implied

purpose of that request.

Lines fifteen and sixteen are repetitions that could be omitted.

Minute 12-13 / Table 13: 124 words; reduction of 41 words.

1. Confound it, Rajah.
2. So, this is why Prince Achmed / stormed out.
3. Oh, Father.
4. Rajah was just playing with him. / Weren't you Rajah?
5. You were just playing / with that overdressed,
6. self-absorbed Prince Achmed, / weren't you?
7. [both laughing]
8. [cleans throat]
9. Dearest, you've got to stop rejecting / every suitor who comes to call.
10. The law says / you must be married to a prince…
11. by your next birthday.
12. The law is wrong.
13. You've only got three more days.
14. Father, I hate being forced into this.
15. If I do marry, / I want it to be for love.
16. Jasmine…
17. it's not only this law…
18. I'm not going to be around forever, / and well, I…
19. I just want to make sure / you're taken care of.
20. Provided for.
21. Please try to understand.

-

1. Darn, Rajah.
2. So, this is why Prince Achmed / left.
3. Oh, Father.
4. Rajah was just playing
5. with that overdressed, egotistical Prince,
6. weren't you?
7. [laughs]
8. [clears throat]
9. Dear, you reject every suitor
10. And the law says / you must marry a prince...
11. before your birthday.
12. The law is wrong.
13. Only three more days.
14. I hate being forced into this

109

15. I'll marry for love.
16. Jasmine…
17. it's not only this law.
18. I won't be around forever…
19. I want you to be taken care of.
20. Provided for.
21. Please, understand.

In the first line, a synonym of *counfound it*, consisting of fewer letters, could be used to reduce one word.

In line two, the phrasal verb *stormed out* could be replaced by s single word verb which maintains the meaning of abandoning a place, and the anger of the character can be inferred from the image.

Lines four, five and six could be condensed since these three lines are repetitions; instead of three sentences, the utterance could be reduced to one sentence spread in three subtitles. The adjective *self-absorbed* could be replaced by a synonym consisting of fewer words to facilitate and accelerate the reading.

In line seven, the paralinguistic information *[both laughing]* could be reduced to *[laughs]* since the agents of the action are seen on screen (endophoric on-screen referents).

In line nine, the first word could be replaced by the same word consisting of fewer letters *Dearest > Dear*. Line nine and ten could be cohesively linked by a conjunction proper *and* which allows changes in the structure of both sentences, while maintaining the overall meaning of the utterance ('do not reject every suitor because the law says you must marry a prince').

In line eleven, *by your next birthday* could be replaced by a similar structure which preserves the overall meaning (*before your birthday*).

In line thirteen, the sentence *you've only got three more days* could be reduced to *Only three more days* since there is continuity between the lines which are connected to one another thematically.

In line fourteen the vocative *Father* could be omitted for the purpose of reducing words.

In line fifteen, the sentence is a hypothetical case (*If I do marry*) but the speaker is the princess and this is a Disney film so there will be a happy ending (wedding). The hypothetical case loses part of its meaning and thus it could be replaced by a statement (*I'll marry for love*).

Line eighteen could be reduced by changing the verb tense (*groin to > will*) and omitting the stammering of the character.

In line nineteen, the sentence could be replaced by another one which maintains the overall meaning and purpose of the character who speaks.

In line twenty one, two words could be reduced by changing the request (*try to understand*) by another type of request more direct (*understand*).

4.2.2. Up

4.2.2.1. Reduction of dialogues

Minute 03-04 / Table 19: 121 words; reduction of 31 words.

1. Is there nothing he cannot do?
2. Yes, as Muntz himself says, / "Adventure is…"
3. ELLIE: Adventure is out there! / Look out!
4. Mount Rushmore! Hard to starboard!
5. Must get *Spirit of Adventure* / over Mount Rushmore!
6. Hold together, old girl. / How're my dogs doing?
7. (MIMICS BARKING)
8. All engines, ahead full! / Let's take her up to 26,000 feet.
9. Rudders 18 degrees towards the south.
10. It's a beautiful day. / Winds out of the east at 10 knots.
11. Visibility unlimited. / Enter the weather in the logbook.
12. There's something down there. / I will bring it back for science.
13. Aw! It's a puppy! Ah! No time! / A storm! Lightning. Hail.
14. -What are you doing? / -Ahhh!
15. Don't you know / this is an exclusive club?
16. Only explorers get in here,

