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ACQUIRING TRANSLATION COMPETENCE THROUGH THE USE OF SUBTITLING. ENHANCING LANGUAGE LEARNING THROUGH TRANSLATION AND TRANSLATING

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TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

TABLES

FIGURES

LIST OF ABBREVIATIONS

AVT Audiovisual Translation
CALL Computer-Assisted Language Learning
CLT Communicative Language Teaching
CMC Computer-Mediated Communication
ELF English as a Lingua Franca
FL Foreign Language
FLL Foreign Language Learning
SDH Subtitles for the Deaf and the Hard of Hearing
SL Source Language
ST Source Text
SLA Second Language Acquisition
TAPs Think-Aloud Protocols
TILT Translation In Language Teaching
TL Target Language
TS Translation Studies
TT Target Text

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Summary

The research work presented here is the result of two interconnected factors: on the one hand the results of a preliminary study on the skills of students of the degree courses “Mediazione Linguistica e Culturale” [Linguistic and Cultural Mediation] and “Lingue, Letterature e Culture Moderne” [Modern Languages, Literature and Cultures] to analyse and assess the translation of audiovisual products and on the other hand the analysis of the most recent literature on language learning and audiovisual material, in particular interlingual subtitling. The first shows that the competences acquired during the three years of study do not always guarantee satisfying language and translation skills – in particular, a rather literal approach to texts persists –; while the second presents encouraging results on the use of subtitling in foreign language teaching, although the studies conducted so far are few and on small samples. Hence, the need for students to abandon their word-for-word approach and the intrinsic characteristics of interlingual subtitling and of audiovisual texts (i.e. the time and space constraints imposed on the text) are the starting point of this dissertation.

Although the *Common European Framework of Reference* (CEFR) acknowledges translation as part of the activities necessary to language learning, its status is not yet clear since it is sometimes included in reception and production skills. The lack of specific descriptors then, makes the role played by translation in language learning still uncertain.

To this end a methodology based on the use of two pieces of software was designed and implemented, namely LvS 2.5.2 a subtitling simulator for didactic purposes and *Translog* 2006 that allows to record all cursor movements and keystrokes. The first was used to analyse the processes and products of the translation of audiovisual texts, while the latter to create subtitles from English to Italian. One of the innovative aspects of this project lies precisely in the combination of these two pieces of software for the survey and development of language and translation competence for English L2 learners.

The first stage of this investigation consisted in a pilot study with 18 volunteers of the third year of the degree course “Mediazione Linguistica e Culturale” over

three lessons. The main purpose of the pilot study was to test students' reactions to the use of LvS and *Translog* and improve the methodology, as well as the quality of the learning material. This provided us with positive reactions on the part of students and with preliminary data on translation processes that proved helpful to the trial. The most striking datum found is that around 40% of the students observed do not read the text before translating, with negative consequences on the working speed and quality of their translations.

The trial had a larger sample of students (27) and took place over a period of about two months (10 lessons). Students underwent an initial profiling activity, so that their translation style and initial competence and were instructed on how to use LvS and *Translog*. The activities carried out during the trial were structured according to the main stages of the translation process (orientation, drafting and end-revision). Therefore, every lesson would entail three stages: a group watching of the material and students' comments on the content and possible translation problems, then the translation with *Translog* and a transposition on LvS, and finally a group discussion with students' proposals. The material was administered on the basis of the learner-centred approach in which the teacher was a mere facilitator and encouraged a critical dialogue among students as much as possible rather than impose her own perspective.

The definition of competence the study and the analysis refer to is that proposed by the PACTE group ("*the underlying system of knowledge required to translate*"). The audiovisual texts propose to students were selected on the basis of a number of "Rich Points", which were then the specific object of the qualitative and quantitative analysis. Special attention was paid to the three basic stages of the translation process and their evolution, the duration of pauses, number of re-elaborations and the quality of the solutions of Rich Points. Moreover, the trial group's translation performance was compared to that of a control group to allow better data validation.

The results of the study have contributed to gather precious information on learners' translation style and techniques and seem to encourage the use of this practice in foreign language teaching through the analysis and translation of audiovisual material. In fact, the trial group outperformed the control group both as

far as the general approach to translation is concerned and specific problems considered representative of the most common translation difficulties.

Riassunto

Il progetto di ricerca presentato di seguito è il risultato dell'incontro di due fattori interconnessi: da un lato i risultati di uno studio preliminare sulla capacità degli studenti dei corsi di laurea “Mediazione Linguistica e Culturale” e “Lingue, Letterature e Culture Moderne” di analizzare e valutare la traduzione di prodotti audiovisivi, e dall'altro l'analisi della letteratura più recente in materia di apprendimento linguistico e audiovisivi, in particolare del sottotitolaggio interlinguistico attivo. Dal primo risulta che le competenze acquisite nell'arco del triennio non sono sempre sufficienti a garantire abilità linguistiche e traduttive soddisfacenti, in particolare persiste un approccio quasi letterale al testo, mentre dalla seconda emergono risultati incoraggianti (anche se gli studi condotti finora sono pochi e su campioni limitati) riguardo l'uso del sottotitolaggio nella didattica delle lingue straniere. La necessità quindi di allontanare gli studenti dall'approccio parola per parola da un lato e le caratteristiche intrinseche al sottotitolaggio interlinguistico (cioè le limitazioni di tempo e spazio a cui il testo deve sottostare) nonchè al testo audiovisivo in generale dall'altro sono il punto di partenza di questa tesi.

Anche se nel *Quadro Comune Europeo di Riferimento* (QCER) la traduzione è riconosciuta come parte integrante delle attività necessarie all'apprendimento linguistico, il suo status non appare ancora del tutto chiaro poichè questa viene volte inclusa nelle abilità di ricezione e produzione. La mancanza di specifici descrittori, poi, contribuisce a lasciare nell'incertezza il ruolo della traduzione nell'apprendimento linguistico.

A tale scopo è stata elaborata e implementata una metodologia basata sull'utilizzo di due software: LvS 2.5.2, un simulatore di sottotitoli creato a scopi didattici e *Translog* 2006, che permette di registrare tutti i movimenti effettuati dal cursore e le battute della tastiera di un computer. Il primo è stato utilizzato per l'analisi sia dei processi che dei prodotti risultanti dalla traduzione di testi audiovisivi, mentre il

secondo per la creazione di sottotitoli dall'inglese all'italiano. Uno degli aspetti innovativi del progetto sta proprio nella combinazione di questi due software per l'esplorazione e lo sviluppo della competenza linguistico/traduttiva di apprendenti di lingua inglese L2.

La prima fase di sperimentazione è consistita in uno studio pilota con 18 volontari frequentanti il terzo anno del corso di laurea “Mediazione Linguistica e Culturale” della durata di 3 lezioni. Lo scopo principale era quello di testare le reazioni degli studenti all'utilizzo dei due software e affinare la metodologia, nonchè la qualità del materiale didattico. Questo ha permesso di ottenere risposte positive da parte degli studenti e anche dati preliminari utili alla sperimentazione successiva riguardanti i processi di traduzione. Il dato più significativo emerso è che circa il 40% degli studenti osservati non legge il testo prima di tradurlo, con conseguenze negative sulla velocità di esecuzione e la qualità delle traduzioni.

Lo studio principale si è tenuto con un campione di studenti più ampio (27) su un periodo di circa due mesi (10 lezioni). Gli studenti sono stati sottoposti ad un'attività iniziale di profiling in modo da individuarne lo stile traduttivo e la competenza di partenza e sono stati introdotti all'uso dei software. Le attività proposte durante il corso sono state strutturate in fasi che rispecchiano quelle del processo di traduzione (orientamento, elaborazione e revisione). Perciò ogni lezione consisteva in una fase di visione collettiva del materiale audiovisivo e di commento da parte degli studenti riguardo al contenuto e ai possibili problemi di traduzione, in una fase di traduzione con Translog e di trasposizione su LvS e infine una fase di discussione di gruppo delle soluzioni proposte. Il materiale è stato somministrato sulla base del learner-centred approach, in cui l'insegnante aveva un ruolo di facilitatrice e incoraggiando il più possibile il dialogo critico tra studenti piuttosto che imporre il proprio punto di vista.

La definizione di competenza di riferimento per lo studio e l'analisi è quella proposta dal gruppo PACTE (“*the underlying system of knowledge required to translate*”). I testi audiovisivi proposti agli studenti sono stati selezionati considerando una serie di “Rich Points”, che hanno costituito poi l'oggetto specifico dell'analisi quantitativa e qualitativa. E' stata posta particolare attenzione alla durata delle tre fasi fondamentali del processo traduttivo e la loro evoluzione, alla durata

delle pause, al numero di rielaborazioni e alla qualità della resa finale dei Rich Points. Inoltre la performance traduttiva del gruppo sperimentale è stata confrontata con quella di un gruppo di controllo per una migliore validazione dei dati.

I risultati ottenuti dallo studio hanno contribuito a fornire preziose informazioni riguardo allo stile e alle tecniche di traduzione degli apprendenti e sembrano incoraggiare l'utilizzo di questa pratica nell'insegnamento delle lingue straniere attraverso l'analisi e la traduzione di materiale audiovisivo. Sono infatti stati riscontrati miglioramenti rispetto al gruppo di controllo sia nell'approccio alla traduzione in generale che a specifici problemi considerati rappresentativi delle difficoltà più diffuse in traduzione.

Introduction

The work presented in this investigation aims at providing a contribution to the recent trend that has witnessed the reintroduction and reinstatement of translation in the foreign language class as a means to improve linguistic skills. In particular, it will do so by looking at the newest avenues of research opened up by the use of subtitles and subtitling and by implementing a new methodology based on the use of a subtitling simulator and a keystroke recorder to allow the analysis of learners' translation processes and products. Within this perspective, translation competence is seen as ancillary to the enhancement of language learning skills.

The use of translation as a foreign language learning tool has been absent for a relatively long period of time because of the progressive decline of the Grammar Translation Method and the introduction of the Communicative Approach and of the methods derived from it. Ever since then translation has been associated with the passive and almost literal transposition of sentences or short texts deprived of context and with the only purpose of applying grammar rules correctly.

In the last 40-odd years however, the progressive establishment of Translation Studies (TS) as a fully-fledged discipline, the acknowledgement of the extremism of the previous stances on translation, and the emergence of functional theories recognising it as a true act of communication have contributed to revive the debate around translation and translator teaching as well as to reassess the value of translation as an effective language learning tool.

The initial focus of TS mostly on literary and technical-scientific texts has led to the partial exclusion of other types and genres, whose translation was and is nonetheless common practice in the profession. One of these was certainly audiovisual translation (AVT), which saw an exponential growth in the last few years though it had to struggle at the beginning to be accepted within TS, since its features and constraints appeared at odds with translation theory and lacked the status awarded to more traditional text genres. However, developments in TS as well as in society have led to the inclusion of AVT in TS and allowed it to bloom quickly.

The application of AVT – and of subtitling in particular – to foreign language learning is a recent trend, though it has already proven to bring about positive results

in the improvement of fundamental skills such as listening, reading, writing and vocabulary acquisition. The present work hence started out from these encouraging results in order to develop a methodology allowing the improvement of language and translation skills of language students at the University of Padua, who – according to a preliminary study – appeared to have small weaknesses precisely in these areas.

After a review of the literature and of the state of the art of subtitles and subtitling in foreign language learning FLL (Chapter 2), the research work presented below will be touching upon topics such as the impact of technology, the fruition of video content and the problem of out-of-date software in research (Chapter 3); the thorough description of the methodology and of the principles applied in the design of the trial and the collection and analysis of data along with an account of the structure and functioning of the two pieces of software utilised (Chapter 4); an in-depth analysis of results (Chapter 5) and their discussion (Chapter 6).

CHAPTER 1

Translation in the foreign language class. New research avenues

1.1 Language learning and translation. The long journey to reconciliation

Though the 20th century has seen a growing interest in developing effective methodologies for foreign language teaching and learning, both theoretical and applied linguistics have not always considered translation a viable tool in second language acquisition (SLA). This has caused TILT's (Translation In Language Teaching) long absence from the language class in Europe and, as accurately recounted by Cook (2010), such choice has not always been supported and motivated by scientifically proven evidence. Nevertheless, many of the methods that have become popular over that period have more or less explicitly banned translation from their methodologies or have marginalised it.

By taking a brief look at the main trends that have characterised the past century, over time we can see that a number of approaches have been proposed. Each of them was advertised as more effective than the previous ones. One of the most important and debated ones is certainly the so-called "Direct Method", according to which effective learning is possible through total immersion in the foreign language, i.e. in a process similar to that of the acquisition of the students' mother tongue. For this reason, classes were mostly monolingual and instances of written or oral translation both as a means of clarification or as training were considered superfluous, if not even damaging. However, this method itself started out as a reaction to the previous approach to language learning, which – in spite of much criticism – will find application for the whole first half of the 20th century. This was the "Grammar Translation Method", which originated at the end of the 19th century and was initially used to teach classical languages (i.e. Latin and Greek) but later on applied to teach modern foreign languages as well. Also known as the "Classical

Method" or the "Prussian Method", it placed emphasis on grammar rules and their accurate application through translation into the students' native language, rather than on oral communication and fluency. It is no wonder it remained quite popular in Europe at least until the 1960s (Cook 2010: 11): teachers needed few specific skills; the use of translation to assess the comprehension of grammar rules did not require much effort on their part; and the objective evaluation of students' performances was facilitated by a set of rigid parameters offered by grammar itself.

The two approaches discussed so far coexisted during the first half of the 20th century and clear-cut distinctions in geographical or temporal terms cannot be easily drawn. Furthermore, secondary schools and universities did not respond to the banning of translation in the same way. In fact, while the former fully embraced a monolingual communicative approach, the latter partly resisted this trend; official examinations still required students to perform the active and/or passive translation of texts and a certain resistance on the part of lecturers to change their well-tested methods also persisted (Carreres 2006: 2).

Even though the two methods can be said to stand at the extremes of foreign language teaching, the diffusion of the practices they advocated deeply affected the conception of translation in language learning for a long time. On the one hand the Grammar Translation Method contributed to spread the idea that translation was an almost mechanical transfer of words from one language to another and that "imitating this [the text's] surface structure by transposing it into grammatically correct target language units guarantees the preservation of content" (Vermeer 2001: 61). Its opponents often emphasised the artificiality of the sentences students had to translate, as these were developed mostly to illustrate grammar rules, rather than to teach how to communicate effectively. Hence, it was not so uncommon to see sentences like "The merchant is swimming with the gardener's son, but the Dutchman has the fine gun" (Sweet in Cook 2001: 117), an utterance that seems hard to place within any real-life context. Thus TILT has almost become synonymous with this approach, as if there was no other possible application of translation to language learning.

On the other hand, the Direct Method has come to the fore proposing an approach to learning more in line with what were considered the latest theories in

second language acquisition and banning the use of translation from the classroom, thus eliminating it from mainstream teaching theory and practice. In fact, not only was translation considered a violation of the principle of monolingualism but it was also regarded as communicating little because it was associated with written rather than oral production. Moreover, it was seen as hindering interaction between students, who usually performed this activity on their own. Around the 1970s, a number of other (minor) approaches was developed such as the Army Method, Suggestopedia, Total Physical Response, Community Language Learning, etc. Yet, none of them used or acknowledged the use of translation in class. This scenario has been effectively summarised by Cook (2009: 112):

> […] recent theories of language teaching and learning have at best ignored the role of translation and at worst vilified it. From the end of the nineteenth century onwards, almost all influential theoretical works on language teaching have assumed without argument that a new language (L2) should be taught without reference to the student's first language (L1).

Even though these recent theories "ignored" or "vilified" translation, it should be remembered that its concrete use, though formally banned, never really abandoned the classroom, as for example many teachers adhering to the Direct Method resorted to an extensive use of translation exercises as reported in a study conducted in 1975 by Grotjahn and Klevinghaus (see Zojer 2009: 32-33).

Only in recent years have scholars and teachers reconsidered the role played by translation thanks to a re-assessment of its potential benefits and the acknowledgment of the extremism of the previous approaches[1]. This new perspective has contributed to rehabilitate translation both as a practice and within academia and resulted from the complex interaction of a number of different and sometimes overlapping phenomena occurred in the educational sphere as well as in society. First of all, the communicative approach as applied by the Direct Method and by its ramifications (e.g. Natural Approach, Communicative Language Teaching or CLT, Audio-lingual and Audiovisual Method) showed a major drawback: the almost

[1] For further reference see Widdowson: 1979; Howatt: 1984; Duff: 1989; Stern: 1992.

exclusive focus on fluency induced students to produce grammatically, semantically or syntactically inaccurate outputs. A more objective reflection has led to the realisation that on the one hand, translation helps students develop accuracy and equivalence at all discourse levels and prevents avoidance strategies that are so common in free spoken/written productions; on the other hand, it can be a theoretically solid tool increasing acquisition. Also, the criticism based on the idea that translation is not a communicative activity appears no longer valid because "[…] translation activities invite discussion about linguistic correctness, semantic equivalence, situational and stylistic adequacy, and also about cultural appropriateness" (Gnutzmann 2009: 55). Finally, there has been a growing number of students interested in learning how to translate for future professional purposes, i.e. in translation as an activity in itself.

As for academia, a first fundamental step was the seminal work of the American poet and translator James S. Holmes *The Name and Nature of Translation Studies* (1972), which paved the way for the establishment of TS (Translation Studies) as a fully-fledged discipline and to develop a more rational and thorough approach to research on translation. Although the impact of TS was much greater on the learning and teaching of translation proper, it also gradually influenced foreign language teaching thanks to the development of subfields such as learning psychology, applied linguistics and sociolinguistics (Gnutzmann 2009: 56). Along with a greater attention to learners' needs brought about by cognitivism, new developments in sociolinguistics as well as a society ever more based on intercultural communication and – in the case of English – the emergence of ELF (English as a Lingua Franca) have undermined one of the cornerstones of the communicative approach: the native speaker's primacy. In fact, native speakers are no longer deemed to be the only producers of correct instances of language. As a consequence, teaching by non-native speakers is also envisaged; other languages entered the classroom, as so did translation.

A significant contribution to the reappraisal of translation in language learning was also given by the emergence of functional theories of translation (e.g. Vermeer's *Skopos* Theory, Reiss and Vermeer's general theory of translation and Holz-Mänttäri's theory of translatorial action) as they introduced the idea that texts need to

be considered not as a mere sequence of sentences but more holistically as units created within a specific context for a specific purpose. Hence, "translation […] is no longer the mere transformation of a text from one language to another, but rather the production of a target text that can function within a different context for recipients from a different culture" (Vermeer 2001: 61). Here, accent is placed on the cultural aspects involved in translating, thus introducing the need for language learners not only to become acquainted with new linguistic structures but also with the overt and covert implications of their use. Moreover, texts are seen as part of a broader act of communication, belonging to a genre that was chosen because it is commonly associated with a certain situation and function (e.g. advertisement, press release, recipe, manual instructions etc.); the translator needs to convey all this set of direct and indirect information along with the target text.

The debate is still lively today, as demonstrated by the wealth of published volumes or articles expressly dedicated to this topic[2]. If the discussion was particularly intense in the 1970s with defenders and opponents of translation putting forward their arguments in favour or against it, the following decades saw the prevalence of scholars defending the value of translation as an effective pedagogical tool[3].

Finally, it has been claimed[4] that a further advantage of translation is that it contributes to develop students' language awareness, as it:

- facilitates and stimulates the comprehension and acquisition of new words and expressions;
- gives concrete examples of the differences in form and structure of source and target language, thus allowing learners to compare them;
- discourages linguistic interference as learners become more and more aware that SL (Source Language) and TL (Target Language) organize information in lexically and syntactically different ways;
- can also promote passive translation, which helps learners develop expressive abilities in their mother tongue.

[2] Cf. Carreres: 2006; Cook: 2001, 2009, 2010; Witte, Harden, Ramos de Oliveira Harden (eds.): 2009; González Davies: 2004 but the list is much longer if we consider less recent works.
[3] For further bibliographical reference on the authors participating in the debate see Zojer (2009: 31).
[4] See Gnutzmann: 2009; Andrews: 2007; Candelier, Gnutzmann: 1989.

It appears that this overall process of reassessment has abundantly favoured the reintroduction of translation, though not as applied during the golden age of the Grammar Translation Method. Rather, current teaching practices in secondary education seem to have blended communicative and "Classical Method" seeking a balance between accuracy and fluency, between form and content, and have taken a broader perspective on the possible applications of translation. It has become clear that both oral and written translation can be applied in different ways and, through an accurate selection of texts and a purposeful design of activities, it can effectively target specific critical areas such as pragmatics, terminology, syntax and style to mention but a few.

This new attitude towards translation has also affected practices in translator training. For example, there has been growing debate about how would-be professional translators should be trained and what skills and knowledge such training should include. An enlightening insight is provided by Bernardini (2004), who draws an important distinction between translator training and translator education. While the former requires to "put together as large an inventory of pieces of knowledge as possible in the field in which she is being trained" (2004: 19), the latter is understood as "as a generative rather than cumulative process, whose aim is to develop the ability to employ available knowledge to solve new problems, and to gain new knowledge as the need arises" (2004: 20). Moreover, training is seen as more suitable for short-term and field specific aims while education as a long-term and awareness-raising process. Hence, in the case of undergraduate courses it appears of paramount importance to help learners develop skills such as awareness, reflectiveness and resourcefulness. Even though many questions are still to be solved, we can see how translation has come a long way in a relatively short amount of time.

1.2 From paper to screen: the Cinderella story of audiovisual translation (AVT)

Along with and somewhat parallel to the struggle for translation to be reinstated in the language class, translation scholars were also engaged in establishing Translation Studies as a field of research as well as developing its many sub-fields. However, until recent times the concept of translation was inextricably connected with a notion of text as a monomodal unit associated with a system of graphically expressed words printed on paper and with a limited range of text types and genres. For a long time only literary or technical-scientific texts were taken into consideration as examples of texts worth translating. Many others, whose translation was nonetheless normal practice in the profession – e.g. advertisements, film scripts or tourist guides –, were largely ignored by academia. The well-established tradition of literary translation and the literary background of many lecturers along with the lexical complexity and specificity characterising technical-scientific texts meant that translation – if and when it was included in language and literature courses – was usually translation of literary texts. Meanwhile, translation and interpreting courses developed in academic institutions. However, as they focused on scientific, technical and legal translation to the exclusion of literary translation the dichotomy still held.

Among largely ignored areas of translation there was also audiovisual translation (AVT), whose road from anecdotal, sparse studies to becoming a discipline in its own right as well as gaining general recognition within TS has been relatively short, though not without major obstacles. The following paragraphs will attempt to briefly sketch out the main developments occurred and the issues faced by the scholars who ventured into this new field of study, as well as the present state of the art. Such events often run in parallel, hence the next paragraphs do not follow a strictly chronological order but are divided by topic.