-

1. Is there nothing he cannot do?
2. As Muntz says,

3. ELLIE: Adventure is out there! / Look out!
4. Hard to starboard!
5. Must get *Spirit of Adventure* / over Mount Rushmore!
6. How're my dogs doing?
7. (MIMICS BARKING)
8. All engines, ahead full! 26,000 feet.
9. Rudders towards the south.
10. It's a beautiful day. / Winds out of the east.
11. Visibility unlimited. / Enter the weather in the logbook.
12. There's something there. / I'll bring it back for science.
13. Aw! It's a puppy! No time! Storm!
14. -What are you doing? / -Ahhh!
15. This is an exclusive club.
16. Only explorer get in,

Line one is a rhetorical question that I think should remain as such due to the description of Muntz as a kind of hero. The rhetorical question emphasises Muntz's abilities as an explorer and his strengths as well.

Line two could be reduced by omitting the first word which does not have any meaning in this context, and the reflexive pronoun *himself*. As Ellie's voice is heard over the news narrator's when he is saying *"Adventure is..."*, this part of the subtitle could be eluded since the next subtitle contains the same words, so it is a reiteration that could be avoided.

In line four, *Mount Rushmore!* could be omitted because there is another reference to the mountain in the next subtitle (line five) which should be preserved as it is a cultural reference.

From now on, there are some subtitles with vocabulary related to piloting an airship, which should be maintained as it is something closely connected with the theme of the film (i.e. *Hard to starboard, rudders*).

Line six could be reduced to the second line of the subtitle, for the purpose of reducing number of words.

In line eight, the first line could remain the same and the second line could be reduced to the height, which makes reference to the fact that she is emulating to steer a dirigible.

112

In lines nine and ten, measures (*18 degrees, at 10 knots*) could be omitted allowing to reduce five words while vocabulary related to airships is maintained (*Rudders towards the south, Winds out of the east*).

In line twelve, the preposition *down* could be omitted because of the context (Ellie is imitating she is piloting a dirigible) so whatever she saw must be down.

In line thirteen, the last two words (*Lightning. Hail*) could be omitted for the purpose of reducing words and because Ellie's voice fades while the camera moves to shoot another character.

Line fifteen could be reformulated in the form of an assertion instead of a question, reducing three words.

In line sixteen, the adverb of place *here* could be omitted without changing the meaning of the sentence (get in the clubhouse or get in the club understood as a group of people).

Minute 04-05 / Table 20: 82 words; reduction of 23 words.

1. not just any kid off the street / with a helmet and a pair of goggles.
2. Do you think you've got what it takes? / Well, do you?
3. (STAMMERING)
4. All right, you're in. Welcome aboard.
5. What's wrong? Can't you talk?
6. Hey, I don't bite.
7. (STATIC ELECTRICITY BUZZING)
8. You and me, we're in a club now.
9. I saw where your balloon went. / Come on. Let's go get it.
10. My name's Ellie.
11. There it is.
12. (GULPS)
13. Well, go ahead.
14. Go on.
15. (CARL SCREAMING)
16. (THUDDING)
17. (SIREN WAILING)

-

1. not any kid with a helmet and goggles.
2. Do you think you've got what it takes?

3. (STAMMERING)
4. You're in. Welcome aboard.
5. Can't you talk?
6. Hey, I don't bite.
7. (STATIC ELECTRICITY BUZZING)
8. We're in a club now.
9. I saw your balloon. / Let's go get it.
10. I'm Ellie.
11. There it is.
12. (GULPS)
13. Go ahead.
14. Go on.
15. (CARL SCREAMING)
16. (THUDDING)
17. (SIREN WAILING)

The first line could be reduced while maintaining the most relevant words of the sentence (*kid, helmet, goggles*).

In line two, the second line of the subtitle could be omitted sin it has no meaning but emphasising the question that precedes it.

In line four, the two first words function as an introduction of the statement that follows, thus these words could be omitted.

In line five, there are two questions, one is more general and it could be omitted (*What's wrong?*), and the other one is more specific and emphatic on the fact that Carl is not talking and should be preserved.

In line eight, *you and me* could be omitted because the following word is *we*, which denotes, together with the image, that she is talking about the two of them.

Line nine could be reduced while maintaining the most relevant part of information (*I saw your balloon. / Let's go get it*).

In line ten, a simpler sentence consisting of two words (*I'm Ellie*) could replace the original *My name's Ellie*, which has a higher number of characters (letters).

In line thirteen, the interjection *Well* could be omitted.