While the emergence of functionalist approaches contributed to introduce studies on a wider range of text types and genres within TS, and Polysystem Theory offered a fresh perspective on translations seen as facts becoming part of the target culture – irrespective of text type –, the notion of text as a number of characters printed on a page went unchallenged. Hence, even though these new trends in

translation certainly had the merit of shifting attention away from the linguistic aspects of texts to their socio-cultural functions and impact – thus remarkably broadening scholars' perspective on the translation of texts – times did not seem ripe for taking a further leap forward and challenge the notion of text itself as well. Such view on translation and texts has also led some scholars to

> [...] frequently raise the question whether translation theory can actually incorporate audiovisual translation within its general scope. [...] But it is a well-known fact that audiovisual translation has always been considered inferior to (written) literary translation, most probably because of the lack of cultural prestige in audiovisual mass-media, compared to canonised literature. (Karamitroglou, 2000: 10)

Karamitroglou's observation has held true for a long time, however lack of prestige was not the only reason why academia found it difficult to accept AVT as part of TS. In fact, there are other reasons intrinsic to TS that caused AVT to be initially considered either as a minor field or even belonging to other disciplines, mainly Media Studies. As already mentioned, TS is a relatively recent field of research and was not immediately acknowledged as such. As pointed out by Petillo (2012: 10), one of the top priorities of TS between the 1950s and 1980s was to become a proper science with a solid theoretical framework, hence it is not surprising that the translation of audiovisual material – with its multimodal and multimedial nature and its many constraints – was regarded with suspicion, as it escaped any attempt to be included in such a neat theoretical-prescriptive framework.

Secondly, scholars have not yet agreed on a clear-cut definition of translation itself, which not only appears as a major flaw in the establishing of TS as a scientific discipline but also creates disagreement as to its "boundaries", i.e. when is a certain text a translation and when an adaptation? Or are these purely theoretical simplifications because translation always entails some kind of adaptation? Early works have often opted for a narrow definition of translation centred on faithfulness to the source text and to genre, so when the translation of films and television programmes became object of more and more studies, these linguistic transfers were considered beyond the scope of TS.

Moreover, debate soon arose as to how to name this new branch of studies. As the discipline evolved, a number of labels have been used over time, each emphasising different scopes and focuses. Since early studies mainly focused on cinema, "film dubbing" and "film translation" were the most frequently used terms. With the growing importance of television, new labels were proposed such as "film and TV translation", "media translation" and later on "screen translation". In 2003, Yves Gambier joined the debate and proposed the term *transadaptation* instead of "screen translation" in view of the ever more blurred boundaries between oral and written code and between translation and interpreting for the media. However, it seems that this term "does not do justice to the semiotic complexity of this operation[5]" (Petillo, 2012: 15) and therefore "multimedia translation" and finally "audiovisual translation" became established. Although most of the terminology listed above is still in use[6], the latter is now the accepted label because it encompasses all the elements these products consist of, expresses the idea that meaning is conveyed through the interaction of multiple channels and might be flexible enough to comprise the future developments of this discipline.

Although forms of audiovisual translation have been practised since the early 1920s and have expanded as television developed, thus gaining more and more popularity, it was only in the 1990s that this begins to develop as a proper domain for research. According to Gambier (2008: 12), 1995 is the watershed in which studies on AVT start to be recognised, and interest in this field has been growing ever since, as witnessed by the wealth of conferences organised, and publications and dissertations produced. However, if we leaf through the first edition of the Routledge Encyclopedia of Translation Studies (2001), which can be seen as the barometer of the most researched areas within TS, we find no mention of AVT in general (nor of any other term scholars may have used), though one entry is devoted to subtitling and another one to dubbing. The same goes for the Dictionary of Translation Studies (1997), which also emphasises that both dubbing and subtitling have been largely neglected by Translation Studies and, again, it does not make any reference to AVT or any other branch of TS that might include them. Finally, the three-volume

[5] My translation from Italian.
[6] For further reference see Petillo: 2012; Pérez Gonzalez: 2009 and Spadafora: 2007.

Übersetzung, Translation, Traduction. Ein internationales Handbuch zur Übersetzungsforschung (2004) does not include audiovisual translation in its list of text genres but rather loosely refers to a more general "new communication genres" (2004: 1680) encompassing dubbing, subtitling and voice over.

On the one hand, this indicates that dubbing and subtitling were not perceived as part of a discipline but rather as isolated phenomena devoid of a broader framework – an impression strengthened by the fact that most studies at the time were anecdotal and mostly prescriptive. On the other hand, it shows that audiovisual translation was not yet considered a proper research field within TS. It was not until the second edition of the Routledge Encyclopedia of Translation Studies (2009) that an entry on audiovisual translation was found.

A relevant change for the acceptance of AVT within TS was the progressive shift of attention from literary texts and translations as products to the analysis of translations as processes favouring an *a posteriori* approach, i.e. looking into the strategies and methodologies adopted by translators rather than studying the results and looking for errors or inconsistences. An example of such a change can be found precisely in AVT research, as illustrated by Spadafora (2007: 21-22):

> la difficoltà stessa di accesso agli ambienti professionali dove si realizzano le traduzioni e gli adattamenti dei prodotti audiovisivi inevitabilmente presuppone un approccio *product-to-process* che, partendo dall'analisi dei prodotti traduttivi, analizza e descrive l'attività del tradurre.[7]

Moreover, pioneering works like those by Hatim & Mason (1990) also contributed to shift focus away from purely linguistic aspects to a more integrated approach to translation, while accounting for cultural and communicative issues regardless of text type or genre. Their definition of translation as "communicative transaction"[8] paved the way to exploring "less conventional" fields, including studies on dubbing and subtitling.

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[7] "the very difficulty to access the professional environments where audiovisual products are realised and adapted inevitably presupposes a product-to-process approach that, starting from the analysis of the translated products, analyses and describes the translational activity". My translation.

[8] Hatim, B., Mason, I. (1990). *Discourse and the Translator*. London: Longman.

A factor adding up to the current improved status of AVT is the far-reaching impact that computer technology has had on our society lately, as it has changed the way in which we conceive and "produce" communication. There is no doubt that information of any kind is nowadays mostly transmitted multimedially and multimodally, thus taking advantage of the multiplication of channels and codes made available by its deployment through screens. This overall change in mentality has also led scholars to reconsider key concepts like that of "text" defined by semiotics as "any combination of sensory signs carrying communicative intention" (Gottlieb 2007: 3). Remael and Neves take a step forward and reflect on the growing impact of AVT on the production of texts targeting the general public and maintain that:

> [...] AVT appears to be acting as a microcosm of current text production more generally. It reflects the ongoing revolution in text production and consumption that mixes written, visual and aural modes, alternates or combines different carriers, undermines traditional notions such as the linearity of verbal texts, questions the relations of dependence between source and target text(s), and reaches out for increasingly diversified audiences (2007:11).

Such innovative and long-awaited stances have also brought to a redefinition of the relationship between TS and AVT as well as to a re-elaboration of the concept of translation. A working definition of translation in line with this broader view of text has been given by the audiovisual translation scholar Henrik Gottieb (2007: 3), who describes it as "any process or product hereof, in which a combination of sensory signs carrying communicative intention is replaced by another combination reflecting, or inspired by, the original entity".

However, as mentioned at the beginning, audiovisual translation was not immediately accepted as an established discipline within TS. Authors have sometimes lamented this lack of recognition on the part of other linguists, thus spreading the belief that AVT was some sort of Cinderella within TS. Such conviction has held true until recent times but is nowadays no longer realistic, considering the exponential growth of published (see for example the special issue of JoSTrans dedicated to AVT in 2006) and unpublished works, conferences, university

courses and degrees, together with a tighter collaboration with the industry. Díaz Cintas (2008: 1) effectively summarises today's state of the art of AVT as follows:

> Given the flurry of developments we have witnessed in recent years, it could be considered false modesty to start an article or contribution by lamenting the little interest shown in audiovisual translation (AVT) and the scarce activity that, up until now, has been carried out in our field. Though such an (sic) statement might have been true a few years back, the Cinderella mantle that has surrounded this area of knowledge seems to have (partially) evaporated; [...]. AVT is definitely one of the fastest growing areas in the field of Translation Studies (TS) [...].

The concept of text and translation in early TS, the lack of prestige of audiovisual media and their specificity along with the terminological and scientific issues discussed above are the main causes of AVT's absence from the field of TS until recently. However, thanks to the developments within academia and society illustrated and the work of dedicated scholars, AVT has now won its battle for acknowledgement. However, this discipline is still in its infancy and offers plenty of avenues for research. The following sections will be dedicated to exploring one of these, namely audiovisual translation – in particular the creation of interlingual subtitles – and its potential for language learning applications.

1.3 Scope and research questions

Whereas papers on various theoretical and professional facets of AVT now abound, studies on its concrete application to language learning and teaching have been rather scarce so far. Leaving works dedicated to the teaching of the specific professional practices of AVT aside, it is only in the last few years that a restricted number of scholars have turned their attention to the practical use of audiovisual translation as a resource for improving learners' linguistic competence and as a tool that should become an integral part of foreign language curricula.

The present work intends to give a contribution to the growth of this new avenue of research by investigating the *creation* of interlingual subtitles in formal settings by means of specifically designed software, LvS a subtitling simulator and *Translog* a keystroke recorder used for research purposes, and its potential for the improvement of language teaching and learning practices.

The study presented in the next sections started out as a response to two combined factors: on the one hand the results of a preliminary study on students' ability to analyse and assess the translation of audiovisual products and on the other hand the review of the literature on the use of AVT in general and of the creation of subtitles in particular for improving students' performance.

As for the first factor, a preliminary study was conducted on a sample of twenty-one B.A. dissertations written in English between the academic year 2004-2005 and 2009-2010 by students of the degree courses "Mediazione Linguistica e Culturale (MZL)" [Linguistic and Cultural Mediation] and "Lingue, Letterature e Culture Moderne (LCM)" [Modern Languages, Literature and Cultures] at the University of Padua (Italy). The purpose of the study was to look at how students approach translation problems within the field of AVT and whether they have acquired sufficient linguistic and analytic skills to do so, in short if they have acquired translation competence[9]. Their assessment of translation problems and the criteria, theoretical frameworks and classifications they resorted to were used to gain insights into students' linguistic and translational performance at the end of their studies.

The common denominator of all the dissertations in question is their focus on the translation/adaptation of one or more films from English to Italian. Not only do they share a common structure (introduction, overview on dubbing and/or subtitling, analysis of translation problems, conclusions, bibliography) but they also appear to discuss a recurring range of problems. Students were left free to select the bibliographic and audiovisual material as well as the angle to adopt on them, since it is believed that a dissertation should be a somehow faithful representation of a student's competence and critical skills at the end of his/her studies.

[9] The notion of competence used for the study will be discussed in full in Chapter 4.

The results of the preliminary study showed that graduation candidates tend to follow a specific pattern of analysis, combining retrospective and prospective assessment (Chesterman 2000: 123 ff.) : the source text (ST) is object of a preliminary analysis, then the theoretical framework against which the extracts chosen are analysed is illustrated, problems are detected, the target text(s) (TT) is/are discussed mostly on the basis of fidelity to ST and to pragmatic/communicative effect, and a final assessment along with the conclusions summarises the main findings. However, a certain confusion seems to arise when students try to detect translation *problems*, as these are very often confused with subjective *difficulties*. So, non-relevant elements such as the translation of units of measurement, geographical names or idiomatic expressions are analysed because they are perceived as difficulties by students, and hence worth discussing in their theses. This causes even potentially interesting material to be treated in passing, sometimes – or even often – lacking a broader perspective on the whole film.

The dissection of dialogues into smaller parts, mostly at sentence level, and the lack of an overall analysis of works also shows that students struggle to look at the whole picture, which in turn has been found to reflect their way of dealing with the translation of texts in general[10]. Finally, the overall level of English of the dissertations is not always fully in line with the expected outcome (B2 level of the Common European Framework of Reference for Languages: Learning, Teaching, Assessment, CEFR): syntactic and lexical structures as well as collocations often mirror a pattern that is still very close to that of Italian.

As for the second factor, a review of the results presented by the most recent studies, which will be analysed later in this work, seem to lead to the conclusion that the creation of interlingual subtitles is an effective tool to help learners acquire linguistic and translational skills. This not only has all the advantages of “traditional” translation tasks[11], but also strengthens students' listening and reading comprehension and can help them develop pragmatic competence through contact with language used in truly communicative environments. Needless to say, the presence of images, words, gestures and facial expressions at the same time can

[10] See Chapter 4.
[11] See Chapter 1.1

noticeably speed up the process of becoming acquainted with new cultural items too. Finally, it appears that the presence of audiovisual material in the classroom contributes to lower learners' affective filter and cognitive efforts, thus constituting an additional boost to motivation. The former term was introduced by Krashen[12] and indicates a barrier in learners' minds that blocks out input in situations in which anxiety is high or self-esteem and motivation are low; while the latter is understood here as the mental workload required to carry out a certain activity mostly involving working memory.

The results of the preliminary study indicated that students' skills need to be improved for them to acquire fully-fledged linguistic and translation competence. The gaps found in their performances along with the new possibilities offered by active interlingual subtitling have been taken as the starting point of the present investigation. Hence, my first research question is:

> *How can we make the most of interlingual subtitling to develop students' linguistic and translation competence in formal settings?*

This dissertation will investigate a possible methodology and the impact of its application on a sample of third-year B.A. students in the same degree courses as those of the preliminary study.

In order to implement the methodology proposed, two pieces of software have been selected for their characteristics: LvS, a subtitling simulator, and *Translog*, a keystroke recorder. To the author's knowledge there are at present no other investigations combining two such programmes, hence a secondary aim of this study is also to test the real effectiveness of each software and of their combined use. For these reasons, my second research question is:

> *Are LvS and Translog effective tools and can their combined application contribute to implement the above mentioned methodology?*

[12] Krashen, S. (1982). *Principles and Practice in Second Language Acquisition*. Pergamon:Oxford.

This is a broader question that needs to be further specified in order to better pinpoint the specific facets that this investigation will explore. Therefore, the two following addtional sub-questions were devised:

a. does the type of training applied contribute to improving students' cognitive rhythm?

b. can instruction and practice on the translation process lead to an improvement in performance?

The features of each will be dealt with in depth in the next sections; suffice it here to say that they were both trialled in a pilot study with 18 volunteers over three lessons in order to carry out an initial evaluation of their applicability and of their impact on students. The trial was then implemented on a different and bigger sample of students over a longer period of time; additionally, results will also be contrasted with those of a control group.

CHAPTER 2

Literature review: a framework for studying subtitles and subtitling in foreign language learning

2.1 A brief note on terminology

The literature review presented below will discuss works both dealing with subtitles as aid and subtitling as an activity. The first will be henceforth called either (closed-) captions or subtitles and will indicate ready-made written content projected on a screen or impressed on film that report dialogues either partially or integrally. The second is labelled subtitling and indicates the creation or manipulation of written content attached to video.

Captions and (monolingual) subtitles are those displayed in the same language as that of utterances, however for the sake of clarity it may be sometimes necessary to specify the language combination involved. Hence, the terms intralingual or same-language subtitles or the abbreviation L2-L2 will be used when utterances and subtitles are in the same language; interlingual subtitles or the abbreviation L2-L1 will indicate that subtitles are in a language different from that of dialogues. The same distinction is adopted for subtitling.

Finally, the terms learning and acquisition will be used as synonyms here, although some scholars consider them two distinct processes[13].

2.2 Literature review

A considerable number of studies has been carried out so far on the general topic of subtitles/subtitling in connection with various aspects of language learning/acquisition mostly in North-American and European contexts. The vast majority of studies attempted to prove whether and to what extent subtitles have an

[13] See for example Krashen, S. (1981). *Second Language Acquisition and Second Language Learning*. Oxford: Pergamon.

impact on language learners' performance. However, a great number has focused on the effects of watching intralingual and interlingual subtitles as a passive activity (i.e. learners were asked to read subtitles, not write them), sometimes in combination with pre- or post-viewing comprehension activities. In the case of less recent studies, there was hardly an option as the technology was not advanced enough to provide students with professional/amateur subtitle production tools. Today, this line of research is still pursued and investigations focus both on formal and incidental learning[14] in areas such as vocabulary acquisition and retention, pronunciation, listening comprehension, written performance and general foreign language learning both at academic and non-academic level. Studies on incidental learning through subtitles also abound. However, they transcend the scope of the present work, and they will not be considered in the literature review, or only mentioned in passing.

To the author's knowledge, investigations on the use and effects of active subtitling on foreign language learning are still in their infancy, though their results are promising and subtitling can be an effective way of tackling issues in foreign language learning and teaching. As summarised by Incalcaterra McLoughlin (2011: 174):

> research on the pedagogical implications of the use of subtitling in language teaching, however, has traditionally focused mainly on the effects of ready-captioned material on learner's reading and listening abilities and, less often, on oral skills.

The literature review presented in the next pages will first tackle research conducted on the effects of intralingual and interlingual subtitles in different areas of second/foreign language learning, and then approach research on intralingual subtitling.

[14] The term “formal learning” indicates that learning takes place in settings such as schools, universities etc. and occurs intentionally through the guidance of a teacher over a previously established period of time. In such situations, learners are exposed to repeated reinforcement through various types of training. “Incidental learning”, on the contrary, occurs unintentionally in situations and settings in which learning is not required or expected but is the result of (usually repeated) direct experience with a certain phenomenon.

2.2.1 The use of interlingual and intralingual subtitles in formal settings

The next sections will provide a brief overview of the approaches and points of interest in studying the effects of subtitles on L2 learners in primary and secondary education, regardless of learners' native and second language. The time span considered is of approximately thirty years for it is deemed sufficiently representative of the most significant developments of such a young discipline.

Attempts in studying closed-captioned material and its application in formal settings date back to the late 1970s, also boosted by the progressive advances in the knowledge and use of captions. Though pioneering in their endeavour to provide learners with new tools and learning experiences, these earlier studies were often short, exploratory in nature and could not always be compared to one another because of the variety of approaches, scope, language combinations, materials, duration, number and age of participants entailed. Hardly ever were they longitudinal, nor were control groups set up. Also, the theoretical perspective underlying these studies is often varied: some focus on cognitive aspects such as the elaboration of information or learning strategies, some on linguistic aspects such as the ability to acquire new vocabulary or improve listening comprehension and some on pedagogical aspects such as general theories on foreign language learning or learning styles.

Throughout the 1980s and 1990s further research on larger samples of participants and with more specific foci as well as the development of cognitive theories of memory and learning contributed to gaining a better understanding of the relationship between words and images in human mind. In particular, the "dual coding" theory first put forward by Paivio in 1986 – according to which multiple representations (i.e. both verbal and non-verbal) of the same information reinforce memory and learning – and the "priming effect" theory by Jo and Berkowitz (1994)[15] – i.e. our mind can activate associative mechanisms of semantically related memory contents – provided a further theoretical support to the empirical results obtained in

[15] Jo, E. & Berkowitz, L. (1994). "A priming effect analysis of media influences: An update" in Bryant, J., Zillman, D. (eds.) *Media Effects*. Hillsdale: Lawrence Erlbaum Associates, p. 43-60.

studies on subtitles. In particular, studies on intralingual subtitles in the 1980s have emphasised the positive effect of the redundancy of message to enhance overall oral comprehension and general acquisition.

However, the initial enthusiasm aroused by the potentiality of authentic video material in class partly died away when teachers realised how much effort and preparation the selection of appropriate material required, especially when using television programmes[16]. Learners' L2 proficiency also appeared to be a decisive factor in determining the greater or lesser effectiveness of subtitles. Studies on pupils and students with a low L2 level have shown that this is far too engaging a task, as it requires relatively high reading speed and listening skills. Moreover, a number of methodological questions have been raised, as to the type (which film/TV programme?) and extent (a whole film/TV programme or just some sequences?) of the material to be displayed in the classroom; the specific skills that it is supposed to help develop; whether excessive exposure to audiovisual material can cause memory overloads and lead to demotivation because of the speed of subtitles; whether subtitles can be used as basis for exercises, etc[17].

Finally, the technological advances introduced since the early 2000s, in particular the use of DVDs, satellite television, the Internet and the first non-professional captioning software have not only paved the way to new teaching approaches but also modified people's attitudes to foreign languages by making large quantities of FL input readily accessible. As summarised by Gambier (2007:98):

> [...] l'internationalisation des médias, l'accroissement des volumes diffusés, l'accessibilité des langues, leur appréhension en contexte audiovisuel... construisent de nouvelles situations de communication, de nouveaux besoins langagiers et de nouvelles motivations d'apprentissage.[18]

[16] As remarked by Prof. Vanderplank during a speech delivered at the conference "Subtitles and Language Learning", Pavia, 13-14 September 2012.
[17] See Gambier (2007: 99).
[18] [...] the internationalisation of media, the increase in the quantities spread, the accessibility of languages, their comprehension in an audiovisual context...create new communicative situations, new language needs and new learning motivations. My translation.

2.2.1.1 Intralingual and interlingual subtitles for second/foreign language learning purposes

Some of the early attempts to exploit the potential of subtitles for foreign language learning purposes has focused mainly on the development of learners' ability to understand input in a foreign language by means of intralingual subtitles either created by the teacher or available from Teletext (i.e. originally aimed at a deaf or hard-of-hearing audience), VHS or DVD. The type of subtitles taken into consideration greatly varies from study to study, and teacher's choices are certainly affected by the availability of material. Clearly, also the country where studies are conducted along with their preferred audiovisual mode (mainly dubbing or subtitling) play a role in the design of trials.

As already mentioned, research in this field has been conducted on the basis of different methods and in different countries. Hence, while some works are centred on only one combination of spoken/written mode (for ex. audio and subtitles in L2) others include various combinations of inputs administered to randomly divided groups with the specific aim of demonstrating the intrinsic added value of subtitled material over simple aural or visual input (Garza: 1991, Bird & Williams: 2002, Guichon & McLoran: 2007 to mention but a few). The conclusion they all reach is that phonological along with written information favours the comprehension of spoken language, thus leading to the conclusion that subtitled material helps learners to recognise and memorise items. In fact, phonological and orthographical processes are two intertwined channels leading to lexical recognition (Gambier, 2007:103-104). However, for the sake of completeness it will also be accounted for studies presenting data that lead to opposite conclusions.

The areas of interest of most of the studies conducted so far regards the different facets of foreign language comprehension. In some cases, studies only focus on one specific skill (reading, listening, vocabulary acquisition) or on a combination of interrelated abilities. The works discussed below aim at giving an overview on the developments in research on first intralingual and then interlingual subtitles, emphasising the different foci and methodologies applied.

2.2.1.2 Research on second/foreign language learning using intralingual subtitles in formal settings

The benefits of captions on listening comprehension were explored by Berwald (1979), who was amongst the first scholars to use teacher-made captions and project them as slides along with oral and/or visual content. According to the author, these are an effective tool to facilitate learners' understanding of foreign language input and he provides suggestions on how to design and use them in the classroom.

Interest in the relevance of media for second language learning is also shown by Lambert, Boehler & Sidoti (1981), who trialled various combinations of written and spoken messages in L1 and L2 on primary school pupils. Their results suggested that reversed subtitling was amongst the most effective practices for the acquisition of second language skills in general and vocabulary memorisation in particular.

Other trials were conducted by Holobow, Lambert & Sayegh (1984) on English speaking pupils learning French. Following a method similar to the one discussed above but with the introduction of subgroups, each exposed to a different combination of L1/L2 visual (subitles)/aural (dialogue) input, this study too emphasised the efficacy of reversed subtitling and also of bimodal L2 input (dialogues and scripts were both in L2) on the comprehension of aural input.

A seminal work in the didactics of foreign languages with the support of audiovisual material is Vanderplank's *The value of teletext subtitles in language learning* (1988). By using intralingual subtitles on a small sample of European intermediate and high-proficiency learners of English, Vanderplank concluded that exposure to general captioned television programmes (BBC in this case) contributes not only to lower students' affective filter – as students admitted these are beneficial to the comprehension of oral input – but also to their language development in terms of listening comprehension, accent recognition and vocabulary recall.

Almost around the same time Vanderplank also undertook the ten-year long "Teletext 888 Language Learning Project" (1986-1996) where both learner and technology issues were thoroughly explored with the intention of bringing teletext subtitles – i.e. subtitles originally designed for the deaf and the hard of hearing, also referred to as SDH – to the fore and analysing their possible uses as well as limits in

cognitive tasks such as recall and recognition of words, along with orthography and reading skills. However, the author also observed that watching television in a foreign language can be very demanding compared to other media because

> [T]here is too much language, it comes too quickly and it is too culture-bound even for many teachers of English outside Britain to follow with complete confidence. In pedagogical terms, this means not only very time-consuming preparation of programmes (which may, of course, become dated quite rapidly), but also frustration among students at not following, and a need to keep the focus on educational goals, in addition to the inevitable technical problems. In the end, the marginal use of television and video turns out not to be surprising at all. (Vanderplank 1997: 15)

Hence, subtitles can be the gateway to making television an endless resource for FL students by making input comprehensible and enjoyable and also enabling them to watch programmes in a native-speaker-like way. This clearly also raises the issue of the role of teachers on the selection of the material proposed, which needs to be relevant for the target students (on the basis of age and interests) and whose linguistic and cultural input need to be proportioned to their skills, especially in the case of formal settings (Mariotti: 2002). Should it not be the case, students may be faced with an excessive quantity of unknown items and structures, both on the oral (dialogues) and visual (subtitles) channel, and feel cognitively and emotionally overwhelmed. In fact, not only would they find it too hard to make sense of the contents presented, but also be left with a sense of frustration, thus complicating learning or even discouraging it (see for example Gant Guillory: 1998; Caimi: 2006). Garza (1994) even suggests four criteria for the selection of material:

> [F]irst, useful video must contain the linguistic material (lexical, syntactic, phonetic, functional, etc.) desired for instruction. Second, the video segment should be thematically interesting and culturally relevant for the target audience. Third, the selected materials should be multi-layered; that is, they should be able to maintain student interest in the face of repeated close viewing. Fourth, in the ideal segment, the visual images are no less important than the

> accompanying spoken text, and the two depend on each other for complete comprehension of the text.

These guidelines have also informed the selection of material for the activities designed in the present dissertation and will be discussed more in detail in Chapter 4.

Romano Snyder and Colón (1988) tested one hundred seven high school learners of Spanish for seven weeks; these were divided into two groups, with one group exposed to a higher number of different audiovisual stimuli. The results showed that learners benefiting from a more extensive exposure to AV material outperformed the group using traditional teaching methods in vocabulary and listening comprehension. This confirms the above mentioned results (Vanderplank: 1988) on the importance of providing learners with an adequate quantity of stimuli over a period of time sufficient for items to be acquired.

Around the same time, Goldman & Goldman (1988) published a paper reporting on a study conducted on the use of subtitles to improve the reading skills, comprehension, vocabulary and written production of high school students with reading difficulties. Learners were exposed to episodes of popular television series with video, captions and sound on for the first 5-8 minutes and then with sound off. Students were encouraged to follow the episode by reading the captions. This type of material was chosen by the teachers for its appeal on younger generations, thus encouraging them to improve their reading skills through exercise. Learners were then asked to either discuss or write a possible alternative ending to the episode before watching it and to complete post-viewing vocabulary activities. The results obtained suggest improved comprehension and vocabulary acquisition skills as well as increased motivation.

The first large-scale study using ready-captioned material was published by Karen Price in 1991 and involved five hundred participants from twenty different language backgrounds at the university of Harvard. Students were divided into subgroups and exposed to video with and without captions and to a different number of viewings. Her work proved that language acquisition is enhanced through the increased comprehension brought about by exposure to subtitled material, regardless of educational level, and paved the way to further research in this field.

Noticing that more and more language programmes try to utilise video material in foreign language instruction to enhance comprehension skills and attempting to generalise the findings of previous studies, Garza (1991) trials authentic video with Russian and ESL as target languages on two samples of advanced university students. After watching extracts with and without subtitles, students answered multiple-choice questionnaires related to written production, content and vocabulary comprehension. Here too, the repetition of the same message through two channels (oral and visual) proved helpful to the recognition and retention of new vocabulary.

In spite of the apparently successful results claimed in the studies mentioned above, many foreign language teachers argued that subtitles distracted learners and hindered the development of listening skills, as they can comfortably rely on subtitles and ignore the audio track (Díaz Cintas and Fernández Cruz, 2008: 204). According to Borrás and Lafayette (1994) neither position is supported by solid empirical data and no research has investigated the impact of fully duplicating intralingual subtitles on oral communicative performance. The two researchers argue against Garza's findings, stating that vocabulary memorisation does not guarantee its use in the proper context, hence "students should be provided not only with subtitles but also with meaningful practice tasks supported by contextualised linguistic (grammatical and phonological) cues" (1994: 62). In their experiment, forty-four college students of French were divided into four groups and exposed to four different combinations of stimuli and tasks: subtitles + lower-level speaking tasks; subtitles + higher-level speaking tasks; no subtitles + lower-level speaking tasks; no subtitles + higher-level speaking tasks. Learners were assessed on the basis of effectiveness, accuracy, organisation and fluency. According to the results, all subjects exposed to subtitles obtained significantly higher scores, and higher-level task subjects performed best, thus confirming that intermediate/advanced students benefit more from subtitles than beginners.

Gant Guillory (1998) set out to assess the effectiveness of video with keyword captions compared to video with no captions and full-length captions on reading comprehension. Keyword captions are thought to decrease the amount of words learners have to read without affecting the comprehension of the spoken message. Learners were hence divided into three groups, each corresponding to one fruition

mode. Thanks to this study, it has been once again proven that watching videos with subtitles increases comprehension and that keyword captioning appears as effective as full text captions on learners' comprehension skills.

The particularly robust study by Bird and Williams (2002) exposed native and advanced non-native speakers of English to different types of input (only sound, only text or sound and text) in order to assess the possible benefits of intralingual subtitles on spoken word recognition efficiency as well as recognition memory. During the course of two experiments, the researchers have observed that subjects presented with bi-modal input found it easier to learn and recall new words. Moreover, they found evidence that cognitive systems processing auditory and visual inputs are interconnected and interact with each another, leading to the conclusion that captions support comprehension because they increase processing depth.

Further studies have been carried out in order to test the potential of same language ready-captioned material on second language instruction, especially listening and reading comprehension (Markham: 1999), however, doubt is still being raised as to the actual effectiveness of subtitles for improving listening skills and scientific evidence does not appear solid enough. For example, Diao et al. (2007) argue that the cognitive load required for processing multiple forms of the same input (spoken and written text) causes a redundancy effect, i.e. memory has to process the same items twice going through a cognitive overload, thus interfering with content learning, which is clearly in contrast with the findings at the basis of dual-coding theory. Furthermore, it is hypothesised that the positive results obtained in previous studies on the improvement of listening skills may have been biased by interference with actual improvement on reading skills. This means that students have not become better listeners but rather better readers. The authors conclude the study by casting doubt on the validity of research conducted up to then, as it has not been clearly demonstrated that learners have actually developed listening skills and strategies that enable them to face real-life situations, where no written cue is provided; therefore they advise against using captions for enhancing listening skills. Nonetheless, previous data on increased comprehension and vocabulary recall is confirmed.

A similar line of thought seems to characterise the work of Caimi (2006), who supports the use of same-language subtitles for foreign learning purposes. However,

she suggests that pre- and post-viewing activities play a crucial role in the development of aural comprehension skills. Most importantly, she points out that comprehension, vocabulary retention and improved pronunciation are specially reinforced by the reading of subtitles rather than by better listening comprehension. Students surveyed after viewing intralingual subtitled material confirmed that their main focus was on the written rather than the aural track and that pre-viewing linguistic tasks boosted their information encoding processes. In order to encourage students to train their listening skills, Talaván Zanón (2006: 45) proposes to alternate viewings with and without the support of subtitles to gradually accustom them to rely only on aural input.

Finally, a recent study by Winke et al. (2010) is considered particularly thorough. The effectiveness of captions on listening and comprehension skills have been tested, as they are believed to help form-meaning mapping and identify word boundaries, thus making streams of speech more comprehensible. However, it is also acknowledged that it is not yet clear how and to which extent learners process subtitles along with the other channels. Therefore, a sample of one-hundred fifty university students – with English as native language – learning Arabic, Chinese, Spanish and Russian was exposed to three short clips (3-5 minutes) each viewed first with and then without subtitles. The languages with non-Roman scripts were chosen because no research so far has investigated the processing of such captions (except for Garza: 1991), hence it is not clear whether the results obtained with Latin-alphabet languages can be extended to other languages. Their results confirm the validity of previous studies on vocabulary retention and increase in attention, and showed that they can reinforce learners' previous knowledge. Moreover, it appears that watching a video first with captions and then without decreases students' anxiety, and activates selective and global listening strategies. Finally, when L1 and L2 orthography are similar, captions affect comprehension more; when they are not, learners rely much more on the audio input.

As mentioned at the beginning of this review, studies on subtitles have applied a vast number of approaches, methodologies, language combinations and have mostly observed relatively small samples. Hence, even though they all confirm the generally positive value of intralingual subtitles for the improvement of comprehension and

production skills, this lack of homogeneity makes their findings far too specific to allow scientifically solid generalisations. In order to gather sufficiently representative data, the ambitious European project "Subtitles and Language Learning" (SLL) was started in 2009. The two-year long project involved nine universities in eight different countries[19], plus two associate partners. The aims of this longitudinal study were to investigate the impact of both formal and incidental language learning through different combinations of subtitles (L2-L1, L2-L2, L1-L2) on children and adults alike and to:

1. analyse, understand and evaluate programmes/films as a means to motivate language learning (LL) for young people, students, adults, migrants;
2. analyse, understand and evaluate subtitled programmes/films as a tool for intentional LL in an institutional environment and for incidental LL in an informal/natural environment;
3. compare the importance of interlingual subtitles in the process of FL learning for the young people in comparison with adult (self-)learners;
4. compare the different types of subtitles (L2->L1, L2->L2, L1->L2).

It is believed that the wide range of languages involved in the project (Romance, Germanic, Slavonic and Finno-ougric), the different profile and background of a large amount of participants along with their LL situations, and the chance to then use the results to promote motivation in learning FLs and support the linguistic diversity of EU countries can finally answer the question whether subtitles play a major role in FL learning both for more and less widely used and taught languages. However, as emphasised by the project coordinator, Yves Gambier[20], it would be utopian to think that a foreign language can be learned by watching subtitled programmes from scratch, although experiences of partial acquisition with children are sometimes reported.

Furthermore, the project was set up as a response to the growing need felt by the European Union to encourage multilingualism and language diversity, as witnessed by the many initiatives taken between 2003 and 2008, for example

[19] Namely: Finland, Greece, Italy, Lithuania, Poland, Portugal, Slovenia and Spain. For further reference see http://www.sublanglearn.utu.fi/index.html

[20] Speech held at the international conference "Subtitles and Language Learning", Pavia, 13-14 September 2012, which was organised as part of the project dissemination programme.

Promoting Language Learning and Linguistic Diversity: An Action Plan 2004 – 2006, Framework strategy for multilingualism and the *Final Report on High Level Group on Multilingualism.* The belief that subtitles can be a valuable support to language learners is also shared by the EU, which issued the Eurobarometer report *Europeans and their Languages* in 2005 to explore the possibilities offered by interlingual subtitling to all European citizens.

The results of this large-scale investigation are yet to be published, though they will certainly provide the whole scholarly community with in-depth and illuminating information about the actual effectiveness of subtitles in a wide variety of contexts.

2.2.1.3 Synthesis

What has emerged from the studies described above is that research using audiovisual material with same-language captions for foreign language learning purposes in formal settings is now well established and the number of studies on the topic has been growing in the last decade thanks to technological advances and deeper investigations in various aspects of cognition and pedagogy. Initial studies specially focused on the effect of subtitles on learners' attention and motivation (Vanderplank: 1988), on foreign input comprehensibility (Berwald: 1979) and on surveying the value of different subtitling modes (Lambert et al.: 1981, Holobow et al.: 1984). It has later been observed that input needs to be proportioned to the learner's proficiency level (Vanderplank: 1997, Guillory: 1998, Mariotti: 2002, Caimi: 2006) and that subtitles are less beneficial to lower-level learners (Borrás and Lafayette: 1994). A further line of research has dealt with comparing the effectiveness of captioned versus non-captioned material on comprehension (Price: 1991, Garza: 1991, Borrás and Lafayette: 1994, Guillory: 1998, Bird and Williams: 2002). Although many of these studies claim that intralingual subtitles improve listening skills, some authors have argued that increased comprehension of video material must be attributed to improved reading rather than better listening abilities (Diao: 2007, Caimi: 2006, Winke et al.: 2010). General consensus has been reached

on the proven efficacy of subtitles on better performance in vocabulary acquisition and reading.

2.2.1.4 Research on second/foreign language learning using interlingual subtitles in formal settings

The body of research available on the topic of the application of interlingual subtitles in formal foreign language settings is quite restricted. In fact, interest in the issues related to L2 video/L1 subtitles arose later compared to L2 video/L2 captions, as any kind of L1 input has been long excluded by the FL classroom for various reasons (see Chap.1) along with the practice of translation, for they were considered detrimental and have been fully reinstated only in recent times. In the specific case of audiovisual translation, trials on the effects of interlingual subtitles have not abounded until recently, as they were thought to discourage learners from paying attention to the soundtrack in the foreign language and according to the findings of Lambert et al. (1981) and Holobow et al. (1984) they did not seem to facilitate comprehension or general language skills. However, even if subtitles inevitably attract viewers' attention regardless of language combination[21], they do not hinder aural processing, as learners are capable of splitting their attention between visual and aural stimuli at will according to their needs (Gambier, 2007: 106).

One of the few studies on this topic – reported by Gambier (2007: 106) – was carried out by De Bot et al. (1986) with two groups of Dutch learners (one consisting of fifty high school students of English L2 and one of twenty advanced learners who no longer attended English classes) exposed to English news programmes with L1 condensed subtitles. Post-viewing tests on items regarding both content equal to or diverging from the original clearly shows that the oral, visual and written channels are all processed simultaneously. However, what could not be ascertained was what and how much information derives from the aural source.

[21] As demonstrated by the study by d'Ydewalle & Pavakanun (1991). "Watching foreign TV programs and language learning". Leuven, KUL, Laboratory of Experimental Psychology: Report 128. Reprinted in: F. Engel, D. Bouwhuis, T. Bösser & G. d'Ydewalle (eds.) (1992). *Cognitive modelling and interactive environments in language learning.* Berlin: Springer Verlag, p. 193-198.

Lack of studies on the possible advantages brought about by viewing video material with interlingual subtitles in formal settings is also due to the fact that most research in this field has focused on incidental acquisition and has often taken place in some of the so-called subtitling countries, especially the Nederlands, Finland and Belgium where the average good level of English of the population seems related to contact with L1 subtitles since early age. However, the merit of these findings lies in having brought interlingual subtitles and their pedagogical value in second language acquisition to the attention of the research community. In her paper, Danan (2004) examines how both captions and intralingual subtitles can improve listening comprehension skills. Though acknowledging previous research on captions, she also emphasises their limitations: they are not suitable for beginners unless the material presented is carefully selected and contains enough familiar items (Gant Guillory: 1998), as pointed out in Krashen's famous comprehensible input hypothesis[22]. As for the benefits of interlingual subtitles, Danan emphasises the importance of learners' endeavour in matching subtitles in L1 and audio in L2 as well as of "a redundant and interconnected network of encoded propositions" (2004: 72), which leads to more elaborate processing and enhances vocabulary recognition and recall. The role played by emotional factors on learning and motivation are also stressed and she invites teachers to make fruition strategies explicit (reflective attention on both channels) when working with students who are not used to watch captioned/subtitled material. Finally, she pleads for longer-term research able to clarify the effect of both captions and subtitles in the long run and for the elaboration of successful teaching strategies.

Still in 2008, Santiago Araújo laments the presence of an empirical gap regarding the acceptance of translated subtitled material in the FL classroom and the scepticism on the part of teachers in the use of translation as a pedagogical tool. In particular, her 4-year-long research project on teacher training aims at testing the efficacy of intraligual subtitles on oral proficiency. Four groups have been set up (two exposed to subtitled films and two control groups) consisting of adults from 16 to 50 years of age with different backgrounds. Interlingual subtitles were used with beginners to facilitate their learning process and intralingual subtitles with advanced

[22] Krashen, S. (1985). *The input hypothesis: Issues and Implications*. London and New York: Longman.

learners followed by listening and speaking activities. The data gathered during this study showed that learners watching subtitled video (both interlingual and intralingual) performed better in the oral proficiency tests. As for oral production assessed on the basis of pronunciation and fluency using Grant's scale, the subtitle group surprisingly outperformed the control group in spontaneous speech production sounding more fluent and natural.

2.2.2 Intralingual and interlingual subtitles and subtitling

The two main avenues of research previously described have contributed not only to shed light on tools and practices that were formerly unchartered territory, by providing helpful insights into the possible applications of subtitles/subtitling to various aspects of foreign language instruction but have also encouraged further research in the general field of audiovisual translation from a variety of angles other than pedagogy (technical aspects, history of AVT, translation modes, social and cultural impacts, reception of AV products etc.). Another important aspect that has led to the present state of the art (see below) is the fast-paced development of technologies that have allowed researchers to explore new possibilities and practices, as well as to tackle learners' needs in a novel way. In particular, from the early 2000s more and more people have gained access to the World Wide Web and software for the manipulation of video material has progressively become an affordable, readily accessible and user-friendly facility.

Such set of tools has brought to the emergence of more “active approaches” in research and to further investigation in the potential of subtitle creation, both interlingual and intralingual. As stated by Sokoli et al. (2011: 220) “The idea of asking language learners to add or modify subtitles on a video emerged with the view to enlarge the range of exploitable activities”. However, this application of subtitling has been explored by a limited number of scholars, as recounted in the next paragraphs.

An example is provided by the much-quoted paper by Williams and Thorne (2000), who were amongst the first scholars to propose a more hands-on approach to FL learning by means of interlingual subtitling:

> Even for students who have no desire to work in the media, the combination of aural, visual and written elements required in order to subtitle competently makes it [training in interlingual subtitling] unique as a language-learning tool. [...] more practically based and vocationally orientated courses, similar to subtitling, would be of benefit to language undergraduates and would contribute to increase motivation in second language acquisition. (2000: 217)

The two researchers have set up a training programme in interlingual subtitling (Welsh-English) at the University of Wales since 1990 proving to be far ahead of many other institutions. In their work, they emphasise the very many skills learners need to acquire to carry out interlingual subtitling activities. Below are listed those considered most relevant:

1. Listening skills, as understanding video content in a foreign language is far more challenging than in one's mother tongue (Vanderplank: 1997). Furthermore, having to analyse dialogues to then translate them and reduce them requires a full comprehension of the oral input;
2. Reading/viewing skills, which allow the connection between language and visual input (i.e. proxemics, kinesics, setting etc.), whose interaction gives rise to the overall meaning. In this way, learners can observe the interaction of different communicative layers at work and understand "that communication in another language is considerably more than merely stringing together a series of words" (2000: 220).
3. Translation skills ensuring the lexical and pragmatic accuracy of contents in the target language as well as the coherence with the visual information displayed.
4. Editing skills in order to select and reorganise linguistic input preserving the original message.
5. Writing skills allowing a smooth passage from oral to written communication and a suitable choice of register according to the style of the video material. The

language used should read naturally and syntactical units be organised through splitting and punctuation.

6. Reviewing skills and ability to discuss and motivate the choices made. This will induce students to reflect upon their translational behaviour and be critical about their speaking, writing, proofreading and checking skills.

The results of their two-semester-long trial showed considerable improvement on many areas such as: listening skills, vocabulary acquisition, awareness of competence (or lack thereof) in L1, punctuation skills, writing and researching skills and simultaneous improvement of both L1 and L2. The authors also concluded that the implementation of practical subtitling tasks may help to increase students' motivation and drive them to invest more time in foreign language learning activities.

Other works suggesting that subtitles may be beneficial for foreign language instruction have focused on learning about vocabulary and register (Diaz Cintas: 1995), on autonomous learning (Wagener: 2006) and translation skills in general (Rundle: 2000, Neves: 2004). However, a new trend has emerged in recent years that we could label “blended approach”, which seeks to combine research in subtitles as support with subtitling as activity in order to make the most of the intrinsic features of both. So far, this research methodology has been trialled by a small number of scholars on different samples and with different language combinations.

One of the few authors whose work on the pedagogical potential of active and passive subtitling is quite extensive is Talaván's (2006, 2008, 2010a, 2010b, 2011, 2012). According to her studies on Spanish learners of English, the fruition and production of subtitles is beneficial to foreign language learning for a number of reasons and on different levels:

1. They enhance language acquisition irrespectively of students' learning styles because they combine image, text, sound, cultural information, technology etc., thus appealing to different types of intelligence.

2. Learning with video creates a familiar and motivating environment for students, who are nowadays very comfortable in dealing with this type of input and with technology in general. Moreover, video material gives students the chance to work with authentic and up-to-date contents and is flexible enough to allow the use of different linguistic combinations (L2-L2; L1-L2; L2-L1), depending on

learners' level of proficiency and on the type of activities planned. However, it is important to remember that video material and exercises need to be designed with specific criteria in mind in order to avoid either uninteresting topics or disproportioned input.