Minute 05-06 / Table 21: 95 words; reduction of 19 words.

1. (SHOUTS)
2. Ow.
3. Hey, kid!
4. (SCREAMS)
5. Thought you might need / a little cheering up.
6. I got something to show you.
7. ELLIE: I am about to let you / see something
8. I have never shown / to another human being.
9. Ever! In my life!
10. You'll have to swear / you will not tell anyone.
11. Cross your heart. Do it!
12. ELLIE: My Adventure Book.
13. You know him.
14. (GASPS)
15. Charles Muntz, explorer.
16. When I get big, / I'm going where he's going.
17. South America. / It's like America, but south.
18. Wanna know where I'm gonna live?
19. "Paradise Falls, a land lost in time."

-

1. (SHOUTS)
2. Ow.
3. Hey, kid!
4. (SCREAMS)
5. I wanna show you something.
6. It will cheer you up.
7. You're about to see something
8. I've never shown to anyone.
9. Ever! In my life!
10. Swear you won't tell anyone.
11. Cross your heart!
12. My Adventure Book.
13. You know him.
14. (GASPS)
15. Charles Muntz, explorer.
16. When I get big, / I'm going where he's going.
17. South America. / It's like America, but south.
18. Wanna know where I'm gonna live?
19. "Paradise Falls, a land lost in time."

Lines five and six could be switched so that a further reduction can be made without a significant transfer of meaning. Line five, then, would contain the purpose that the sentence *I got something to show you* conveys (*I wanna show you something*); and line six could be reduced to

115

an assertion that conveys the overall meaning of the original utterance (*It will cheer you up*).

In line seven, the tag with the name (*ELLIE*) could be eluded since she is the only character who speaks. The sentence *I am about to let you / see something* could be reformulated by changing the subject and thus omitting the verb *to let* (> *You're about to see something*).

In line eight, contraction could be used (*I've*) to reduce one word and make it easier to identify, and a line of the subtitle could be reduced by referring to *another human being* as *anyone*, thus reducing two more words.

Line nine should remain the same due to the fact that it is an animation film and vocalization of characters is more detailed; in this particular case, one could read the character's lips, which I think it could be helpful for deaf viewers.

Line ten could be reduced to an imperative sentence since that is the purpose of the utterance (to not tell to anyone > *Swear you won't tell anyone*) and by using the contracted form of *will not*. In line eleven, two words (*Do it!*) could be eluded since the previous sentence (*Cross your heart*) conveys the meaning of the whole subtitle.

In line eighteen, the question *Wanna know where I'm gonna live?* should be maintained as such since reduction to an assertion (i.e. *And I'll live here*) would make the utterance lose part of its meaning and the intention of Ellie, who is trying to get Carl involve in the conversation.

Minute 06-07 / Table 22: 108 words; reduction of 24 words.

1. I ripped this right out of a library book.
2. (GASPS)
3. I'm gonna move my clubhouse there / and park it right next to the falls.
4. Who knows what lives up there.
5. And once I get there?
6. Well, I'm saving these pages for / all the adventures I'm gonna have.
7. Only I just don't know / how I'm gonna get to Paradise Falls.
8. That's it! You can take us there in a blimp!
9. Swear you'll take us! Cross your heart!
10. Cross it! Cross your heart! / Good, you promised. No backing out.
11. Well, see you tomorrow, kid. Bye!

12. Adventure is out there!
13. You know, you don't talk very much.
14. I like you!
15. Wow.
-
1. I ripped this out of a library book.
2. (GASPS)
3. I'll move my clubhouse there / next to the falls.
4. Who knows what lives up there.
5. And once I get there?
6. I'm saving these pages for / my futures adventures.
7. I just don't know how to get there.
8. That's it! You can take us in a blimp!
9. Swear you'll take us!
10. Cross your heart!   / You promised. No backing out.
11. Well, see you tomorrow. Bye!
12. Adventure is out there!
13. You don't talk very much.
14. I like you!
15. Wow.

In line one the adverb *right* could be omitted since it is used to emphasise the act of ripping out a sheet out of a book.

Line three could be reduced by changing the verb tense (*I'm gonna* > *I'll*) in its contracted form and by eluding some words from the second line while preserving the overall meaning of the sentence (to move and place the house next to the falls).

In line six, the cohesive link *well* could be omitted since there is continuity (question in line five and answer in line six) and its function is that of an interjection which has no charge of meaning. The second line of the subtitle could be reformulated and turned into a noun phrase which maintains the overall meaning (adventure I will have in the future).

In line seven, *only* functions as a conjunction but there is continuity between lines so it could be omitted. The subtitle could be reduced to one line by changing the second part of the sentence, simplifying it through the omission of some words (*I'm gonna*) and referring to *Paradise Falls* with an adverb of place (*there*).

In line eight, as it can be inferred (due to continuity) that the character is talking about going to Paradise Falls, the adverb of place *there* could be omitted.

In line nine, there are two exclamations but the second one (*Cross your heart!*) is repeated in the next subtitle, hence it could be omitted.

In line ten, due to the fact that the sentence *Cross your heart!* has been omitted in the previous subtitle, the first exclamation of line ten should be omitted (*Cross it!*) since there is an anaphoric reference. The second line of the subtitle contains an interjection (*Good*) that could be omitted since the most relevant information is preserved (*You promised. No backing out.*).

In line eleven, the interjection *well* should be maintained as a cohesive link that marks a pause in the conversation that is coming to an end. The term used by the character to refer to the other character (*kid*) could be omitted since it does not add any important or new information and it could be considered to be another type of interjection.

In line fourteen, the expression *you know* could be omitted because it does not have a significant charge of meaning and the most relevant part of information is maintained (*You don't talk very much*).

From minute 07-08 to minute 12-13 (Tables 23 to 27; no table for minute 09-10 since there are no subtitles) there are no dialogues and only paralinguistic information appear in subtitles. No reduction is necessary and the time subtitles remain on screen is apparently appropriate; there are only four instances in which a subtitle consisting of one word remain on screen less than one second (0.8 or 0.9 seconds), but the difference is not remarkable.

Minute 13-14 / Table 28: 77 words; reduction of 17 words.

1. (MACHINES CLANGING)
2. MAN: Stevie, throw me a deuce!
3. (SCOFFS) Quite a sight, huh, Ellie?
4. Uh! Mail's here.
5. (SCOFFS) Shady Oaks Retirement. / Oh, brother.

118

6. Hmm…
7. Hey! Morning, Mr Fresricksen. / Need any help there?
8. No. Yes!
9. Tell your boss over there / that you boys are ruining our house.
10. Well, just to let you know,
11. my boss will be happy to take / this old place off your hands
12. and for double his last offer!
13. What do you say to that?

-

1. (MACHINES CLANGING)
2. (CONSTRUCTION WORKERS TALKING)
3. (SCOFFS) Quite a sight, huh, Ellie?
4. Uh! Mail's here.
5. (SCOFFS) Shady Oaks Retirement. / Oh, brother.
6. Hmm…
7. Hey! Morning, Mr Fredricksen. / Need any help?
8. No. Yes!
9. Tell your boss / that you're ruining our house.
10. Well, my boss will double his last offer
11. to take this old place / off your hands.
12. What do you say to that?

In this scene, the noise of the machines is heard over the voice of the man that we find in line two, which has no relevant information for the plot. Therefore, instead of the original subtitle, I think it would be more appropriate to include a subtitle consisting of paralinguistic information (*CONSTRUCTION WORKERS TALKING*).

In line seven, the adverb of place *there* could be eluded since there is an endophoric reference on-screen (the mailbox).

In line nine the adverbial phrase *over there* could be omitted since there is an endophoric reference on-screen (the camera moves and shoots the boss) and the term Carl uses to refer to the workers (*boys*) could also be omitted and replaced by the contracted form *you're*.

Lines ten, eleven and twelve could be reformulated and condensed into two subtitles instead of three, consisting of sixteen words instead of twenty five. The reduced version preserves the most relevant part of information (the boss is offering more money to get the house).

Minute 14-15 / Table 29: 135 words; reduction of 38 words.

1. Uh, I take that as a "no," then?
2. I believe I made my position / to your boss quite clear.
3. You poured prune juice in his gas tank.
4. Yeah, that was good. / Here, let me talk to him.
5. (BULLHORN BEEPS)
6. *You in the suit. / Yes, you. Take a bath, hippie!*
7. *I am not with him!*
8. This is serious! / He's out to get your house.
9. CARL: Tell your boss / he can have our house.
10. -Really? / -When I'm dead!
11. I'll take that as a maybe.
12. ANNOUNCER ON TV: Order now, / you get the camera
13. you get the printer, 4x optical zoom,
14. Schneider lens, photo printer, SD card.
15. (KNOCKING ON DOOR)
16. "Good afternoon. My name is Russell.
17. And I am a Wilderness Explorer / in Tribe 54, Sweat Lodge 12.
18. Are you in need / of any assistance today, sir?"
19. No.