3. Activities involving the production of subtitles can be carried out both in a face-to-face and distance self-learning environment.

4. The author proposes to combine passive and active subtitling (2010a, 2010b, 2011) in order to make the most of the advantages presented by both. In fact, on the one hand reading subtitles provides a multi-channel input (images, sounds and text) with a reinforcing effect on memory and easier access to meaning thanks to the support of images; furthermore learners feel a sense of security, as they can lean on them to check on meaning comprehension and dialogue condensation, which can be a stimulus to pay attention to the aural channel as well. On the other hand, creating subtitles forces students to re-elaborate content, thus avoiding word for word renderings and enhancing their writing and summarising skills. Also, the specificity and practicality of aims along with the immediate tangible results obtained eliminates the passivity typical of traditional language instruction methods. Finally, students' work can be immediately shared with peers, so that they can compare their performances and learn from each other.

5. Her investigations have mainly focused on how the passive viewing of subtitles together with active subtitling can contribute to the development of listening comprehension skills, vocabulary acquisition and spoken production showing encouraging results both in terms of acquisition and learners' positive response to treatment. Certainly, further research on this methodology is needed in order to gather more data, possibly with linguistic combinations other than English/Spanish.

6. Talaván's latest experimental research (2012) focuses on the combined use of reversed active subtitling and dubbing for the improvement of oral and written production skills. Preliminary results indicate positive responses on the part of students as well as promising outputs.

Condinho Bravo (2008) too shows an interest in surveying different modes of fruition of video material and comparing their effectiveness. In her PhD dissertation,

she reports on three different trials: one with foreign learners of Portuguese exposed first to L2 teletext subtitles and then to the same video without subtitles over four weeks, one with young Portuguese learners (13-14 years old) of English watching videos either with intralingual or interlingual subtitles, and one with undergraduate students of EFL, who first watched extracts with interlingual subtitles and then were asked to subtitle short clips using LvS, a subtitle simulator designed for educational purposes.

The first trial was carried out on a sample of thirty-two learners from different countries of origin (hence with different attitudes towards subtitles) and with levels of Portuguese ranging from elementary to advanced, who watched 6 videos belonging to different genres such as film, music, news etc. According to the results, preference for captions sometimes varies according to the combination of two variables: genre and learners' proficiency level. Hence, some advanced students watching a news programme – which is considered among the most challenging types of input for utterance speed and variety of content – prefer avoiding subtitles, contrary to what elementary-level students reported. However, most learners found subtitled material a valid support for dealing with foreign input and motivation. Moreover, the data on all the three groups showed a positive correlation between the use of subtitled material (L2-L1) and an increased listening/reading comprehension of target items.

The second trial tried to assess the role played by translation in foreign language learning and comprehension and which subtitling mode (interlingual or intralingual) is most effective. According to the results obtained, recall and retention seem to be better enhanced by interlingual rather than intralingual subtitles. Finally, the third trial aimed at testing the effectiveness of subtitling as an activity to improve vocabulary acquisition in general and the memorisation of idioms in particular, along with written production skills. Apparently, the repetition of items necessary to carry out the subtitling task had a positive effect on the learning of new words and expressions. In a later test, students also proved an increased ability in recalling and using items correctly in written production.

Scholars at the University of Galway have also developed an interest in researching the potential of interlingual subtitling as an activity. Incalcaterra

McLoughlin (2009) provides us with very interesting insights into this practice and its relevance for FL instruction. Also, her work is particularly significant for the scope of this dissertation because she focuses her attention on the connection between subtitles and the improvement of language skills through translation. This special task in fact connects two separate verbal systems (L1 and L2) to the same visual input; in order to do this, students need to develop critical and reflective thinking, along with contrastive awareness if they want to cope successfully with the amount of processing required by subtitling. This working on and re-working of audiovisual material necessarily boosts retention of vocabulary and of syntactical structures. It is also worth noticing that the subtitling software becomes a sort of playground, in which trainees can freely and safely test different hypotheses but at the same time are forced to find a balance between rendering language and its different levels (lexis, syntax, pragmatic effect) effectively and making the message fit into the space allowed. Moreover, this process is thought to contrast the tendency (also found in Italian students) to translate word for word and rather focus on semantic units.

Incalcaterra McLoughlin and Lertola (2011) have conducted further research on the applicability of subtitling to language learning. In their discussion of the differences between traditional translation tasks and subtitling, they emphasise not only all of the features previously mentioned by other authors (see above) but also the linguistic and meta-linguistic awareness they raise and the ability for contrastive analysis they develop. What is more,

> audiovisual translation has the added bonus of making it immediately evident that there is a communicative reason for the translation (rather than a grammatical reason, for example), thereby according a meaningful functional dimension to the new TL text. (2011: 244)

In another paper, Lertola (2012) trials subtitling on sixteen learners of Italian to test vocabulary acquisition. She highlights the importance of considering students as "active participants in the learning process", whose learning styles and memorisation techniques along with personal motivation are essential to enjoy successful outcomes. Another relevant point made is the outlook on subtitling seen as task-

induced involvement (Laufer and Hulstijn, 2001) for it comprises the three factors constituting the involvement construct: need, search and evaluation. The first refers to the need for learners to fully grasp the meaning of utterances in order to then communicate it in another language, the second to the search for unknown words, and the third factor refers to the evaluation necessary to select the appropriate rendering. Her results on a small sample of students exposed to L2 to L1 subtitling (6) and a control group (10) exposed to task-based activities on the same video material show that both conditions – exposure to foreign language video material – bring to retention of new L2 vocabulary. However, on a delayed test, learners who have worked on subtitling tasks show a higher retention level, thus demonstrating once again the connection between this task and the acquisition of new words.

Finally, the combined use of intralingual and interlingual subtitles has been put to the test by Caimi (2007) in order to explore their effectiveness on the development of students' awareness and comprehension skills. Her stance on the usefulness of this combination is expressed at the very beginning of her article:

> Intralingual and interlingual subtitled films or TV programmes are precious tools for foreign language learning purposes because they combine the practice of listening and reading comprehension through entertainment. Consequently, they offer stimuli to which learners respond effectively because the use of this kind of multimedia and communication technology in the classroom offers learning opportunities that enable students to practise the foreign language both at cognitive and communicative levels. (2007: 61)

A small number of volunteers (15) was asked to watch a film first in the original language, then with intralingual and finally with interlingual subtitles. Each viewing was preceded and followed by a number of activities (questionnaires, dialogue completion exercises, true/false exercises etc). The innovative design of this study lies in the emphasis put on the importance of group work and peer assessment. Moreover, students wee asked to set up a website containing all the activities carried

out and suggesting improvements, thus taking up the role of teachers as suggested by the learning by teaching approach[23].

2.2.2.1 Non-vocational subtitling courses

The new research perspectives opened up by the studies previously described have inspired and encouraged some scholars to take a further step forward and institute proper non-vocational subtitling courses for language learning purposes either as completely independent units or as modules within standard curricula.

As mentioned in Chapter 1, some universities (especially in the UK and Spain but also in Italy and Germany) have also set up postgraduate courses in audiovisual translation – including modules on subtitling – though with a strong vocational orientation. We will briefly mention here the online postgraduate course in subtitling held at the University of Barcelona since 2003, for its concept and approach have been inspiring part of the methodology applied in the trials reported later in this work. Of particular relevance is the idea that teaching not focused on assessment leads to a deep learning approach

> where the interaction and dialogue in learning – student-teacher/student-student – helps the students towards reflexivity in their study and encourages them to construct meaning. [...] (this) is a key issue in our course in order to teach the many skills within a context and taking into consideration the discourse of each subject material. (Dorado, Orero 2007: 193)

The lack of assessment requirements and the space given to dialogue among peers and with the teachers is deemed fundamental to put students in the right frame of mind to focus on language rather than on performance assessment. In fact, far too often are students more concerned with the content of tests/exams than on the long-term value of acquiring knowledge and skills, which in turn leads to short-term memorisation of notions.

[23] Gartner, A. et al. (1971). *Children Teach Children: Learning by Teaching*. New York: Harper and Row Publishers.

As for non-vocational courses, examples can be found Europe-wide and include the already mentioned subtitling course at the University of Lampeter (Wales) described by Williams and Thorne and the "Sub2learn" on-line project held at the University of Galway[24]. The latter was designed by the Department of Italian Studies in 2010 and offers training materials for interlingual subtitling activities in three languages (Italian, French and English). The website provides some simple guidelines on the subtitling process along with proper training tutorials and a link to a Youtube channel with clips to work on. Also, a section is dedicated to up-to-date bibliography on subtitling in general and for language learning purposes.

The setting up of vocational as well as non-vocational courses centred on the development of language, translational as well as technical skills in the field of audiovisual translation marks not only a trend in the market of audiovisual products but also raises the awareness that the simulated environment of the classroom – where interaction in the foreign language often comes in the form of exercises or prompted dialogues – needs to be balanced with materials and activities anchored in real-life situations, such as those found in documentaries, news programmes and certain film genres[25]. In this way, students are encouraged to explore not only new linguistic items but also cultural contexts different from their own in a constant re-adjustment of perspectives through the understanding and mediation of two realities. The act of translating dialogues then closes the circle and reunites the linguistic and cultural aspects of the original, which will have to be conveyed through a foreign language. The impossibility of modifying the visual input forces students to channel their act of mediation into the subtitles, which will sometimes have to cater for the whole message (visual and verbal) when images display cultural specific content foreign to the target audience. In this way, students will progressively take up the role of mediators, thus adding a further dimension to their translational competence.

The inclusion of such input is certainly also more in line with the learning styles of students of the web 2.0 generation (Talavan 2006: 42), who are no longer comparable to those of the 1980s and 1990s when the first studies on video input for

[24] See http://www.sub2learn.ie/ (last access 12/10/2012).
[25] Even though the orality of films is clearly a prefabricated one, some genres like drama often resort to dialogues displaying lexical and syntactical features and an elocutionary speed shaped on real-life exchanges.

FL learning were conducted. In fact, the relationship to technology in general and to the fruition of video content in particular, has changed dramatically (Gambier, 2007: 108). Even though video input seems to have kept its positive benefits in spite of the generational/technological gap, it is nonetheless necessary for instructional methods and tools to keep the pace with technological advances, which have become an integral part of our society. Excluding them from the classroom would lead to a progressive alienation of teaching methods from real life, thus offering an unsuitable environment for young learners, with a negative impact on their motivation. As affirmed by Díaz Cintas and Fernández Cruz (2008: 214): "In a society ruled by the power of image and flooded by audiovisual products, it seems only natural that audiovisual subtitled material should play a more prominent role in foreign (and native) language instruction [...]."

2.2.2.2 Synthesis

The new perspectives opened up by research on the use of intralingual or interlingual captions in conjunction with the popularisation of new technologies have marked the beginning of a novel line of research, which attempts to combine not only L2-L2 and L2-L1 captions but also takes into consideration the pedagogical benefits of their creation or manipulation. As we have seen in the previous sections, subtitling as an activity has been found to have a number of positive effects on learners of different languages – provided they are not at beginner's level – such as:

- enhanced listening, translational, summarising and writing skills, as learners are "forced" to understand content deeply in order to re-elaborate it in the form of subtitles in their L1. This also ensures avoidance strategies such as word-for-word renderings and stimulates them to search for lexically and pragmatically adequate translations;
- better motivation, as learners feel a sense of accomplishment in seeing their translation immediately "in action" on screen and are aware that they are going to share them with their peers;

- improved language awareness, as learners have a clearer perception of the multidimensional aspects of real-life communication through the analysis of video content and have to make motivated choices when translating;
- increased vocabulary acquisition, as the working and re-working of material along with the association of words and images reinforces the memorisation of items (Condinho Bravo: 2008, Lertola: 2011).

Some scholars have recently explored the possibility of combining the benefits of subtitles as support and subtitling as activity (Talaván Zanón: 2010a, 2010b, 2011; Incalcaterra McLoughlin: 2009; Condinho Bravo: 2008) in order to test whether this approach can help students improve their language skills further. However, too few and diversified are the trials conducted so far to consider the results presented representative enough. Hence, this line of research needs further validation through longitudinal studies, possibly contemplating a higher number of participants with more language combinations available.

2.3 Conclusion

The literature review discussed in this chapter has attempted to sketch out the main developments occurred in the relatively brief history of foreign language learning enhanced by subtitled and subtitling video material. The studies considered here refer to research in formal settings only, regarding intralingual and interlingual subtitles and subtitling, hence discussions on incidental learning or reversed subtitling have not been contemplated or only marginally discussed.

Trials on intralingual subtitles started being reported around the beginning of the 1980s and generally describe small-scale studies based on a variety of samples (children, teenagers or adults) trying to assess the effectiveness of ready-captioned material on learners of different foreign languages and proficiency levels. The trials did not span very long periods of time and explored issues such as general comprehension as well as the improvement of listening and/or reading skills. In this first stage, captions were thought to be beneficial for increasing attention, lower anxiety levels, boost motivation and support the understanding of aural input

(Vanderplank: 1988), though hypotheses were not validated through control groups. Intralingual were chosen over interlingual subtitles because the first were readily available both in films and television (teletext) and because of the little consideration enjoyed by the use of the L1 and translation in the classroom. Later on, scholars also focused on contrasting captioned and non-captioned material in order to prove (or disprove) the hypotheses elaborated in the 1980s about the effectiveness of subtitles on foreign language learning (Garza: 1991, Gant Guillory: 1998, Winke et al.: 2010). Their results seem to all reach positive conclusions regarding the value of this approach, especially in enhancing comprehension and vocabulary acquisition.

Studies with larger samples of participants (Price: 1991, Romano Snyder and Colón**:** 1988) have been then carried out and important advances in cognitive theories of memory and learning such as Paivio's dual coding theory and Jo and Berkowitz's priming effect were made. Both of them emphasised the relevance of repeated input on memory mechanisms, thus confirming the findings of research conducted until then. However, enthusiasm about this new approach soon died out when it became apparent that planning and carrying out activities with the aid of audiovisual products is very time-consuming and does not work with lower level learners (Borras and Lafayette: 1994). In fact, even though captioned television programmes virtually offer large quantities of authentic dialogues, teachers need to filter it and adapt it to the specific needs and levels of learners. Wrongly selected inputs may lead to low motivation/performance and a sense of dissatisfaction and frustration (Gant Guillory: 1998, Caimi: 2006). Moreover, it has been argued that the simple exposure to subtitles does not guarantee acquisition, as contextualised and meaningful cues play a central role in comprehension/memorisation (Borras, Lafayette: 1994).

These studies have also raised further questions as far as methodology is concerned, for example: what kind of material is most suitable? Should whole films or selected extracts be shown to students? What abilities can captioned material develop? Could prolonged exposure to audiovisual material cause memory or emotional overloads and hinder acquisition? Doubts have also been cast on the effectiveness of subtitles for the improvement of listening skills (Diao et al. 2007, Caimi: 2006), as comprehension of audiovisual content is more likely to be achieved

by reading subtitles, rather than understanding aural input. Moreover, the repetition of the same piece of information through different channels may cause cognitive overloads and slow down or even prevent acquisition. Therefore, it is important for students to be guided through targeted pre- and post-viewing activities, so that they will progressively abandon the habit of relying on subtitles for the comprehension of video content and be prepared for real-life interaction.

The review of these works has shown on the one hand that there is an increasing interest in how subtitles can be integrated in classroom activities, on the other hand the data resulting from these studies cannot be extended to all language combinations and learners' backgrounds. For example, very few studies have focused on languages with non-Latin alphabets (Garza: 1991, Winke et al.: 2010) and it appears that orthographic similarities between L1 and L2 contribute more to the positive effects of subtitles. For these reasons, a two-year European project – "Subtitles and Language Learning" – has been set up in order to verify the efficacy of captions on different learners (children, teenagers and adults) with different language combinations in eight different countries. Research has been conducted from 2009 to 2011 both in formal and incidental settings with the additional aim of disseminating good practice on the use of subtitles for foreign language learning purposes. Other important foci of this longitudinal study are the impact of subtitles on motivation and the effectiveness of different combinations (intralingual, interlingual and reversed subtitling). Final results are not available at the moment, however such large-scale study will certainly provide a considerable amount of data on a wide range of subjects and backgrounds to reflect upon.

So far, research has paid considerably less attention to the potential of interlingual subtitles for foreign language instruction. Such lack of interest is caused by a combination of concomitant factors. First of all, technology has only recently allowed us to watch programmes or films accompanied by subtitles in different languages. Before the advent of DVD and of digital compression systems it was not possible to select or exclude subtitles in a foreign language from a film. As a result, it was much simpler to turn to either teletext subtitles (either recorded on VHS or CD-ROM) or films with same-language captions. Moreover, learners' native language along with translation have been banned from FL instruction until recent times

because they were mostly associated with the Grammar-Translation Method (see Chapter 1) and because purely communicative approaches, which did not allow the use of L1, were the most widespread. Moreover, L1 subtitles were thought to be detrimental to listening skills, as students may simply read subtitles in their language to access content. This meant their exclusion from research in formal settings altogether, an empirical gap that can be still witnessed nowadays. It is for this reason that the impact of interlingual subtitles has been mostly studied in incidental learning conditions, especially in countries where this is the preferred mode of fruition of foreign audiovisual products such as the Netherlands, Finland and Belgium. However, this body of research has contributed to raise scholars' awareness on its potential and to encourage further investigations, as stated by Danan (2004), who wishes for more long-term research for both modalities.

The second part of the literature review was dedicated to recent developments in the use of both interlingual and intralingual subtitles as support and as activity. Once again, technology plays an important role in the design of methodologies, as the widespread of the internet along with ever more accessible software for the creation of amateur subtitles has offered teachers and students new ways of working with audiovisual materials as well as the possibility to design new activities. As emphasised by a number of scholars (Williams and Thorne: 2000, Talaván Zanón: 2006, 2010a, 2010b, 2011, Incalcaterra: 2009, Incalcaterra and Lertola: 2011) interlingual subtitling presents many advantages for foreign language learners. For example they contribute to develop all four general skills (reading, listening, writing and speaking) along with translational abilities. In fact, students need to pay special attention to lexis, linguistic structures and pragmatic accuracy both when they watch the video and when they translate it, thus also contributing to the development of a multi-layered notion of communication. This, in turn, stimulates learners to abandon a word-for-word approach and embrace translation as an act of mediation between two cultures involving all the channels present in audiovisual communication. It has also been found that students increase their abilities in discussing choices and strategies and compare them with peers; they also experience a sense of self-accomplishment for seeing a concrete purpose in their translating with a considerable increase in motivation.

In recent times scholars have been testing the possibility of blending the advantages provided by the combination L2-L2 subtitles and L2-L1 subtitling activities. In this way, the advantages described above can add up to those of passive subtitles, namely: effectiveness of audiovisual input irrespective of individual learning styles, authentic and up-to-date materials and long-term effects on vocabulary recalling. According to the results obtained, this approach is beneficial to the improvement of listening skills, vocabulary acquisition and spoken production.

A fairly recent tendency has witnessed the development of both vocational and non-vocational courses dedicated to audiovisual translation in general. This shows a trend in the job market, which seeks language specialists with technical competences, and a trend in education, which turns to audiovisual products to introduce native-speaker-like material presenting learners with authentic dialogues and culturally challenging items. Needless to say, this approach is also more suitable to the learning styles of the younger generations, who are much more responsive to input presented in the form of images and sounds, rather than on paper.

CHAPTER 3

An analysis of the relationship between language learning, technology and audiovisual translation

3.1 Language learning, technology and AVT

There is clearly a tight connection among foreign language learning, technology and audiovisual translation, in particular subtitling. The present chapter will look at different aspects related to the interaction of these three elements such as the reasons why the introduction of technology and subtitling in the classroom can be a positive stimulus for learners; how technology has changed the way students approach texts and their whole learning process and how new software can help us cast a light on learners' translation processes; and finally the little debated issue of how methodologies relying on subtitling software can still be valid even when this is no longer up-to-date.

3.1.1 Why integrate subtitling in language programmes at undergraduate level

The topics dealt with in Chapter 1 and 2 – i.e. the role of translation in foreign language learning/teaching and that of audiovisual translation within translation studies, and the development of research in the active and passive use of subtitles in foreign language instruction – clearly share some common ground. The connection between the two lies in how the methodologies and findings described in the literature can be put into practice to assist foreign language learners in the development of further knowledge and skills.

The type of language classes considered here are not those held in vocational courses or at faculties for translators and interpreters but rather those using translation as one of many instructional tools to achieve language proficiency that are typically found at undergraduate level. This type of translation has been defined by Delisle (1998: 26 in Stewart: 2008) as “pedagogical translation” as follows:

“Academic, or pedagogical translation is intended to help the student acquire the rudiments of a language, or at a more advanced level, to perfect his style. It is never an end in itself, but always a means”.

As noticed by Stewart (2008), this use of translation does not contemplate aspects such as a possible target readership, the translation brief and all of those “real-world” considerations affecting professional translators' choices. As a consequence, students often fail to grasp the communicational aspects entailed by the act of translating – as these are not sufficiently (if at all) emphasised in class – and rather tend to see it as an exercise consisting of transposing words from one language to another. Besides, this way of looking at texts greatly favours word-for-word or sentence-for-sentence approaches, which are clearly detrimental to both language and translation learning. In the words of Snell-Hornby (1992: 18 in Stewart: 2008): “someone who has spent years using translation as a means of practising grammar structures and vocabulary as in Latin classes, automatically assumes that this is what translation is – a kind of linguistic transcoding”. This may also have negative repercussions on students' motivation, especially when translation tasks become more and more complex and language expertise alone is not enough to cope with the creation of a coherent and communicatively effective text.

Without denying the advantages brought about by “traditional” translation exercises, it should also be acknowledged that experience has proved that these are not sufficient. In fact, they should be integrated with tools that provide students with tasks centred on the communicative value of translating and that give them a sense of concreteness and accomplishment. Working with video content and with the translation of dialogues through subtitling can help learners reflect on aspects such as readership/audience's expectations, lexical accuracy and fluency, or register. Clearly AVT is not seen here as the panacea for all ills but rather as a further means for supporting learners in the development of specific skills and knowledge as well as in the deepening of particular linguistic and cultural aspects. As mentioned in the previous chapter, subtitling activities need to be carefully planned ahead with clear-cut objectives and an accurate selection of the video material; also, the way exercises are administered and how the material is presented to students deeply affects the learning process.

Why does all this matter to research in audiovisual translation for FL purposes at undergraduate level? It is deemed relevant because investigations in this field have been primarily empirical, as the top priority was and is to ascertain once and for all whether, how and to which extent the use of audiovisual resources in the language classroom can be beneficial to foreign language learners. Besides, most efforts have focused so far on post-graduate vocational courses, which are exclusively designed to develop specific skills in the field of AVT and assume that learners already possess an adequate command of their foreign languages. As confirmed by Incalcaterra McLoughlin and Lertola (2011: 243) "[...] literature on the integration of subtitling in FL curricula and its effectiveness is perhaps less extensive, even though there is considerable interest in this area".