-

1. I take that as a "no".
2. I made my position / clear to your boss.
3. You poured prune juice in his gas tank.
4. Yeah, that was good. / Let me talk to him.
5. (BULLHORN BEEPS)
6. *You in the suit. / Take a bath, hippie!*
7. *I'm not with him.*
8. Seriously. / He's out to get your house.
9. CARL: He can have our house.
10. -Really? / -When I'm dead.
11. I'll take that as a maybe.
12. (ADS ON TV)
13. (KNOCKING ON DOOR)
14. "Good afternoon. My name's Russell.
15. I'm a Wilderness Explorer / in Tribe 54, Sweat Lodge 12.
16. Do you need any help today, sir?"
17. No.

In the first line, the interjection *Uh* could be omitted as well as the last word *then?* because these words do not add any relevant information.

In line two, the beginning of the sentence (*I believe*) and the intensifier *quite* could be eluded without any significant change in the overall meaning of the utterance.

In line three, the type of juice (*prune*) could be omitted but along the film there are other

references to prune juice, so I think it is important to maintain it.

In line four, *here* functions as an interjection, thus it could be omitted with no change of meaning.

In line six, two words can be omitted (*Yes, you*) since it is a kind of appeal to make the boss pay attention to Carl; however, there is no need to "recall" the boss because the image shows that he realises of the first call.

In line eight, *This is serious!* could be replaced by the adverb *Seriously* which has a similar meaning to reduce two words.

In line nine, it is necessary to specify who is talking (*CARL*) because in the image there is no character facing the camera. The imperative *Tell your boss* could be eluded since the relevant part of information is preceded by these words and maintained.

From line twelve to line fourteen, subtitles consist of advertising on TV, which is not relevant for the plot, hence the three subtitles could be reduced to one where paralinguistic information is shown (*ADS ON TV*).

NOTE that as two subtitles have been deleted, the number of lines in the original version and in the simplified version are not the same.

In lines fourteen and fifteen, contractions could be used (*My name's Russell, I'm a Wilderness...*) to reduce two words.

The question in line eighteen could be reformulated in a more informal way to reduce two words (*Do you need any help today, sir?*), always maintaining the adverb of time, which is relevant due to the context, and the polite address *sir* since Carl is an elderly person.

Minute 15-16 / Table 30: 119 words; reduction of 21 words.

1. -I could help you cross the street. / -No.
2. -I could help you cross your yard. / -No.
3. -I could help you cross your porch. / -No.

4. Well, I gotta help you cross something.
5. No. I'm doing fine.
6. "Good afternoon. My name is Russell,"
7. (CARL STAMMERING)
8. -Kid… Kid. / -"And I am a Wilderness Explorer"
9. -"in Tribe 54, Sweat Lodge 12." / -I… Slow down, kid!
10. -"Are you in need of any assistance…" / -Thank you,
11. -but I don't need any help! / -"… today, sir?"
12. RUSSELL: Ow.
13. Proceed.
14. -"Good afternoon… " / -But skip to the end!
15. See these? These are / my Wilderness Explorer badges.
16. You may notice one is missing. / It's my Assisting the Elderly badge.
17. If I get it, I will become / a Senior Wilderness Explorer.
-
1. -I could help you cross the street. / -No.
2. -Your yard? / -No.
3. -Your porch? / -No.
4. Well, I'm gotta help you cross something.
5. I'm doing fine.
6. "Good afternoon. My name's Russell,"
7. (CARL STAMMERING)
8. "And I'm a Wilderness Explorer"
9. -"in tribe 54, Sweat Lodge 12." / -Slow down, kid!
10. -"Do you need any help…" / -Thanks,
11. -but I don't need any help! / -"…today, sir?"
12. RUSSELL: Ow.
13. Proceed.
14. -"Good afternoon…" / -But skip to the end!
15. These are / my Wilderness Explorer badges.
16. If I get my Assisting the Elderly badge
17. I'll become / a Senior Wilderness Explorer.

In the first three lines there is a reiteration (*I could help you cross the street/your yard/your porch*) that could be reduced by transforming the request into a two-word question to reduce ten words.

In line four, the interjection *Well* should be maintained since a cohesive link is necessary in this case due to the intonation in speech.

In line five, the adverb *No* could be omitted since the following line (*I'm doing fine*) is already marking a refusal.