Now that the results obtained in the studies carried out in the last few decades seem to point to positive responses on the part of a wide range of learners in terms of vocabulary acquisition, listening, reading and speaking skills, it is also time to reflect on how all this can be applied to long-term general FL teaching and learning. We should now turn our attention to undergraduate language programmes in degrees such as those of languages and intercultural communication[26] and try to integrate AVT, and in particular subtitling, in the language curriculum, if we want the body of research conducted so far to be fully exploited. Clearly, this does not imply the exclusion of "traditional" FL teaching methods, as the audiovisual approach works best with intermediate/advanced learners, but rather it seeks a profitable way to include subtitling as a complementary tool for the development of language competence. Far too often are audiovisual resources seen by language instructors as one-off activities or projects, without being actually integrated within language programmes in a strategic way.

These reflections have been inspired both by my personal experience with students of the undergraduate degree course "Mediazione Linguistica e Culturale"

[26] Such degree courses aim to train future "cultural mediators" rather than professional translators. As pointed out by Blini (2008) becoming a mediator entails a much broader set of skills such as the understanding of interethnic and intercultural issues or socio- and ethnolinguistic comminication competences. An account on the role of cultural mediators in Italy can be found in Siebetcheu Youmbi (2011).

[Linguistic and Cultural Mediation][27], who seem to have greatly enjoyed and profited from their experience with subtitles and by Martine Danan's wish that "current interest in multimedia will lead to the development of language curricula and self-learning programs integrating captions and subtitles while encouraging in-depth pedagogical research on their most effective use" (2004: 76).

As emphasised by Calvo (2011: 10), recent trends in curriculum development have insisted on the importance of meeting the requirements of the job market[28], in particular special attention is now paid to interaction with computers, the internet and their impact on cognitive processes and activities; to knowledge transferability and integration; and to the ability of dealing with information management and selection in consideration of the large amount made available by the modern media. Furthermore, the shift from teacher-centred transmissionist approaches to student-centred socio-constructivist (Kiraly: 2000) ones along with the introduction of task-based learning (Hurtado: 1999 and González Davies: 2004) has also brought to the fore the importance of meeting learners' needs and of progressively empowering them.

The introduction of activities centred on audiovisual translation is deemed to fit well into this framework, as these offer the opportunity of meeting all of the requirements described above. First of all, AVT is strictly related to ICT knowledge and even if students are not trained to become professional subtitlers, nonetheless they need to learn how to interact with software and internet resources in order to complete their tasks. Moreover, some pieces of software currently used in translator training – but that can also be applied to more general language courses – have been designed to shed light on learners' cognitive processing while translating and can be used in association with subtitling software[29]. Secondly, working on the translation of audiovisual resources requires the ability of quickly acquiring new information and integrating it with our own world knowledge in order to transpose it into another language. What is more, intercultural mediation and summarising skills are paramount in such contexts, which are regarded as highly transferrable skills.

[27] In this degree course translation is not taught in order to train professional translators but rather as a tool for the development of language competence.
[28] Or as defined by Kearns (2008: 195) "the increasing commercialisation of education".
[29] This particular aspect will be specifically dealt with in Chapter 4.

Thirdly, the activities proposed through subtitling can be exploited to better meet students' learning needs such as intercultural knowledge, vocabulary acquisition, listening/reading comprehension and writing, and can be designed accordingly. As already mentioned (Talaván: 2010a), the use of video material suits all types of learners regardless of their learning styles, hence it can help overcome the difficulties typical of traditional FL teaching, which may sometimes be suitable only to certain types of intelligences. Finally, the subtitling of a video can be broken into a number of sequential tasks (other than being considered a task in itself) aiming at achieving different learning outcomes. For example, pre- and post-viewing discussion can help develop students' textual sensibility and speaking skills, background information research can be used to teach students how to select reliable sources when looking for appropriate terminology or field-related information, etc. In this way, language classes become an occasion in which students actively test and train their abilities and can learn from the work of their peers.

There is a further aspect worth noticing. English today is no longer spoken only in countries where it is the official language or one of them, but has become a lingua franca, i.e. it is used by non-native speakers to communicate with other both native and non-native speakers of English. The spread of English was first described by Kachru,[30] who coined the expression "World Englishes" to indicate the different varieties of English spoken around the world divided into three circles: the inner circle is constituted by those countries where English is traditionally the first or native language (UK, USA, Australia, New Zealand, South Africa etc.), the Outer Circle is made up of those territories where it is a second or non-native language (India, Nigeria, Kenya, Pakistan, Bangladesh etc) and the Expanding Circle consists of those countries where English is used as foreign language. Students are very likely to interact with speakers of all these varieties either during or after their studies and the use of audiovisual material may be a valid support for them to become acquainted with the phonetic, lexical and syntactic features of such varieties.

All of these considerations along with the findings reported in Chapter 2 point to the fact that subtitling – and AVT in general – can be considered an integral part

[30] Kachru, B. (1992). *The Other Tongue: English across cultures* (second ed.). Urbana: University of Illinois Press.

of any language learning course, as already stated by scholars such as Diaz Cintas and Fernández Cruz (2008), Talaván Zanon (2006), Kruger (2008) and Incalcaterra McLoughlin and Lertola (2011). In his article, Kruger (2008:79) discusses the advantages of using subtitling in the training of professional translators, however, what he says can also be applied to those language courses using translation for FL instruction:

> Care has to be taken to integrate subtitling with the more generic training and to utilise it optimally: firstly to expose students to benefits related to the constant need for creative translation solutions, often requiring agile lateral thinking skills, and secondly to introduce them to subtitling as a possible field of specialisation.

The trials carried out for the present work have tried to put subtitling into practice with the precise aim of helping students discover the advantages of this activity and make the most of it to improve their language and translation competences.

3.1.2 The impact of new technologies on the learning and teaching of languages

Advances in computer technology have been affecting many aspects of our daily lives and nowadays interactions with computers and similar devices have become indispensable to perform tasks that were either inconceivable before or that needed face-to-face contact. Such progress has clearly influenced both the way foreign languages are taught and the way they are learnt. As we have seen, research in FL instruction is constantly on the lookout for novel tools and resources that may bring improvements to teaching methodologies.

Interest in the use of computer technology to enhance foreign language learning or CALL (Computer-Assisted Language Learning) has appeared quite early in the literature. In particular between the years 1990 and 2000 two hundred forty-two articles were published on this topic, most of which focused on vocabulary learning and reading comprehension (Liu et al. in Romero et al: 2011). Very few of

them mentioned the use of video, and the prospect of applying subtitling or other AVT techniques to language learning was not taken into consideration, since the technology at the time was not advanced enough to allow an easy and instant manipulation of video content. However, even in recent works on CALL such as those by Chapelle (2003) or Levy and Stockwell (2006) the contribution that the active or passive interaction with video content can give to FL learners has been neglected altogether. This is also the case of the European INTENT project[31], which started in 2011 and set out to spread the use of telecollaboration in universities as a tool for vitual mobility in FL education. In fact, when the authors talk about technology or computers, what they have in mind is mostly CMC (Computer-Mediated Communication) via e-mail, chat or forum, the creation or use of corpora, web publishing, or distance learning in general. Yet the use of video material and its manipulation (be it through subtitling, dubbing, voice-over etc.) for educational purposes would not be possible without the aid of computers and dedicated software.

The exclusion of AVT from a discussion on recent works on CALL may be attributed to three key factors. First of all, the fact that studies on the pedagogical application of AVT to FL instruction are relatively recent – though scholars have developed an interest in the use of subtitles since the early 1980s, in dubbing and voice over since 2000s – and may be little known outside of the circle of specialists dealing with it. Secondly, AVT does not enjoy full institutionalisation, as it is still taught in dedicated vocational or non-vocational courses at university level and only in very recent times have we witnessed an interest in AVT from teachers of primary and first-level secondary education[32]. Thirdly, teaching with video material may be perceived as less accessible in comparison to e-mails or chats, and asking students to subtitle or dub a video certainly requires expertise on the part of teachers first, who may be discouraged by both lack of equipment and by the specific technical skills needed. Also, such expertise has to be passed on to students, who will also need to work on tailor-made materials. Both the creation of materials and their implementation requires the adoption of a specific methodology of task ordering and

[31] http://www.intent-project.eu/ (last access 24/02/2013).
[32] During the already mentioned international conference "Subtitles and Language Learning" held in Pavia on September 2012 there were also contributions from non academic environments reporting on experiments on the use of subtitles with pupils and teen-age students.

assessment, along with a considerable amount of time inside and outside of the classroom. As emphasised by Chapelle (2003: 37), little attention is paid by CALL research to the concrete development of teaching materials, which is often only focused on corpus-based research and needs analysis.

Mention of the use of SDH (Subtitles for the Deaf and the Hard of Hearing) within a CALL perspective was made in a 2010 European project named "POOLS-M"[33] dedicated to the use of ICT in language teaching methods. However, SDH was listed under the range of activities for the teaching of foreign languages dedicated to hearing impaired subjects only, which leads us to think that subtitles/subtitling activities have not yet been acknowledged by CALL practitioners as helpful tasks for all kinds of students. All of the factors mentioned so far may explain the absence of AVT from discourse on CALL, however the greater accessibility to software and the widespread use of AVT in the foreign language classroom will hopefully contribute to a more open approach towards audiovisual translation.

Another point deemed relevant for the present discussion is the impact that technology has on texts and mental processes. Indeed, one of the factors that have marked a change in our society is the progressive shift from the dominance (and the prestige) of the spoken/written word to that of the image. The latter has progressively become the preferred channel of communication and this process is likely to have started when television became a medium of mass communication and then evolved with the spreading of internet use. In 2003 Kress had already registered this change and predicted:

> Language-as-speech will remain the major mode of communication; language-as-writing will increasingly be displaced by image in many domains of public communication, though writing will remain the preferred mode of the political and cultural elites. The combined effects on writing of the dominance of the mode of image and of the medium of the screen will produce deep changes in the forms and functions of writing. This in turn will have profound effects on human, cognitive/affective, cultural and bodily engagement with the world, and on the form and shapes of knowledge. (Kress 2003: 1)

[33] See http://languages.dk/index.html (last accessed 25/10/2012).

Almost a decay after these predictions, we can say that Kress has captured the essence of today's preferred communication strategies: orality has taken over written expression and images/screens over words and books. Moreover, writing is progressively becoming ancillary to video, as it is used more and more as a transcription/summary of speech, thus turning into a further visual channel. This change in the way we perceive, construct and "consume" knowledge and information along with its availability regardless of time and space constraints has deeply affected our perception of what is central and what is peripheral, and this is particularly true for the younger generations. This means that the information we receive needs to be selected, i.e. some inputs will be at the centre of our attention (we cannot watch or read everything that is made available to us); at the same time information becomes obsolete very quickly, so that what a few hours earlier was central may soon be now marginal. Such process is even faster in the case of web browsing, where attention spans all but a few seconds and information needs to be immediately and clearly displayed, or it will be ignored and users will move on to the next website[34]. This in turn contributes to give a sense of abstractness and volatility to information, so that a greater amount of input does not necessarily correspond to an increase in knowledge. On the contrary, the habit of treating information as something volatile and temporary hinders concentration and deep thinking, with possible impacts on long-term memory as well.

Moreover, input comes from different sources like mobile phones, computers, televisions, mp3 players etc. often all at the same time so that we find ourselves bombarded with images and stimuli that force us to split our attention. My personal observations on students also led me to hypothesise that long-term exposure to sources of extraneous cognitive loads causes a progressive loss of the ability to focus on one single element for prolonged periods of time, which is precisely what is required to acquire new knowledge or skills. In fact, students seem to find it hard to keep sustained attention for long and are easily distracted; on the other hand, any multimodal stimulus immediately attracts their attention, which is probably

[34] See for example the report by Elon University School of Communication for a debate on new technologies and their effect on young people's learning skills http://www.elon.edu/e-web/predictions/expertsurveys/2012survey/future_generation_AO_2020.xhtml (last accessed 24/10/2012).

symptomatic of a well-established habit of giving priority to this type of input rather to monomodal ones.

In spite of the omnipresence of moving images and of their captivating power, hardly ever are we formally taught how to deal with them, i.e. how to critically analyse their content and how to cope with the language of multimodality in general. The apparent straightforwardness of audiovisual material may lead us to think that the messages it sends are simple and immediately comprehensible, however this is far from being the case. Today's educational system, both in Italy and probably in many other countries, has not yet tackled the issue of teaching learners how to cope with the redundancy and mixed quality of information and to develop strategies to keep attention and concentration high. Technology is affecting the way young generations process, store and retrieve information with an impact on their learning capabilities. Hence, the way knowledge and skills are taught needs to be re-thought through and re-equipped with methodologies and tools that on the one hand keep guaranteeing a high standard of education and on the other hand allow learners both to manage new technologies and to make the most of them.

As far as the teaching and learning of foreign languages is concerned, I believe that the translation of authentic audiovisual resources can help fill the gaps discussed above. In the specific case of subtitles/subtitling, educating students to analyse multimedia input – which is an essential step to carry out any translation task – can both become a highly transferrable skill and, as mentioned earlier, help students develop better translation strategies and tackle texts with greater awareness of their communicative function. Moreover, working on short clips trains students to stay focused on specific tasks and/or materials for relatively long periods of time (sometimes for one whole class), thus favouring concentration and deep thinking processes. A more thorough description of theories on cognitive processes and their relationship to subtitles/subtitling and language learning will be given in the next chapter, as these theories also inform the theoretical framework of the study.

Whereas on the one hand the use of new technologies can pose challenges to young learners, on the other hand it can become a valuable source for the learning of foreign languages through subtitles/subtitling. There is in fact a clear connection between the two, as emphasised by Díaz Cintas and Fernández Cruz (2008: 214) and

by Kruger (2008:78), who makes it clear that solid IT competences are important in order to use subtitling as a translation exercise in courses that are not aimed at training professional subtitlers. Other authors such as Sokoli, Zabalbeascoa & Fountana (2011: 220 ff.) have emphasised both the relationship between ICT and subtitles/subtitling and the benefits of their combined use. According to the Becta[35] (British Educational Communications and Technology Agency) report quoted by the authors, ICT appears to be a valid support for the acquisition of the four key FL skills (reading, writing, listening and speaking) thanks to the vast array of information and learning input available, to the possibility of using resources according to the learner's own pace, and to the greater interest for learners to come into contact with the foreign language they are studying generated by watching films with subtitles. It should also be noted that these authors are among the designers of the LeViS project, which created LvS, the subtitling simulator used in the trials held for the present work.

Another supporter of the utilisation of technology (subtitles in particular) in the foreign language classroom is Caimi (2007). Quoting Kearsley and Shneiderman's engagement theory[36], she maintains that technology holds the quite unique ability of catching students' attention and prompting their engagement in learning activities; this principle, originally developed in the framework of distance learning, seems to be applicable to task-based foreign language instruction as well. This position is also in line with Chapelle's (2003: 36) stance on technology, who maintains that it can provide immersion in the language in ways that were not possible before the internet. However, she continues, immersion alone is not enough, as it needs to be guided by specific methodological principles. Hence, the importance for learners to have a good command of ICT understood both as the ability to technically deal with computers as well as to manage computer mediated content has clearly a repercussion on FL

[35] The agency was closed on 31st March 2011 and its work is now being carried out by the Department for Education (DfE) and the Department for Business, Innovation and Skills (BIS). For further information see http://www.education.gov.uk/aboutdfe/armslengthbodies/a00192537/becta (last accessed 24/10/2012).

[36] Kearsley, G. and Shneiderman, B. (1999). *Engagement Theory: A framework for technology-based teaching and learning*, available at http://home.sprynet.com/~gkearsley/engage.htm (last accessed 24/10/2012).

learning through subtitling, provided that learners are guided through this process on the basis of a well-designed methodology.

3.1.3 The issue of out-of-date software

A topic that seems to be absent from the literature on the use of software for FL instruction is the relationship between the development of instructional methods and the problem of out-of-date software. In other words, what can we do when the new version of the operating system of our language laboratories is no longer compatible with the old (and reliable) version of our software, or viceversa? What happens to the activities specifically designed to work with it?

This issue is deemed relevant for the present work (and hopefully for that of others too) because language teachers make ever more use of such instruments and because this is the case with one of the two pieces of software used in this study. It is now a well-established routine for software and computer manufacturers to either provide users with updates, if they want to keep being competitive on the market, or to dismiss a little remunerative product and replace it with a more profitable one. If instructors decide to implement software developed for educational purposes, as in the case of LvS and *Translog* (see Chapter 4.2 for a thorough description of their features and functions), and that the project has been allocated a time and budget limit, then we may be soon faced again with the problem of incompatibility and out-of-date software.

The problem can be tackled in a number of different ways, depending on the users' needs and possibilities. If we think that by updating our software, we might have troubles with our current operating system, then this should be postponed as much as possible. However, this also means that we will not enjoy the benefits (should there be any) of the new version, which can be equipped with better graphics, additional features or smoother interaction among its components. Another option would be to ask manufacturers for possible fixes in such cases of incompatibility.

In the eventuality that we are employing a piece of software that is no longer updated because it was part of a research project (like those funded by the European Union or other institutions) or because manufacturers stop investing in it, then we might need to find alternative products with similar functions. In the case of LvS, a non-professional subtitling simulator designed in the framework of the LeViS European project (2006-2008), no updates are available anymore, as the project expired four years ago. So far no compatibility issues have been found with the latest Windows version (Windows 7), however this problem is likely to come up soon, as operating systems are updated approximately once a year.

The market of free non-professional subtitling software is nowadays thriving and alternatives to LvS can be found on the internet. For example, Subtitle Workshop[37] seems to be quite popular among language instructors, as it supports all subtitle formats, has a user-friendly interface with 35 languages available, allows to customise subtitle font and colour and has a spellchecker, amongst many other features. The only disadvantage in comparison with LvS is that Subtitle Workshop does not allow to prepare and save activities beforehand, so that students do not need to take care of the spotting process. With Subtitle Workshop, the spotting stage has to be done in class under the teacher's supervision, which entails a considerable waste of time if we think that students are generally not familiar with this process and that this is not among the aims of the activity. DivXland Media Subtitler[38] has also been used in trials with foreign language learners and, although its functions appear more limited compared to those of Subtitle Workshop, it is a suitable alternative in foreign language instruction settings. Another software available for free is Aegisub[39], although I am not aware of studies or trials conducted with it. It is compatible with Windows, Mac and Unix operating systems (though the last two are less stable) and is regularly updated for fixes.

Future prospects in software development may consider to abandon desktop software and turn to on-line platforms in order to fully overcome system compatibility problems and interventions on the part of technicians for installations and reparations in language laboratories. A response to this need has already been

[37] http://www.urusoft.net/products.php?cat=sw (last accessed 28/10/2012)
[38] http://www.divxland.org/subtitler.php (last accessd 28/10/2012)
[39] http://www.aegisub.org/ (last accessed 28/10/2012)

given by part of the team who designed LvS, who has now embarked in a new European-funded project called Clipflair[40], whose beta version has been released in January 2013. The 10 partners of the project have created a platform where videos can be uploaded and then subtitled, revoiced or both. The aim of the project is to help learners practice all four language skills and create an involving and stimulating environment also thanks to web 2.0 features such as a wiki, a forum and tags. Once again however, it is not clear what will happen once the project expires and whether the platform will be kept up to date afterwards.

In the case of software specifically designed for research in Translation Studies such as *Translog*, updates and online support are granted on a regular basis and fixes are provided when incompatibility with new operating systems arises, as in the case of users of Windows 7. More and more options in the field of TS are at hand nowadays thanks to open-source software that can be made available to teachers and students. This has the further advantage of being constantly updated by developers or users themselves and is often portable, since it can be stored in a USB memory stick. Flórez and Alcina (2011) have compiled a Catalogue of Free Software for translators divided into four categories: editing and publishing, language tools, translation tools, and management tools.

[40] http://www.clipflair.net/ (last accessed 28/10/2012).

CHAPTER 4
Methodology

4.1 Theoretical framework

The next sections will provide the reader with a more detailed perspective on the theoretical as well as the practical insights informing the study. In particular, special attention will be given to the relevance of cognitive theories of translation, to the theoreitcal underpinings of the use of subtitles and subtitling in foreign language learning, and a description of the competence model applied in the study.

4.1.1 The process-oriented approach and the need for a cognitive theory of translation

As mentioned above, one of the theoretical foundations of the present research lies in the so-called process-oriented approach to translator training. Although interest in what goes on in the translator's mind has probably begun with translation itself and has long been central to TS, systematic empirical research in the field only started in the 1980s with the general purpose of gaining a better understanding of psychological and linguistic mechanisms involved in translating (Jääskeläinen 2001: 266). The emergence of research in cognitive processes, then, has coincided with the development of investigations based on functional theories of translation, thanks to which attention has started to be paid to the translator and his/her actions and not only to the target text. Such coincidence of interests in looking at processes and the impact of translators' subjectivity on them as well as at a broader range of text typologies has certainly marked an important evolution in TS.

By borrowing experimental methods from a variety of fields such as cognitive psychology and writing research, attempts have been made to formulate, test and refine hypotheses about the processes entailed by the act of translating. The most popular approach consisted in training would-be or professional translators in

verbalizing their thoughts while translating and record them in order to gather data that would otherwise be impossible to access, considering that mental processes are not directly observable. This method of eliciting unedited data is the already mentioned Think-Aloud Protocols (TAPs), which have been seen by some theorists (structuralists) as an effective alternative to access translators' black box, while they have been harshly criticised by others (behaviourists) for their interference in the translation process itself. In fact, TAPs cannot be considered a faithful representation of cognitive processes, if we understand them as neural activities rather than as information processing present in the working memory, and hence accessible to conscious attention. Moreover, when processes become automatic due to extensive practice they also become unconscious, i.e. they are no longer registered by the working memory and subjects are not capable of verbalising them.

Later on research has set out to explore more specific features such as explicitation or a specific stage of the process such as revision behaviour of translators[41] and has often triangulated TAPs with further methods of investigation such as keystroke logging and eye-tracking, a method first implemented by the TRAP (Translation Process) project at the Copenhagen Business School. However, doubts still persist as to the reliability of TAPs as a means to accurately reflect thought processes, as different experiments report on considerably different amounts of verbalization produced by subjects. This may be justified by the different quantity of automatic processes going on in the subjects' mind or by motivational and emotional factors, or else by insufficient preparation, very difficult tasks etc. (Jääskeläinen 2011: 127). The expectations of researchers as to the amount of verbal output to be produced by subjects may also account for biased evaluations on the data collected.