In lines six and eight, contractions could be used to reduce some words (*My name's Russell, I'm a Wilderness...*). As in line seven the paralinguistic information shows that Carl is stammering (and Russell's voice is heard over Carl's) two words could be omitted (*Kid... kid*). For the same reason, in line nine the subject *I...* could be eluded as well.

In line ten, instead of the whole form of showing gratitude (*Thank you*) could be replaced by a single word (*Thanks*).

Line fifteen could be reduced to fewer words by omitting the question *See these?* because no answer is expected.

Lines sixteen and seventeen could be merged to reduce the number of words while preserving the overall meaning of the sentence.

Minute 16-17 / Table 31: 152 words; reduction of 54 words.

1. "The wilderness must be explored!"
2. Caw, caw! Raar!
3. (HEARING AID SCREECHES)
4. It's gonna be great! / There's a big ceremony,
5. and all the dads come, / and they pin on our badges.
6. So, you want to assist an old person?
7. Yep! Then I'll be / a Senior Wilderness Explorer.
8. -You ever heard of a snipe? / -Snipe?
9. Bird. Beady eyes.
10. Every night it sneaks in my yard / and gobbles my poor azaleas.
11. I'm elderly and infirm. I can't catch it. / If only someone could help me.
12. -Me, me! I'll do it! / -I don't know. It's awfully crafty.
13. You'd have to clap your hands / three times to lure it in.
14. I'll find him, Mr Fredricksen!
15. I think its burrow is two blocks down. / If you go past…
16. Two blocks down. Got it! Snipe.
17. Here, snipey, snipey.
18. Bring it back when you find it.
19. RUSSELL: Snipe!
20. STEVE: Okay, keep her coming. / Keep coming.
21. And stop. Stop. Stop!

-

1. "The wilderness must be explored!"
2. Caw, caw! Raar!
3. (HEARING AID SCREECHES)

4. There's a big ceremony,
5. and all the dads come.
6. So, you want to assist an old person?
7. Yep!
8. -You ever heard of a snipe? / -Snipe?
9. Bird. Beady eyes.
10. Every night it sneaks in my yard / and gobbles my flowers.
11. If only someone could help me.
12. -Me! / -Hum. It's awfully crafty.
13. Clap your hands three times / to lure it in.
14. I'll find him.
15. I think its burrow is two blocks down.
16. Got it!
17. (CLAPS) Snipey.
18. Bring it back.
19. STEVE: Keep coming.
20. And stop. Stop!

Lines four and five could be reduced to the information that is more relevant for the plot of the film, that is, the fact that there is a ceremony and that their dads come to the event (as Russell, whose parents are divorced, expects his dad to go to the ceremony).

In line seven, for the purpose of reducing number of words, the whole sentence could be omitted since it has already been said and does not add new information.

In line ten, the adjective *poor* could be omitted although there might be a slight transfer of meaning, and *azaleas* could be replaced by the general term *flowers* because children might not be familiar with that specific type of flowers.

In line eleven, the most relevant part of the subtitle is the last sentence (*If only someone could help me*) because it is linked with the following subtitle, while the rest of the subtitle could be omitted, for the purpose of reducing number of words.

In line twelve, there is a repetition that could be reduced to one word (*Me*) and the exclamation *I'll do it!* could be eluded to reduce more words. In the second line of the subtitle, the sentence *I don't know* could be replaced by an interjection that indicates hesitation (*Hum*).

Line thirteen could be reduced by replacing the conditional verb with an imperative.

124

In line fourteen, *Mr Fredricksen* could be eluded, even though it is a way to show politeness there is no significant transfer of meaning.

In line fifteen, the second line of the subtitle could be omitted since the next utterance is heard over it because Russell interrupts Carl.

Line sixteen could be reduced to the exclamation *Got it!* because it is the part that carries new information; *two blocks down* is a repetition that could be omitted; and the name of the bird could be omitted as well since there is a reference in the next subtitle.

In line seventeen, paralinguistic information could be added (*CLAPS*) and one of the repetitions could be avoided.

In line eighteen, the sentence could be simplified by eluding the part of information that can be inferred (to bring back the bird, first he has to find it).

Lines nineteen and twenty could be reduced by avoiding repetitions, although in line twenty, I think it is important to repeat the verb twice due to the context of the scene.

Minute 17-18 / Table 32: 75 words; reduction of 9 words.