Other two interconnected aspects which have been deemed relevant in process-oriented studies are problem-solving and decision-making. Earlier findings have shown that language learners tend to approach texts at a language surface level – which also confirms the data gathered in my preliminary study – while translation

[41] A study of explicitation in Russian-Swedish translation can be found in Englund Dimitrova, B. (2005). *Expertise and Explicitation in the Translation Process*. Amsterdam/Philadelphia: John Benjamins. Revision in Taiwanese translators was analysed in Shih, C. Y. (2006). "Revision from translators' point of view. An interview study." *Target*, 18 (2), p. 295-312.

students and professional translators tap into both their textual and world knowledge. Much debate has also aroused regarding the notion and categorisation of translation problems themselves, hence it is not particularly surprising to find quite a lot of different definitions and to acknowledge that the scholarly community has not yet reached an agreement on this (Palumbo 2007: 59). Problem-solving and decision-making then are also pertinent to automatised processing, and here another important difference can be found between learners and professionals: while the first seem to encounter fewer potential problems because of lack of awareness, the latter identify many more, thanks to their higher competence and text sensitivity (Jääskeläinen 2011: 130).

One of the goals of the empirical studies on cognitive processes conducted so far have been to try and formulate hypotheses to understand "the need for learners to comprehend linguistic input and to notice gaps between their knowledge and the target language" (Chapelle 2003:39). In order to do this, learners need to develop a special form of intelligence constituted by both specific knowledge and skills, which, according to Wilss (1996: 37) are the two sides of the same coin of translator performance. Together they constitute the pillars of the information-processing procedures employed to "determine the conditions for situationally satisfactory translation processes and to substantiate them evaluatively". This means that concepts from cognitive psychology can be beneficial to investigations in the nature and development of such specialised form of intelligence, since the interconnection between translation studies and cognitive psychology lies in the ability of the latter to provide the first with a scientific "central concept" constituted by an objective and a subjective component (Wilss 1996: 41).

The awareness of such a tight interconnection between TS and cognitive psychology has called for a further step forward in recent years and the need to develop a comprehensive cognitive theory of translation has emerged. One of the most prominent contributions is the work (still in progress) by Sandra Halverson, who draws on Langacker's concept of Cognitive Grammar, with a special emphasis on the notions of construal and conceptual content. These are understood respectively as the "ability to conceive and portray the same situation in alternative ways" and as an entity being constituted by a domain, a domain matrix and a

schematic network (Halverson 2010b: 21). In order to understand the meaning of a linguistic expression we need both construal and conceptual content; moreover, the first appears to be assimilated to what are usually known as "shifts" or "strategies" and also includes the so-called "universals of translation", i.e. "linguistic features which typically occur in translated rather than original texts and are thought to be independent of the influence of the specific language pairs involved"[42]. This means that the act of translating is seen here as a construal process where translational relationships are linked to underlying psychological processes.

However, a comprehensive cognitive theory of translation is yet to be fully developed since it needs to draw on a variety of disciplines, each based on models and methodologies which are not necessarily commensurable. In fact, both representational and processing aspects need to be accounted for but

> at the current stage of theoretical development [...] we do not have definitive answers regarding the relationship between representational and processing factors. Our models must strive towards compatibility, at least (Halverson 2010a: 365).

4.1.2 A theoretical basis for the use of subtitles and subtitling in language learning

The study described in this and the next chapter, which is aimed at testing the effectiveness of subtitles and subtitling tasks on linguistic and translational skills is mainly informed by theories related to the cognitive processes involved in learning activities, which suggest that inputs transmitted through different channels can speed up and reinforce acquisition.

One of the authors who dealt with the creation of a model accounting for the functioning of human memory and information processing is Roger Bell (1991). This model draws on theories in psychology and linguistics related to human communication in the broader attempt to create a theory of translation. What is

[42] Laviosa-Braithwaite, S. (2001). "Universals of Translation" in M. Baker (ed.). *Routledge Encyclopedia of Translation Studies.* Routledge: London/New York, p. 288.

relevant in the present discussion is that Bell was amongst the first to develop a sophisticated model of the translation process based on a relationship between memory and information processing. Bell devotes a whole chapter to the description of human information-processing and to how sensory stimuli are received, transmitted and elaborated by the different types of memory storages, which also accounts for the basic mechanisms of learning.

A development of this stance can be found in the work by Talaván (2010: 288), who states "[...] the production of subtitles for selected authentic video clips, combined with the use of subtitles as a support, is a fairly novel idea with promising benefits for foreign language students". This statement is not only very encouraging but is also rooted in a theoretical framework built on three relevant theories accounting for the functioning of the brain when processing external multi-channel input, namely: Mayer's Cognitive Theory of Multimedia Learning, Paivio's Dual Coding Theory and Information Processing Theory. These three theories have been selected since they account for and explain cognitive processes involved in the reception and re-elaboration of input from external sources and how they can be effectively stored in memory.

As recently as 2009, Mayer elaborated a Cognitive Theory of Multimedia Learning, which rests on the basic assumptions that the human mind is equipped with two information processing channels, one elaborating audio and the other visual information; that every channel can process a limited amount of information at one time; and that acquisition occurs every time external contents are actively elaborated in our memory.

Mayer defines multimedia instruction as follows: "the presentation of material using both words and pictures, with the intention of promoting learning" (2009: 5). The term "words" – Mayer goes on to explain – refers to anything in verbal form, no matter if this is printed or spoken text while the term "pictures" is to be understood as any material presented in pictorial form, be it illustrations, graphs, photos, videos etc. As we can see, the author's approach is open to the learning of potentially any subject and contemplates a wide range of visual supports. Hence, it was not specifically designed to address the learning of foreign languages through subtitled and subtitling material. However, the theoretical framework he presents based on the

idea that instructional messages should be designed in the light of how the human mind works (2009: 6) provides a sound basis to explain how and why the interconnection of words and images delivering the same message can enhance FL learning.

Important insights supporting the effectiveness of watching subtitled video material for FL learners are given by Mayer's basic assumption that humans have two information processing systems, one for verbal and one for visual stimuli. When using multimedia input, we manage to exploit both systems and their respective capacity to process information. In other words, activating both channels means that we can offer learners a double exposure to the same material. However, Mayer understandably warns us that words and images cannot be said to deliver exactly the same message in the same way. This lack of equivalence in quantitative terms is counterbalanced by the qualitative features of the two types of stimuli presented. The fact that words and images are intrinsically different means that they can complement each other in conveying a message, so that "human understanding occurs when learners are able to mentally integrate corresponding pictorial and verbal representations" (2009: 7). Once again, it appears clear that the success of activities making use of audiovisual material heavily relies on the mutual pertinence of images and dialogues, which should be leading learners to the construction of coherent mental representations. Such considerations are of paramount importance during the selection and design stage of activities, if we want to achieve successful learning outcomes. This point will be further discussed in section 4.1.4.

The discussion regarding the work with multimedia material in the classroom can also be extended to its active use. According to Mayer, active learning is the key to obtaining meaningful learning outcomes, however learners should not simply be behaviourally but also cognitively active. This means that learners need to be engaged in activities that require some form of information processing in order to be completed. Although Mayer mostly discusses and defends the value of behaviourally passive activities characterised by active cognitive processing, he also contemplates the possible effectiveness of both behaviourally and cognitively active tasks. In fact, this is the case of interlingual subtitling, which requires learners first to understand content in the original language and then to mentally and concretely re-elaborate it in

their mother tongue. Hence, students will be required to carry out a number of complex cognitive processes and to then put them into practice through written translation. According to this theory, the whole subtitling process can successfully lead to meaningful learning outcomes.

This set of premises lies at the core of Mayer's Cognitive Theory of Multimedia Learning. Its basic principle is that multimedia instructional materials need to be designed according to what we know about how the human mind works, rather than being simply informed by the type of content to be presented or considering learners as containers to be filled in with a set of notions. The model shown below represents how multimedia external input is processed by and stored in the human mind, thus giving rise to active learning processes.

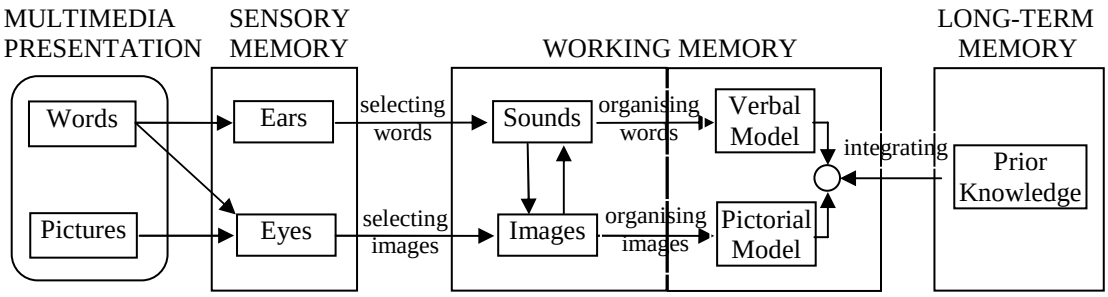


Fig. 1: Mayer's model of a Cognitive Theory of Multimedia Learning (2009: 61).

The boxes represented in the model correspond to memory stores (i.e. sensory, working and long-term memory). If we read this diagram from left to right, we can see on the far left side that when we watch multimedia presentations, these display information in the form of both words and pictures, which enter sensory memory through eyes and ears. Sensory memory captures these stimuli as exact visual and auditory images and is able to retain them for a very limited amount of time.

This set of information is then passed on to working memory where it is temporarily held and consciously re-elaborated. On the left half of the working memory box we can see that visual and sound images are still raw material that needs to be worked out. The arrows that connect them signify the conversion of sounds into images and of images into sounds. For example, is we hear a certain word (e.g. tree) our working memory will produce a corresponding mental image (a tree); if we are exposed to a certain image, our working memory will form a corresponding mental

sound of that word. Afterwards, words and pictures are reorganised (right half) through the integration of the verbal and pictorial models constructed during the previous stage in order to build a coherent set of knowledge. Considering that working memory has a limited capacity and can process a restricted quantity of information at one time, only some of the words and images received through our senses will be selected and then organised. The incoming information that filters into the working memory is regarded as the most meaningful.

This newly acquired information can then be integrated with previous knowledge stored in long-term memory. Moreover, this is where larger amounts of knowledge are permanently (or at least for long periods of time) kept and can be recollected when they are "brought" into working memory during the elaboration process described above. In short, active learning occurs whenever multimedia input goes through cognitive processing producing a set of coherent mental representations, which can also be related to and integrated with previous knowledge.

As pointed out at the beginning of this section, Mayer's theory rests on one important premise: the existence of two different interrelated channels in the human mind, which are responsible for the processing of visual and verbal stimuli. This was first postulated by Paivio (1986) in his Dual-Coding Theory and is considered particularly important for the purposes of this work for its fundamental contribution to research in the potential of audiovisual material to foreign language instruction. As we saw in Figure 1, whenever our eyes are subject to external visual stimulation through static or moving images or on-screen text, our visual channel starts processing it; whenever our ears are presented with aural stimuli, it is the auditory channel that processes the information received. Each channel can then be conceptualised on the basis of two different approaches: either according to presentation mode or to sensory modalities. In the first case a distinction is made between verbal (i.e. spoken or printed words) and non-verbal (i.e. any type of image and/or sounds) stimulus. If we opt for this categorisation, then we will postulate that one channel will be dealing with the processing of words and the other of images and non-verbal sounds.

While this is the approach proposed by Paivio and is centred on format, the second is put forward by Baddeley (1999) and focuses on how stimuli are

represented in the working memory. In other words, the two channels singled out by Baddeley are those constituted by our ears (or articulatory/phonological loop) and eyes (or visuo-spatial sketchpad). If we refer once again to Figure 1, we can see that the first channel (ears) captures spoken words or any other sound stimulus, while the latter (eyes) is responsible for the collection of visual stimuli (static and moving images or printed words). In this sense, the model presented by Mayer is an attempt to harmonise these two perspectives and account for both presentation mode and sensory modality. However, further research is needed in order to clarify the exact interaction among these factors in the human mind.

Finally, the third theory informing the present study is Information Processing Theory. This too is encompassed in Mayer's model (fig. 1) and revolves around the idea that the memory system is divided into three storage structures – namely sensory memory, short-term memory and long-term memory – and that learning can be approached through the study the mechanisms underlying them. A succinct definition of this theory is given by Wang and Shen (2007: 8), who state that it "focuses on how the human memory system acquires, transforms, compacts, elaborates, encodes, retrieves, and uses information". According to this theory, information from the external environment is first captured through our sensory receptors (eyes, ears, nose, mouth or touch) which hold it for a very short time. This information may either be retained, if the stimulus pattern is recognised, or lost, if it is not. All external stimuli that pass this first filter are initially stored in sensory memory and then processed in working memory. The passage from sensory to working memory occurs whenever subjects are conscious of the stimulus received or whenever this is recognised as a known pattern. While in sensory memory information is still "raw" (or non-processed), in working memory information is processed and organised in coherent units because these are converted from sensory input to iconic (in the case of visual information) or echoic (verbal and aural information) input. Finally, if consciously re-elaborated information is retained long enough or if it is connected to previous knowledge, then it will be kept in long-term memory, which, unlike the previous ones, has an unlimited capacity of storing and retrieving knowledge.

What is particularly significant for language learners about this theoretical framework is the presence of a visual and a verbal channel, whose capacity can be

exploited to reinforce external input coming from audiovisual material. When students are exposed to subtitled material, information (or at least the most meaningful parts of it) is replicated in the two channels, thus providing learners with a double stimulus. Hence, it is crucial for learners to focus their attention on the stimulus and its conscious processing occurring in the working memory, if we want the information proposed via audiovisual material to be acquired. This process and its relevance for subtitled/captioned video-based instruction is shown below (Wang and Shen 2007: 13).

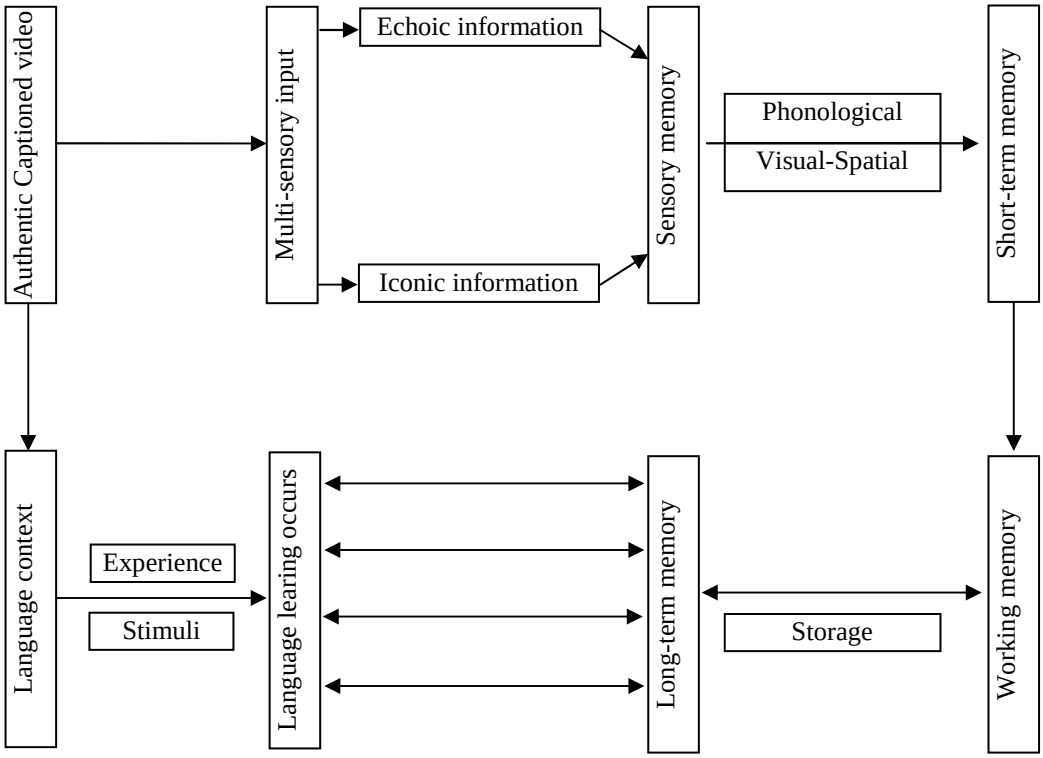


Fig. 2: Language learning through subtitled video

Finally, we should keep in mind that in order for the whole learning process described above to take place, it is fundamental for learners to pay attention to the content they are presented with and to be motivated enough to steadily work on the development of their language skills over time.

As for the essential role played by attention, Schmidt (2001: 3) points out: "there is no doubt that attended learning is far superior [to unattended learning], and for all practical purposes, attention is necessary for all aspects of L2 learning".

According to the author, attention is a complex psychological construct constituted by a number of intertwined mechanisms such as alertness, orientation, detection as part of selective attention, facilitation and inhibition. All of these subsystems (though they do not necessarily intervene all at the same time) are responsible for the control of information processing and behaviour. Schmidt's point of view appears largely in line with the conceptualisation of learning through memory mechanisms provided in this section and reinforces the claim that completely or partly new knowledge necessarily requires active attention.

The importance of being motivated in order to achieve effective learning is discussed, amongst other authors, by Chapelle (2003: 39), who considers motivation "as essential for making the cognitive effort to engage in the processes of comprehension". Moreover, the European Union as well has tackled the issue of motivation in foreign language learning stating that:

> Motivation is a key, if not the key, to successful language learning. Enhancing learner motivation is the crucial element in achieving the desired breakthrough in language learning across Europe. It is here that schools and teachers play a role of paramount importance. Positive experience in language learning at school is likely to encourage people to take up and continue language learning at a later stage (Condinho Bravo 2009: 199).

The effects of the use of audiovisual material on motivation have already been discussed in section 2.2.2. What is hoped is that a methodology including subtitles and subtitling may create a virtuous circle – the richer the stimulus, the higher the performance – helping learners to fuel their motivation in learning foreign languages in the long term.

4.1.3 The concept of translation competence and the PACTE model

The main reason why the present study has been carried out was to design and test a possible methodology able to integrate already existing language learning practices in the undergraduate course Linguistic and Cultural Mediation Studies at

the University of Padua. The need for an integrative method has arisen from a survey on undergraduate students' ability to select, analyse and discuss translation problems in their final dissertations. The results of this preliminary study have highlighted the fact that not all students reach the translation competence level expected at the end of higher education. If on the one hand such poor performance may be attributed to subjective factors such as students' (at lest partial) lack of commitment or motivation, on the other hand one cannot help but wonder whether such trend can be inverted by review of current teaching methods. This should be by no means understood as an attempt to rebuild the whole curriculum of the degree course nor to exclude the application of other methodologies and/or practices but should rather be considered as an additional contribution to current teaching methods and practices.

The main conclusion emerged from the preliminary study is that learners' translation competence needs to be further enhanced and developed. This is why the notion of translational competence plays a central role in the economy of this work and will be discussed in this section. First, a number of different perspectives on this concept will be given and then the notion of competence applied for the present study, which is strongly inspired by the work of the PACTE group, will be thoroughly described.

Debate around what translation competence is and how it can/should be best developed has been going on for approximately the last forty years, with scholars proposing a considerable number of approaches ranging from initially linguistic definitions (Wilss 1976), to cognitive and constructivist approaches in the 1980s and 1990s, with a turn towards more vocationally-oriented perspectives influenced by the advances of technology and the progressive interest towards the translation dynamics and needs within the profession more recently (for a detailed account see Orozco and Hurtado Albir: 2002, Pym: 2003, Calvo: 2011).

For the purposes of the present work it is important to emphasise the distinction between *translation* and *translator* competence. Although these terms have often been used as synonyms in the literature. This terminological "overlapping" may well be attributed to the little importance enjoyed by translation as a means to improve foreign language skills until fairly recent times (see section 1.1), which has probably led TS scholars to consider translation solely within the

perspective of vocational training within academic institutions. In this sense, translation competence – instead of only indicating the use of translation in FLL – has also been associated with the set of sub-competences to be acquired in order to become a professional translator, rather than with a tool for language learning purposes.

A basic working definition proposed here is that translator competence be understood as the set of sub-competences and skills deemed necessary to train professional translators within either academic or vocational environments, hence including (but not limited to) the use of CAT Tools and terminology management tools, Web design, localisation, management of video content and attitudinal and strategic competences. Gouadec (2007 in Kapsaskis 2011: 164) provides a very detailed list of what the modern translator – i.e. the translator of the digital era – is supposed to be trained to become:

> an information management expert, technician, terminologist, phraseologist, translator, adapter, proof-reader, reviser, quality control expert, post-editor, editor, graphic design expert and Web page designer, technical writer, Web site designer, Web page integrator, file manager, macro-command writer and in some cases IT specialist, all rolled into one.

Gouadec's list is an example of what Pym (2003: 485) defines as a multicomponential model of competence, that is translation competence is seen as the sum of a (potentially endless) number of sub-competences, which are included without distinction between means (e.g. translation memories) and ends (e.g. being able to proofread a text for publication) and often without going through critical assessment or empirical validation. In fact, there are still very few examples of competence models validated by empirical data (for example see the work by Göpferich: 2009 or the extensive number of publications by the PACTE group).

According to Pym (2003: 488), competence cannot be approached in a systematic way as grammar or phonetics is and cannot be neatly defined. For this reason he proposes a minimalist definition of functional competence:

- The ability to generate a series of more than one viable target text (TTI, TT2… TTn) for a pertinent source text (ST);
- The ability to select only one viable TT from this series, quickly and with justified confidence.

> We propose that, together, these two skills form a specifically translational competence; their union concerns translation and nothing but translation. There can be no doubt that translators need to know a fair amount of grammar, rhetoric, terminology, computer skills, Internet savvy [...] but the specifically translational part of their practice is strictly neither linguistic nor solely commercial. It is a process of generation and selection, a problem-solving process that often occurs with apparent automatism.

Although such definition has the clear advantage of escaping the shortcomings of listing a number of ideal abilities learners are supposed to acquire, its purposeful vagueness leaves us in the dark when it comes to concretely understand how to teach students effective ways of selecting such *viable target texts* among the different options they may be struggling with (Way 2008: 90). However, Pym's stance has the merit of having focused the discussion around competence on critical issues, such as the proliferation of approaches based on sometimes far too rich lists of competences to be possessed by the ideal translator and the need for translation to remain at the core of scholars' attention. In fact, while there is no doubt that technology has become an indispensable instrument in translators' everyday life, we should also acknowledge that strategic decision-making behaviour is what distinguishes skilled from unskilled translators.