1. Why… Hey! Hey, you!
2. What do you… / What do you think you're doing?
3. -I am so sorry, sir. / -Don't touch that!
4. No, no, no. / Let me take care of that for you.
5. -Get away from our mailbox! / -Hey. Sir, I…
6. I don't want you to touch it!
7. Ow!
8. (GROANING)
9. (BREATHING HEAVILY)
10. MAN: Steve, you all right?
11. (POLICE SIREN WAILS)
12. OFFICER EDITH: Sorry, / Mr Fredricksen.
13. You don't look like / a public menace to me. Take this.

-

1. Hey, you!
2. What do you think you're doing?
3. -I'm so sorry, sir. / -Don't touch that!
4. No. / Let me fix it.
5. -Get away from out mailbox! / -Sir, I…

125

6. I don't want you to touch it!
7. Ow!
8. (GROANING)
9. (BREATHING HEAVILY)
10. MAN: Steve, you all right?
11. (POLICE SIREN WAILS)
12. OFFICER: Sorry, / Mr Fredricksen.
13. You don't look like / a public menace to me. Take this.

The first line could be reduced by omitting the first word and the repetition (*Why... Hey!*) since one exclamation with a reference to the character seen on-screen might be enough (*Hey, you!*).

In line two, repetition could be avoided.

In line four, repetitions could be avoided and the second line could be reduced by a change of verb and referent to the object (*Let me fix it*).

In line five, the interjection *Hey* could be omitted since there is another way of address (*Sir*).

In line twelve, the tag with the name contains information that is not relevant for the story (name of the officer) that should be omitted because it may create confusion to read and memorise another proper name that is not going to appear again.

From minute 18-19 to 22-23 (Tables 33 to 37) no reduction was necessary since the number of words fits the established number of words per minute for deaf children.

5. RESULTS AND DISCUSSION

ALADDIN

Omissions for the purpose of reducing number of words.

Adverbs: *where* (Table 1); *before* (Table 3); *here* (Table 7).

Phrases: *come on down* (Table 1); *more often than not* (Table 2); *like so many things* (Table 3); *the rest of* (Table 5); *obviously less than* (Table 6); *come on* (Table 11).

Subject-verb sentences: *I think… die* (Table 6); *I suppose* (Table 11); *you've got* (Table 13).

Foreign words: *salaam* (Table 2); *effendi* (Table 10).

Modal verb: *can* (Table 3).

Relative: *that* (Table 3).

Unnecessary referents: *thee* (Table 6); *one* (Table 7).

Sentences: *just forget it* (Table 6); *It's not every day you see* (Table 11).

Adjective: *big* (Table 6).

Rhetoric question: *what are we gonna do?* (Table 7).

Questions-answer: *Trouble? No way* (Table 7).

Noun: *woman* (Table 11); *Father* (Table 13).

Omission of reiterations.

Verb: *could fall* (Table 2); *will not…* (Table2).

Conjunction proper: *and…* (Table 2).

Adverb: *please* (Table 2); *too close* (Table 2).

Phrases: *A young man* (Table 3); *street rat* (Table 11), *the lamp* (Table5).

Interjection: *awk* (Table 5).

Sentence: *I just don't believe it* (Table 6); *with him, weren't you, Rajah? / You were just playing* (Table 13).

Noun: *Patience* (Table 6).

Subject: *you* (Table 11).

Proper name x2: *Jasmine* (Table 12).

Conjunction proper: *and* (Table 11); *and* (Table 13).

Interjections: *and, well, I…* (Table 13).

Verb: *try to* (Table 13).

Omissions related to endophoric on-screen references:

Phrase: *to you* (Table 2).

Adjective: *julienne* (Table 2).

Proper name: A*bu* (Table 11).

Adjective: *both* (Table 13).

Substitution of phrases and sentences: *one of these intact > an intact one* (Table 3); *most rewarded to consider this > would like this* (Table 3); *Perhaps you'd like to hear the tale? > Perhaps you want me to tell the tale* (Table 3); *I'll have your hands for a trophy > I'll catch you* (Table 7); *Getting into trouble a little early today, aren't we, Aladdin? > Already in trouble, Aladdin?* (Table 7); *If I were as rich as you, I could afford some manners > You could afford some manners* (Table 11); *I've never been so insulted > This is insulting* (Table 12); *You're not leaving so soon, are you? > Don't leave so soon* (Table 12); *You've got to stop rejecting every suitor who comes to call > You reject every suitor* (Table 13); *You must be married to a prince > You must marry a prince* (Table 13); *by your next birthday > before your birthday* (Table 13); *If I do marry, I'll want it to be for love > I'll marry for love* (Table 13); *I just want to make sure you're taken care of > I want you to be taken care of* (Table 13).

Synonyms: *barbaric > rough* (Table 1); *a lot of > many* (Table 2); *hookah > pipe* (Table 2); *listen > look* (Table 3); *commonplace > common* (Table 3); *get a hold of > get* (Table 6); *ticked off > angry* (Table 6); *get away > escape* (Table 7); *mourn > grieve* (Table 11); *Confound it > Darn* (Table 13); *stormed out > left* (Table 13); *self-absorbed > egotistical* (Table 13); *dearest > dear* (Table 13).

UP

Omissions for the purpose of reducing number of words.

Sentences: *Lurking in the shadows of* (Table 17); *I give you* (Table 17); *vows a return to Paradise Falls* (Table 18); *Hold together, old girl* (Table 19); *Let's take her up to* (Table 19); *Don't you know* (Table 19); *What's wrong?* (Table 20); *Do it!* (Table 21); *and park it right next to the Falls* (Table 22); *You know* (Table 22); *just to let you know* (Table 28); *I believe* (Table 29); *Tell your boss* (Table 29); *See these?* (Table 30); *You may notice that one is missing* (Table 30); *It's gonna be great* (Table 31); *and they pin on our badges* (Table 31); *Then, I'll be a Senior Wilderness Explorer* (Table 31); *I'm elderly and infirm* (Table 31); *I can't catch it* (Table 31); *I'll do it!* (Table 31); *You'd have to* (Table 31); *If you go past* (Table 31); *when you find it* (Table 31);

Phrases: *our subject today* (Table 17); *to the lost world* (Table 17); *placed end to end* (Table 17); *in the sky* (Table 17); *18 degrees* (Table 19); *at 10 knots* (Table 19); *a storm* (Table 19); *a pair of* (Table 20); *You and me* (Table 20); *Come on* (Table 20); *over there* (Table 28); *for you* (Table 32).

Interjections: *Why* (Table 17, Table 32); *Yes* (Table 19); *Well* (Table 20, Table 22); *Good* (Table 22); *Kid* (Table 22, Table 30); *boys* (Table 28); *Uh* (Table 29); *Here* (Table 29, Table 31); *Okay* (Table 31); *Hey* (Table 32).

Substitution and synonyms:

Substitution: *The beloved > He* (Table 17); *completing > after* (Table 17); *It's a veritable floating palace > It's like a floating palace* (Table 17); *the skeleton > it* (Table 18); *The organization > They* (Table 18); *the explorer > Muntz* (Table 18); *he hurdles > and* (Table 18); *My name is > I'm* (Table 20); *I'm about to let you see something > You're about to see something* (Table 21); *You'll have to swear you won't tell anyone > Swear you won't tell anyone* (Table 21);

all the adventures I'm gonna have > my future adventures (Table 22); *how I'm gonna get to Paradise Falls > how to get there* (Table 22); *MAN: Stevie, throw me a deuce > (CONSTRUCTION WORKERS TALKING)* (Table 28); *ANNOUNCER ON TV: … > (ADS ON TV)* (Table 29); *Are you in need of any assistance > Do you need any help* (Table 29); *I don't know > Hum* (Table 31); *take care of that > fix it* (Table 32).

Synonyms: *set foot on > explore* (Table 17); *craft > airship* (Table 17); *Never apart from > Always with* (Table 17); *conceived > built* (Table 17); *brought back > brought* (Table 17); *cry foul > suspect* (Table 18); *strip… of his > remove* (Table 18); *come back > return* (Table 18); *Bon voyage > Farewell* (Table 28); *another human being > anyone* (Table 21); *This is serious > Seriously* (Table 29); *Thank you > Thanks* (Table 30); *azaleas > flowers* (Table 31).

Change in word order: *it sports plants and animal undiscovered by science > (a place with) undiscovered plants and animals* (Table 17); *Charles Muntz. The beloved > The beloved Charles Muntz* (Table 17); *(this) craft was designed by Muntz himself > Muntz himself designed this airship* (Table 17); *Thought you might need a little cheering up. I got something to show you > I wanna show you something. It will cheer you up* (Table 21); *My boss will be happy to take this old place off your hand and for double his last offer > My boss will double his last offer to take this old place off your hands* (Table 28); *It's my Assisting the Elderly badge. If I get it > If I get my Assisting the Elderly badge* (Table 30).