An interesting translation competence model combining Pym and the PACTE group's (cf. next page) proposal is that put forward by Gaballo (2009). Her Systemic Functional model (SF model) consists of a core competence divided into problem-posing and problem solving (Pym's series of viable target texts) and a background competence (roughly corresponding to PACTE's strategic competence) connected to the general ability of planning and to the specific capacity of understanding and producing texts, and including extra-linguistic, sociocognitive, epistemological, instrumental, professional and linguistic competences.

The type of translation competence we are looking at in this investigation is adapted to the more general scope of language learning and is not concerned with the training of future professional translators (or at least this remains one of the many options) but of proficient language mediators. In this context, translation competence needs to be considered as one out of a number of tools for improving foreign language performance and develop linguistic and intercultural awareness. This means that any technology-related competence taught (in our case subtitling) is instrumental to the language learning process and that technical aspects are not dealt with whenever possible. However, this does not mean that translation should be seen/taught as a merely linguistic exercise in which a set of pre-established rules is mechanically applied. On the contrary, what we seek to achieve by improving students' competence through subtitling is to make them see translation as a communication-oriented activity in which situational context and pragmatic effects are as important as the actual wording. Hence, even though students are aware that translation may not be part of their professional future, it is indispensable for them to acquire the ability to understand and render utterances expressed in a foreign language.

The specific translation competence model chosen for the present investigation is mostly based on PACTE group's research work. The group consists of thirteen researchers[43], who have been active since 1997 as a competitive research group and then, since 2002, have been recognised by the Government of Catalonia as a consolidated group. It was initially a member of the Institute of Neuroscience at the Autonomous University of Barcelona (2001-2009) and is now a member of GReCO (Research Group on Competence) of the Polytechnic University of Catalonia.

The acronym PACTE stands for Procés d'Adquisició de la Competència Traductora i Avaluació (Process in the Acquisition of Translation Competence and Evaluation) and the group's main research interests include both empirical and experimental-based research on translation competence and its acquisition in written

[43] Namely: Allison Beeby, Mònica Fernández, Olivia Fox, Anabel Galán, Gabriele Grauwinkel, Anna Kuznik, Wilhelm Neunzig, Patricia Rodríguez, Lupe Romero, Margherita Taffarel, Stefanie Wimmer, Luis Miguel Castillo and Gisela Massana-Roselló.

translation; translator training; empirical and experimental research in Translation Studies and new technologies in translation research[44].

Although their competence model is originally designed for the training of translators, it was deemed the most suitable amongst those proposed so far for the purposes of research in translation applied to foreign language learning. The reasons for this choice are manifold:

1. The PACTE group's work on translation competence started out in 1997, which makes it the longest longitudinal study on competence ever conducted;

2. One of the key factors in the development of the model is that it has been undergoing continuous revision on the basis of empirical testing, which means that the theoretical framework proposed is the result of both top-down and bottom-up validation procedures. In fact, a first version was presented in 1998 and revised afterwards in 2000 in the light of the results obtained in the initial exploratory test. This feature lacks in the biggest part of other models proposed so far by translation scholars (an exception is the three-year long TransComp project[45] held at the Institute of Theoretical and Applied Translation Studies at the University of Graz). Moreover, the validity of the Rich Point system as a procedure to assess translation quality has been proven in an exploratory study by Castillo presented at the IATIS conference in 2012[46].

3. The model put forward is concerned with an analysis of both translation as a process (by gathering data through experimental studies) and as a product (by analysing the translated texts produced by the participants in the trials), since the PACTE group's general hypothesis is that "the degree of expertise in translation (i.e. translation competence) is reflected in both the process and the product of translation" (2011a: 320). This outlook on the notion of competence is also central to the approach and the tools utilised in this investigation;

4. The definition of competence given by PACTE (see below) is in itself quite open-ended and avoids the type of multicomponential definitions so harshly criticised by Pym (2003). Moreover, the main focus is on the act of translating in itself rather than

[44] Taken from: http://grupsderecerca.uab.cat/pacte/en (last accessed 1/11/2012).
[45] Cf. http://gams.uni-graz.at/fedora/get/container:tc/bdef:Container/get (last accessed 1/11/2012).
[46] The abstract of the study can be found at http://www.iatis.org/images/stories/IATIS_2012_Abstracts_prefinal_version.pdf (last access 26/02/2013).

on the acquisition of additional expertise to be acquired in sight of a potential future as professional translator.

The definition of translation competence elaborated by the PACTE group is the following:

> *the underlying system of knowledge required to translate.* (PACTE 2008: 106)

According to this definition, translation competence (TC) is strictly linked to a field of expert knowledge – and not all bilinguals possess it –; it mostly entails procedural rather than declarative knowledge – the ability to use the first is also what distinguishes the skilled from the unskilled translator –; includes a number of intertwined sub-competencies; and comprises a strategic component, which constitutes one of its fundamental elements. It appears that in this view there is no real distinction between the notion of competence and that of knowledge, as one comprises the other. This means that knowing "what" (i.e. declarative knowledge) and knowing "how" (i.e. procedural knowledge) are seen as two complementary rather than separate aspects. This position is also defended by Kearns (2008: 193-4), who claims: "there is an indivisibility of theoretical and practical knowledge which must be acknowledged in the consideration of translation competence".

The TC model put forward by the PACTE group can be schematised as follows (PACTE: 2011a):

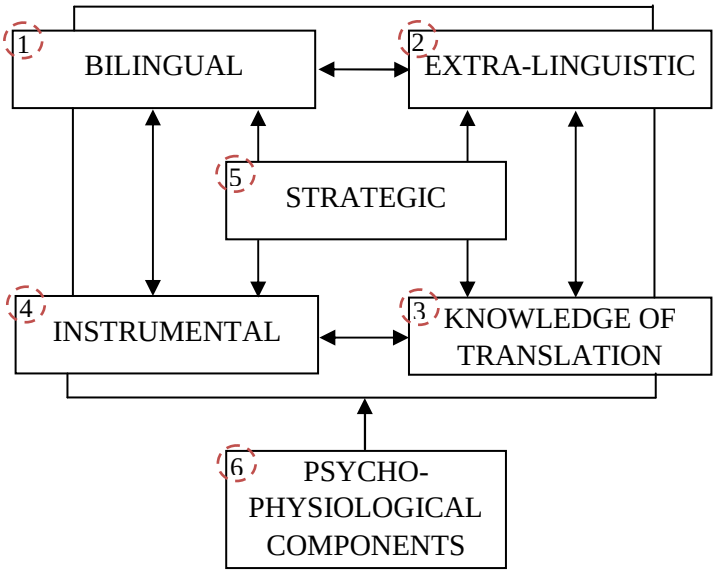


Fig. 3: PACTE holistic translation competence model (numbers are my addition).

The competence model pictured above consists of five fundamental interrelated sub-competences (numbers 1-5) and of one extra component (number 6). Below are the definitions provided by PACTE group for each one (2011a: 319):[47]

The *bilingual sub-competence* (1) is "predominantly procedural knowledge required to communicate in two languages. It comprises pragmatic, socio-linguistic, textual, grammatical and lexical knowledge".

The *extra-linguistic sub-competence* (2) is "predominantly declarative knowledge. It comprises general world knowledge, domain-specific knowledge, and bicultural and encyclopaedic knowledge".

The *knowledge of translation sub-competence* (3) is "predominantly declarative knowledge about translation and aspects of the profession. It comprises knowledge about how translation functions and knowledge about professional translation practice".

The *instrumental sub-competence* (4) is "predominantly procedural knowledge related to the use of documentation resources and information and communication technologies applied to translation (dictionaries of all kinds, encyclopaedias, grammar's style books, parallel texts, electronic corpora, search engines etc.)".

[47] My emphasis.

The *strategic sub-competence* (5) is certainly the most important, as it is the central element which coordinates the functioning of all the other sub-competences. It is "procedural knowledge to guarantee the efficiency of the translation process and solve problems encountered. [...] Its function is to plan the process and carry out the translation project (selecting the most appropriate method); evaluate the process and the partial results obtained in relation to the final purpose; activate the different sub-competences and compensate for any shortcomings; identify translation problems and apply procedures to solve them".

The *psycho-physiological components* (6) include "memory, perception, attention and emotion; attitudinal aspects such as intellectual curiosity, perseverance, rigour, the ability to think critically etc.; and abilities such as, logical reasoning, analysis and synthesis, etc."

For the purposes of the present investigation only four of these sub-competences will be taken into consideration, since the sample observed here is made up of language students – rather than professional translators and foreign language teachers – and the main goal is to try and assess the acquisition of translational competence. Therefore, the next sections will be devoted to the illustration of how this model was adapted to the purposes of this study and the methodology applied.

4.1.4 Adapting the PACTE competence model to language students: the study research design

The competence model proposed by the PACTE group has been taken as the main point of reference for the development of the methodology used in the experiments, however it could not be adopted *in toto* but rather needed to be adapted to the specific target and purposes of the present study. The sample surveyed by the PACTE group consists of professional translators and foreign-language teachers and their tasks aim to assess their translational competence both in active and passive translation activities. In the present investigation instead, the sample consists of language students, who may or may not become professional translators in the future

and the tasks proposed set out to test a methodology able to improve their competence in passive translation within the wider framework of language learning and its improvement, in the light of a preliminary study showing their need to strengthen key areas such as lexis, syntax and pragmatics. Considering that both the samples studied and the aims to reach differ, methodological adjustments were deemed necessary. For these reasons the sub-competences surveyed will be only four: bilingual; knowledge of translation; instrumental; and strategic. For a more detailed account on the sub-competences and their evaluation please refer to the next section.

First of all, the fact of having to train learners and not test a group of experts means that the methodology of my investigation needs to be centred on individual and group classwork as well as on ways of improving learners' performance rather than just observing it. Clearly, this has also had a repercussion on the choice of data gathering methods, since these had to fit in the schedule allowed to the trial as well as in students' timetable. Moreover, as all lessons were held in a language laboratory at the University of Padua because students needed one computer station each, the time available for data collection was also subject to their availability throughout the semester in which the trial took place. Finally, the fundamental need to provide students with the necessary tools to develop greater awareness of the translation process and of the basics of subtitling also meant that part of the lesson had to be dedicated to provide guidelines on how to use these tools and perform tasks. Because of such time restrictions, the methodology applied needed to allow for enough time to administer the material (usually in the form of slides), carry out all the stages of the activities and allow time for final discussion. The occurrence of technical problems or students' difficulties in handling the software (which actually occurred during the trial) were taken into consideration as another potential time-consuming factor.

However, time and logistics – though crucial – were not the only factors that influenced decisions regarding methodology design. Theoretical implications were also central in envisaging how to structure lessons, select the most suitable activities and collect and analyse data. As far as the first point is concerned, lessons were structured on the basis of both the learner-centred approach and task-based learning.

As the relationship between multimedia design (and technology more in general) and language learning is fundamental in this study, a brief explanation of the distinction between technology-centred and learner-centred approaches seems in order.

The basic difference between the two lies – as the names suggest – in what is considered central, i.e. in what influences teaching design the most. In the first case, teaching is constructed on the basis of the possible functions offered by the technology available to design effective learning materials. As pointed out by Mayer (2009: 11 ff.), the 20th century witnessed more than one moment in which technology appeared to be a turning point in education. Let us consider the advent of cinema, the radio, or the internet: all were initially saluted as revolutionary tools that were going to change teaching practice forever. However, such predictions were soon to be confounded as motion pictures, the radio and also the internet were either almost neglected or did not bring about the ground-breaking changes they promised. According to Mayer, their failure is to be attributed precisely to the technology-centred approach, which forced people to adapt their needs to the requirements of technology and focused on "giving people access to the latest technology rather than on helping people to learn through the aid of technology" (2009:12).

In the case of learner-centred approaches to multimedia design instead, the perspective on technology is reversed, and attention is focused on how multimedia content can be used to enhance learning. In particular, materials should be designed according to the learning mechanisms of the human mind (see section 4.1.2) and technology should enhance our abilities or help us develop new ones, as in the case of subtitling. Clearly, the learner-centred approach is not limited to the creation of multimedia learning materials but generally refers to a trend in teaching that started out in the late 1980s with the purpose of shifting away from the traditional transmissionist approach, in which teachers are the indisputable and only source of correct knowledge, which has to be passed on to students. This new approach sees teachers as facilitators, who guide learners through the learning process. Learners in turn are supposed to carry the responsibility of being the active promoters of their own learning. Furthermore, such attitude is enhanced by the use of authentic material as well as by a presentation of theoretical contents in an interactive way (e.g. by asking students to apply a certain principle to a concrete example); and by asking

students to comment on and propose solutions to translation tasks with a minimum guidance on the teacher's part. As we can see, this approach shares common ground with some of the principles of task-based learning, as learners are involved in the learning process through the completion of targeted tasks. Although its application was initially limited to foreign language learning and tasks were mostly used to strengthen grammar, later on it has also been applied to translator training (Kelly 2005: 16), mostly in the works by Hurtado Albir (1999) and González Davies (2004). Here, the acquisition of translation skills is reinforced by the completion of a number of tasks, defined as "a chain of activities with the same global aim and a final product" (González Davies 2004: 22).

In sum, lessons were built so as to grant learners' active involvement in tasks either as individuals or as a group. Each task was broken down into stages, which allowed to guide students through an interactive learning process. The content of the multimedia material proposed in the tasks was selected and designed according to what it could offer to help meet learners' needs, which were established in a preliminary study.

Within this framework, the selection of the content presented to students was inspired by the principle of growing difficulty, so that the translation problems contained in the videos were relatively easy to solve at the beginning of the course and grew ever more difficult with every task. Considering that students were new to subtitling and that the time available was limited, the video material proposed lasted a maximum of two minutes and presented a self-contained unit (i.e. without references to the broader context of the rest of the film/episode etc.), so as to reduce the need for contextualisation to a minimum. The texts were chosen also taking into account the typology and frequency of the translation problems they contained, so that those proposed at the beginning of the course were fewer and more circumscribed while those proposed at the end were more varied and more difficult.

Furthermore, considerations about genre were made, and here too the main approach was to offer students tasks of growing difficulty. Hence, while the first activities were based on comedy clips (also with the intent of involving and motivating learners through "light" contents), we then passed on to the genre of popular science – containing field-related terminology – and finally to news, which is

considered amongst the most challenging text types both lexically and syntactically. Finally, a further requirement to be met was speakers' elocutionary speed, which needed to be proportionate to students' average listening skills. However, the speed of utterances is also fundamental in the design of subtitles, as the faster people speak, the more content has to be reduced. So, even if it was important for students to understand that subtitles are not a mere transcription of dialogues, an excessive reduction caused by a low time/space ratio might have required re-elaboration skills out of students' reach and was hence avoided.

As mentioned earlier, one of the criteria for the selection of the video material was the type and frequency of translation problems it contained. The concept of problem used in the study was inspired by the PACTE group's work. Starting from the premise that translation constantly requires the ability to make decisions in order to solve problems, the group sees such ability as part of the strategic sub-competence (fig. 3). Problems were selected considering those most frequently encountered by professional translators, which are called “Rich Points”. The reason why only relevant parts of the text were selected is that this procedure makes data collection and triangulation simpler, in accordance with Giegler's concept of scientific economy[48]. Once again, this model needed to be adapted to students' requirements, hence the type of problems chosen in the present investigation was based on the findings of the preliminary study, which showed that learners' main problems generally lie in dealing with lexical, syntactical and pragmatic problems, along with a subjective difficulty with units of measurement.

The data collection system implemented by the PACTE group is centred on post-test questionnaires about the problems encountered by subjects in both active and passive translation, in one questionnaire on translation knowledge and in retrospective interviews. This means that all information about the translation process was filtered through the subjects' perceptions and reflections collected after completing the tasks. However, this system was not deemed suitable for the purposes of the present study for a number of reasons. First of all, data based solely on the subjects' perceptions may be reliable in the case of professionals but prove much less

[48] Giegler, H. (1994). “Test und Testtheorie” in R. Ansager, G. Weninger (eds.). *Wörterbuch der Psychologie*. Weinheim: Psychologie Verlag Union, p. 782-789.

so in the case of learners. In other words, there might be a discrepancy between the learners' actual performance and their perception. This emerged at a very early stage thanks to both my supervisor's advice[49] and to the self-perception test carried out during the pilot study. Secondly, the time available to carry out the trials would not have allowed all subjects to be interviewed after every single activity. For the same reasons TAPs were also excluded from the experimental design almost immediately.

Hence, the PACTE data collection method was not fully implemented and information about the translation process and product was rather gathered through a largely "unbiased" tool, namely *Translog*, which automatically collects data – and then displays them to the researcher in the form of a linear representation of the process and of a replay function – without interfering with students' work, who just have to type in their translation as if they were working on a common Wordprocessor (see section 4.2.1).

The log files obtained were then analysed according to a method suggested in Jakobsen (2002) and also followed in experiments conducted by Alves (2005) and Pagano, Alves and Santiago Araújo (2012). According to Jakobsen (2002:192-193), the translation process thus recorded can be divided into three main phases: initial orientation, drafting and end-revision. In this study, initial orientation, i.e. the time span between "the appearance of the source text on the screen and the typing of the first text production key" is carried out in class as group activity (except for the profiling translation activity). Drafting is the time span "from the first text production keystroke until the fist typing of the final punctuation mark (or equivalent keystroke)" and end-revision is considered as all text production from the end of the drafting phase "until the translator decides that a translation is ready to be submitted as finished". The duration of each phase constitutes the translator's cognitive rhythm and there is apparently a correlation between a certain pattern in this rhythm and the quality of a translator's performance. In fact, according to Jakobsen (2002), Alves (2005) and Pagano, Alves and Santiago Araújo (2012) the drafting phase is considerably longer than the other two and it is precisely during drafting that the bigger differences in performance between experienced professional translators and

[49] Prof. Maria Teresa Musacchio has taught English to Italian translation to students of the degree course "Linguistic and Cultural Mediation" for several years and is hence particularly familiar with students' problems and their attitude towards translation.

novice translators can be noticed. Moreover, professionals present a more balanced cognitive rhythm (i.e. they devote time to all the three stages) while novices tend to devote no or very little time to orientation and end-revision, which is very much like was what found with our language students. Hence, analysing and attempting to balance language learners' cognitive rhythm in translation is deemed particularly important for the development of competence.

Questionnaires were used as additional surveying tools: a preliminary questionnaire (see Appendix 2) and an end-of-course questionnaire (see Appendix 20) were administered at the beginning and at the end of the trial, respectively. The first one was deemed useful on the one hand to gather data on the population participating in the experiment (e.g. native and second languages, professional and extra-curricular experience related to translation etc.) and on the other hand to appraise students' perception towards their performance (e.g. how they assess their abilities in the four main translation stages, which translation problems they consider most difficult etc.). The latter was administered in order to survey the general impact of the experience on students (e.g. positive and negative aspects, attitudes towards LvS and *Translog*, assessment of the contents presented during the lessons etc.). Since students were asked to express judgements on the teacher, the material and the software chosen, the final questionnaire was anonymous.

Finally, the outcomes of the experiment and their impact on students were further supported by the marks students got for their general English final exam, for their Italian-English translation exam – which were assessed according to the usual procedures applied for translation exams without any interference on the part of the researcher – and for a post-trial English-Italian translation task. The professors or language assistants who marked the exams were not given any information regarding the identity of the participants in the experiment. Furthermore, the text administered in the post-trial task was also analysed and assessed on the basis of the acceptability of Rich Points. Finally, the participants' marks were compared to those of a control group whose members were picked randomly amongst the third-year students of the same degree course.

4.1.5 Research variables[50]

On the basis of the theoretical and practical reflections presented above, the data available for analysis needed to provide information regarding both the translation process and product. Data was collected through *Translog* and through both closed- and open-ended questionnaires. Such strategies of inquiry call for the application of a mixed method of data analysis, i.e. a method combining the quantitative and qualitative analysis of data. Creswell (2003: 19) defines this a "mixed methods approach", namely

> one in which the researcher tends to base knowledge claims on pragmatic grounds (e.g., consequence-oriented, problem-centred, and pluralistic). It employs strategies of inquiry that involve collecting data either simultaneously or sequentially to best understand research problems. The data collection also involves gathering both numeric information (e.g., on instruments) as well as text information (e.g., on interviews) so that the final database represents both quantitative and qualitative information.

In order to establish whether the activities students were asked to carry out bring about a tangible improvement in their translation competence and hence improve their knowledge of the language, the acquisition of the four sub-competences selected will be evaluated on the basis of some variables. In turn, the variables are assessed according to the results given by the indicators selected.

The table below illustrates the variables, their definition, the sub-competences referred to them, the indicators and the measurement instruments used.

V1: TRANSLATION PROCESS MANAGEMENT	
CONCEPTUAL DEFINITION	The ability of students to translate a text by following a well-established process consisting of an (a) orientation, (b) drafting and (c) end-revision stage.
SUB-COMPETENCE(S)	Knowledge of translation; strategic.
INDICATORS	Duration of drafting stage and duration of end-revision stage

[50] The statistical design and data analysis method for this work were elaborated with the consultancy of Prof. Mario Bolzan, full professor of statistics at the University of Padua.

	(orientation was carried out in class as a group activity)
INSTRUMENTS	*Translog*
V2: TRANSLATION PROBLEM MANAGEMENT	
CONCEPTUAL DEFINITION	The ability of students to successfully deal with the problems encountered in the text through the time-effective selection of one solution
SUB-COMPETENCE(S)	Instrumental; strategic
INDICATORS	Seconds of pause per Rich Point; number of re-elaborations
INSTRUMENTS	*Translog*
V3: QUALITY OF THE TRANSLATION PRODUCT	
CONCEPTUAL DEFINITION	The ability of students to find an acceptable target text equivalent to the problems proposed in the text.
SUB-COMPETENCE(S)	Bilingual; strategic
INDICATORS	Acceptability of the translation of Rich Points
INSTRUMENTS	*Translog*
V4 (macro variable): QUALITY OF RESULTS	
V4a: GENERAL ENGLISH LANGUAGE PERFORMANCE	
CONCEPTUAL DEFINITION	The rating given to students for their general English performance at the end of the academic year
SUB-COMPETENCE(S)	Bilingual; knowledge of translation; instrumental; strategic
INDICATORS	General English language mark of trial and control group
INSTRUMENTS	Written and oral tests
V4b: IT-EN TRANSLATION PERFORMANCE	
CONCEPTUAL DEFINITION	The rating given to students for their Italian to English translation performance at the end of the academic year
SUB-COMPETENCE(S)	Bilingual; knowledge of translation; instrumental; strategic
INDICATORS	Italian to English translation mark of trial and control group
INSTRUMENTS	Written translation test
V4c: EN-IT TRANSLATION PERFORMANCE	
CONCEPTUAL DEFINITION	The rating given to students for their English to Italian translation performance at the end of the academic year
SUB-COMPETENCE(S)	Bilingual; knowledge of translation; instrumental; strategic
INDICATORS	English to Italian translation mark of trial and control group
INSTRUMENTS	Written translation test
V4d: ACCEPTABILITY OF RICH POINTS IN EN-IT TRANSLATION	
CONCEPTUAL DEFINITION	The Rich Points selected in the text to be translated are assessed according to the notion of acceptability applied during the trial.
SUB-COMPETENCE(S)	Bilingual; strategic
INDICATORS	Acceptability of the translation of Rich Points for trial and control group
INSTRUMENTS	Written translation test

Table 1: Description of the variables and indicators used in the study

Variable 1 (V1) aims at looking at how much time students dedicate to two of the three fundamental stages in the translation process, namely drafting and end-revision. According to the results obtained in the pilot study (see section 5.1) – which were also confirmed by those obtained in the trial – students do not appear to have a homogeneous and established translation routine. This means that the drafting/end-revision ratio is highly variable in the sample, i.e. there are students who dedicate no time at all to end-revision and students who dedicate almost half of their time to it. The training hence aims at balancing this by teaching students a routine and by repeating it throughout the trial. The trial will be considered effective if the group of students proves to have acquired a stable routine at the end of the training. This means that the final results of V1 (drafting/end-revision ratio) will be contrasted with what we take to be a sufficiently representative average drafting/end-revision ratio of 20%-35%. This value is thought to include both translation styles in which revision is mostly done during and after writing.

Variable 2 (V2) aims at looking at how students go about translation solving problems and whether their approach to them changes when exposed to the translation of audiovisual material and to translation theory. Each text administered consists of six Rich Points, analysed according to the time spent to translate it (pauses) and to the number of re-elaborations made. In particular, pauses are deemed important because they signal a moment of reflection during the translation process, which may indicate that subjects are elaborating solutions to the problems encountered. Subjects can pause for different reasons: to plan or search for a translation alternative; to assess the previous production; to begin a new reading phase; and to revise or delete a previously translated segment without making any changes to the text (Alves, Couto Vale 2011:107). When analysing pauses pertinent to Rich Points, all of these typologies where considered except for those made to read a new chunk of text, which is deemed irrelevant for our purposes. The number of re-elaborations indicate how many different versions of the same Rich Point are given at both stages without considering spelling corrections.

These two indicators are used to observe learners' translational behaviour throughout the trial and it is hypothesised that an eventual decrease in the time and number of re-elaborations might signal an improvement in the learners' ability to

manage problems. However, this only reflects the learners' behaviour in specific situations and cannot be compared with standard values as is the case with the other variables in the study. Hence, the data provided by variable 2 will only be contrasted with data on acceptability (V3) in order to see whether a correlation between time spent per Rich Point, number of re-elaborations and the acceptability of solutions can be established.

Variable 3 (V3) aims at assessing the quality of the translations of Rich Points provided by students during the activities. The indicator used in this case is the notion of acceptability, as defined by the PACTE group (2011:38):

> Acceptability is defined in terms of whether or not the solution effectively communicates (a) the meaning of the source text; (b) the function of the translation (within the context of the translation brief, the readers' expectations, genre conventions in the target culture); and (c) makes use of appropriate language.

Every solution was awarded one point per each of the three aspects (a, b, c) in the definition, so it ranges on a scale from 0 to 3. In case the translation delivered a different message from that of the source text, i.e. if point (a) could not be awarded, then 0 points were given without considering whether the translation met point (b) and (c). In fact, a TT can be appropriate in terms of function and language but be (very) inaccurate as far as meaning is concerned. Hence, this basic criterion was adopted for all texts in order to avoid misreading the data.

Finally, the macro variable 4 (V4a, b, c and d) has been designed in order to concretely compare the positive effects of the trial – if any – on learners exposed to it. The sub-variables a, b, c and d are thought to indicate whether learners have become more aware of how to deal with translation and its problems and to which extent this has had an impact on their performance. This is is then taken to reflect an improvement in the knowledge of the language, in the differences between language A and language B. For these reasons, the marks obtained in both active and passive translation tasks and the acceptability of the solutions proposed for the Rich Points selected in the English to Italian post-trial translation task have been compared with those of a control group.

4.1.6 A brief note on copyright and right of reproduction for educational purposes in Italy

The use of audiovisual input for educational purposes is ever more widespread both in primary and secondary education be it in face-to-face or e-learning modalities. However, the display of original copyright-protected audiovisual material in the classroom may give rise to doubts regarding legal (and possibly ethical) issues.

Legislation on this matter generally aims to protect the right of authors from seeing their works reproduced, published, sold or otherwise distributed without permission. This is established for example by the Bern Convention for the Protection of Literary and Artistic Works[51], last amended in 1979, an international agreement signed by 165 countries including Italy (also known as the Bern Union), according to which each of the contracting countries shall grant the protection of works published in the other countries of the Berne Union; should works be unpublished, they will be granted protection if their authors are residents or citizens of the countries of the Union.

In the specific case of the free use of literary or artistic works for educational purposes (art.10), the Convention leaves national legislations free to decide whether and to what extent this is permitted. However, the source and the name of the author shall be mentioned in any case. This means that no common frame of reference on this matter exists at international level, hence a brief account on the situation in Italy will be given, as this is where the trials were carried out.

The free use of intellectual works for educational purposes in Italy is regulated by article 70 of law 633/1941 (and following amendments and integrations). This provides that works or parts thereof can be summarised, quoted, reproduced and publicly displayed if used in teaching or scientific research for illustrative purposes and non-commercial ends. This exception to copyright law is also subject to another condition: the work cannot be reproduced in its entirety, only parts of it can be utilised according to the purposes pursued.

[51] Full text available at http://www.wipo.int/export/sites/www/treaties/en/ip/berne/pdf/trtdocs_wo001.pdf (last accessed 28/12/2012).

The three basic requisites indicated by the Italian law (illustrative purposes, non-commercial ends and partial display of the work) have all been fulfilled, as video clips were used for the purposes of teaching translation practice to students through subtitling, no profit was made from these activities and only short extracts were displayed. Moreover, in two cases the material was not copyright protected (activity three and four).

4.2 The software

Both the pilot study and the trial have been carried out using two pieces of software: LvS, a subtitling simulator, and *Translog*, a keystroke recorder. This section is dedicated to their description and will also explain the reasons why they have been combined.

LvS (Learning Via Subtitling) 2.5.2. is a subtitling simulator developed in the framework of the two-year long European Socrates Programme LINGUA 2. It was designed by seven European universities in consideration of the lack in the market of subtitling software specially designed for language learning purposes (Romero et al. 2011: 5). As clarified by the authors, the subtitling tasks carried out with this tool are not to be considered the one and only response to foreign language learners' needs but rather as an additional resource to develop their abilities. The version used for the studies is the latest (2008) and can be downloaded for free from the project website[52] along with a tutorial and a sample activity.

[52] LvS project http://levis.cti.gr/index.php?option=com_frontpage (last accessed 17-02-2012).

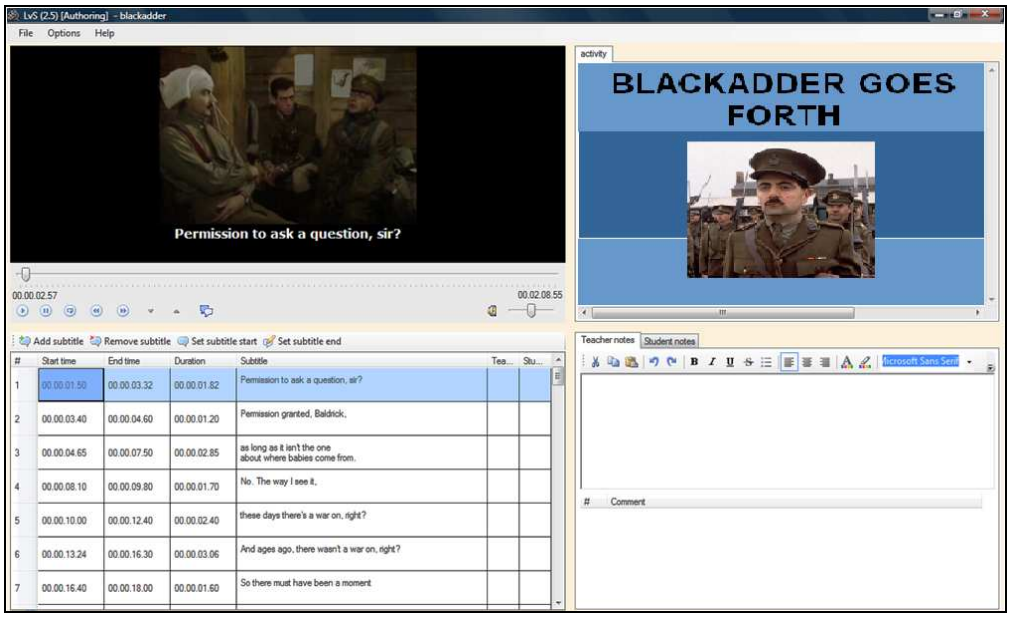


Fig. 4: Screen shot of LvS

The reasons why this particular software was used is to test its efficacy on Italian learners of English – which has not been yet attempted – and, as explained above, because it is the only tool allowing the creation and editing of subtitles conceived for educational applications at the moment. Furthermore, it unites all the advantages of working with multimedia input with those brought about by the creation and/or translation of subtitles. Other reasons why LvS was chosen for conducting the trials are:

- it disrupts students' passivity by proposing hands-on language-learning tasks through the creation and editing of synchronised subtitles;
- it is suitable both for individual and group work, in class, at home or in a virtual classroom;
- its platform is very intuitive and user-friendly, as it requires little computer literacy;
- ihere is no limitation as for the working language pairs, hence students can work on interlingual, intralingual or reversed subtitling activities, although the platform is available only in the six languages of the partner countries (English, Greek, Spanish, Hungarian, Portuguese and Romanian);
- the software supports videos of various formats and of any duration, thus giving instructors an unlimited choice as to the material to be displayed;

- once a task is created, it is automatically saved in one folder, so that class activities can be prepared beforehand and made available to students later. This can prove particularly helpful if instructors have the chance to store them on the common desktop of computers in the language laboratory;
- it is not curriculum-dependent and is flexible enough to suit both general language courses and specific courses such as LSP (Language for Special Purposes). As tasks can be created by teachers, the material can be selected according to the learners' level and to the single goals to be achieved;
- it can be downloaded for free and it does not occupy much space on the hard disk (2.31 MB). However, as mentioned in section 3.1.3, it will no longer be updated, as the project expired in 2008;
- texts entered in the subtitle editor cannot exceed thirty-nine characters per line and words turn red when this limit is overcome, thus signalling that learners need to shorten their subtitles. However, if the extra characters are kept they will still be visible both in the subtitle editor and on video.

The software also underwent a usability evaluation before the final version was released. As defined in Kostaras (2010: 120) usability evaluation "consists of methodologies for measuring the usability [sic] aspects of a system's user interface and identifying specific problems. In other words, it [...] consists of iterative cycles of designing, prototyping, and evaluating". This process was carried out by the Software Quality Research Group (SQRG, 2009) of the Hellenic Open University (HOU, 2009) in order to ensure that LvS be as effective and user-friendly a platform can be.

Furthermore, the software was also trialled in real-life teaching environments (see Sokoli et al.: 2011) with the aim of evaluating the appropriateness of this tool and of the activities developed within the project for FLL purposes, the teachers' perception both on translation as a tool and on the use of computer activities in FL instruction, the success in the development and implementation of the project and the impact of this experience on meeting teaching objectives. The trials also set out to test reactions on the students' part in terms of their familiarity with FLL computer activities in general and their involvement and perception of the software in particular. LvS has been tested on a sample of one-hundred four students over the six

countries participating in the project (Romania, Hungary, UK, Portugal, Greece and Spain) with the collaboration of twelve teachers. A total of fifteen sessions including ten activities with LvS were carried out with each group of learners. According to the results of this evaluation, the software interface features both strenghts and weaknesses. Whereas on the one hand it enhances the development of different language skills, is motivating, versatile, promotes both individual and collaborative tasks and stimulates learners' creativity, on the other hand the creation and design of activities is considerably time-consuming, requires the command of computer skills and technical problems may occur during classes. Improvements such as the introduction of a spell checker, text formatting tools, dictionaries, a "comparison tool" to view peers' productions or work on two videos have been suggested among other things. As for the learners and teachers' perceptions, the overall impression given by the use of the software was positive or very positive and teachers expressed the wish to continue using this tool in the future, provided that more ready-made activities and material are made available to them. Finally, a significant finding of this evaluation process is that LvS proved beneficial for learners belonging to different backgrounds, of different languages and with different levels of L2, who also agree that this can be a useful tool.

The other piece of software used in the trial is *Translog* 2006, a keystroke recorder, which was first created in 1995 by Arnt Lykke Jakobsen and Lasse Schou at the Copenhagen Business School (CBS) for the analysis of text production processes in the field of translation research. The design of such tool was inspired by the idea that by saving all the actions carried out when typing a translation on a keyboard, researchers might gain a better insight into the stages subjects go through to compose their target texts and into the timing of the process, which in turn reflects their cognitive activities. This "prosody of writing" (CBS 2006: 4) given by the rhythm and speed of production can be linked to the pattern followed to construct meaning. Furthermore, this tool can provide useful information regarding decision making processes because

> [T]he complete record of first solutions, false starts, corrections and editorial changes is a treasure of accurate information. It makes it possible for the researcher to track and analyze a writer's entire text production path

> reflecting a wide range (but not necessarily all) of the language decisions made along the way. From this information detailed analyses can be made of decision-making processes and of the strategies employed in editing and/or revising a translation, or any other text. (CBS 2006:13)

The software can be downloaded for free for research purposes and consists of two separate interfaces: Supervisor and User. The first is used both to create activities (i.e. to load the translation project) and to statistically analyse the translation process through log files, while the latter is divided into two horizontal panes, the upper where the source text appears and the lower one where the target text can be typed in and then saved as log file.

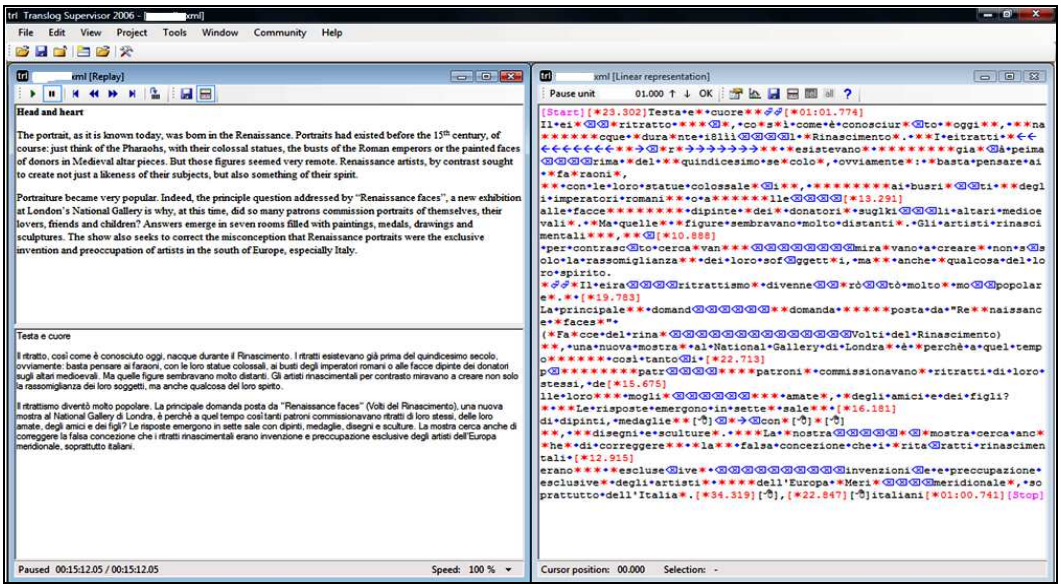


Fig. 5: Screen shot of *Translog* Supervisor displaying the replay function (left) and the linear representation (right)

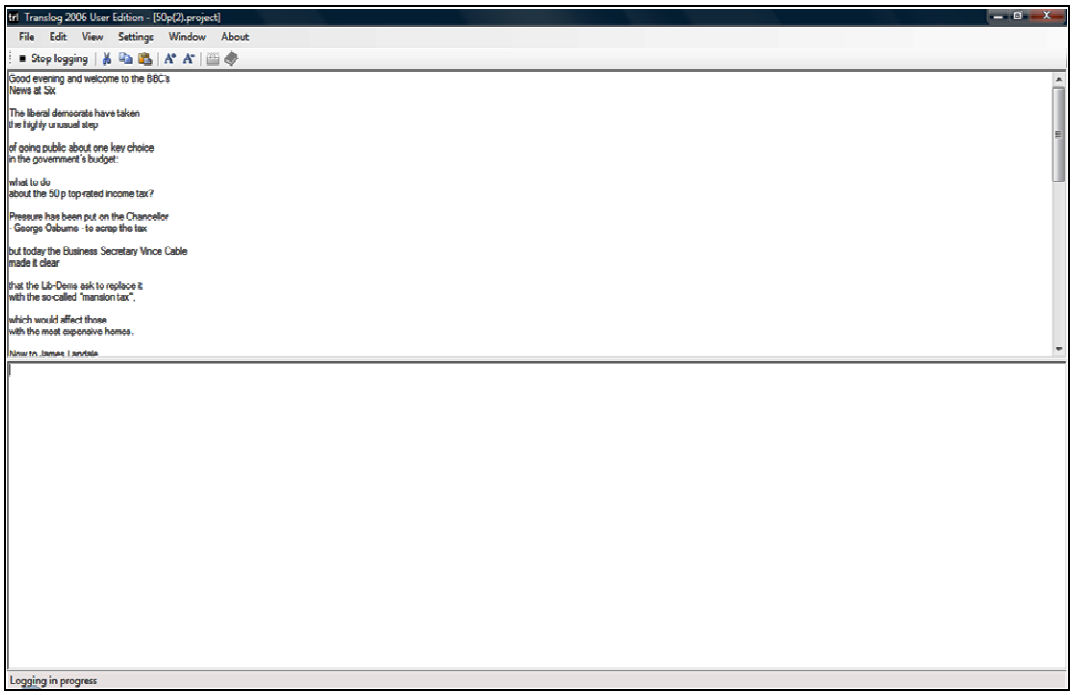


Fig. 6: Screen shot of *Translog* User

The data recorded by *Translog* includes all keyboard and mouse activities, which can be used to insert/delete text and for cursor navigation. Each mode of deletion/insertion is coded in a different way in *Translog* output. In particular, it records and analyses six different types of keystrokes or events, which are also those made available in the "statistics" window. Here is a brief description of each of them (from *Translog* Tutorial):

- **Text Production** keystrokes are all the keystrokes used to create new text. This includes all alphabetical characters, numerical characters, punctuation marks (!, ?, etc.), mathematics symbols like +, -, *, /, =, (,), %, ½, and other signs such as currency signs £, $, €, etc. The Space Bar and Return/Enter also count as Text Production keystrokes.
- **Text Elimination** keystrokes are primarily **Backspace** and **Delete** keystrokes. Words or strings of words can also be blocked and deleted.
- Keystrokes used to navigate the cursor from one position to another are categorized by ***Translog*** as a separate group of keystrokes. **Navigation keystrokes** include **Arrow Up, Arrow Down, Arrow Left, Arrow Right, Pg Up, Pg Down, Home, End**, all of which can be combined with **Ctrl-**.

Keystrokes made on Function buttons (Esc, F1, F2, F3, F6) are not logged even though they may have an active function.

- **Mouse Events** or **Mouse Clicks** count as two keystrokes, the down movement and click is one keystroke, and the up movement and click is another. Mouse Events are recorded as a separate category to distinguish keystroke cursor navigation from cursor navigation managed by means of a Mouse (Touchpad, TrackPoint [Mouse nipple], joystick or similar device). Cursor navigation by means of a mouse across large portions of text results in far fewer keystrokes being recorded than if such navigation is done e.g. by means of the Arrow keys.
- **Miscellaneous Events** include **Cut, Copy, Paste** operations**, "Next Unit" (F1)** icon presses in projects with user-determined progression, and Dictionary look-ups.
- **System Events** are Windows Events produced by the software. The most important system events (indicated in the default settings with Magenta) are **[Start]** and **[Stop]**. Others are e.g. **[Sync]** (in the case of external Synchronization), **[NextUnit]** (in projects with user-determined progression), and **[Dictionary]** (in projects using the document dictionary function). Scroll movements are not identified in the linear representation, but can be recognized if the Toggle Source Text icon is pressed.

The image below contains an example of logging as analysed and displayed by Supervisor.

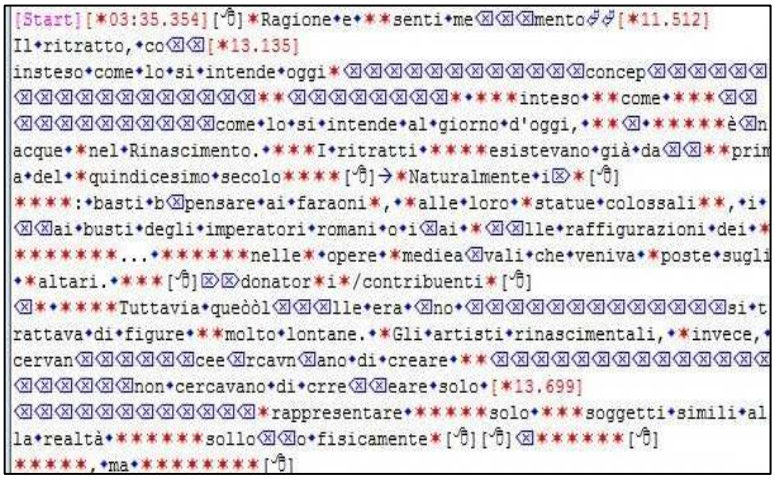


Fig. 7: Screen shot of *Translog* symbols in the linear representation

We can see that the typed-in text alternates with symbols and numbers. The indication [Start] in magenta appears after pressing the “start project” button and entering an identification name (in our case it was the student's surname). The asterisk followed by a time code [03:35.354] indicates a pause of three minutes, thirty-five seconds and three-hundred fifty-four milliseconds. The points at which pauses were made and their duration can be visualised either when replaying the translation process or in the window on the left of the screen; in our trials, one-second pauses are marked by a red asterisk, while pauses longer than ten seconds are indicated in numbers. However, it is possible to set the duration of pauses symbolised by the asterisk when creating a new project. The mouse symbol shows us that the user has been moving their mouse. The backspace icon (⌫) indicates that one or more characters or spaces have been deleted, while the delete key (⌦) shows a movement to the right. Other symbols that may appear on log files are those showing the cursor was moved to the right (→), to the left (←), up (↑) or down (↓), or that the enter key was pressed. Below is the complete list of all the symbols that can be found on a *Translog* linear representation:

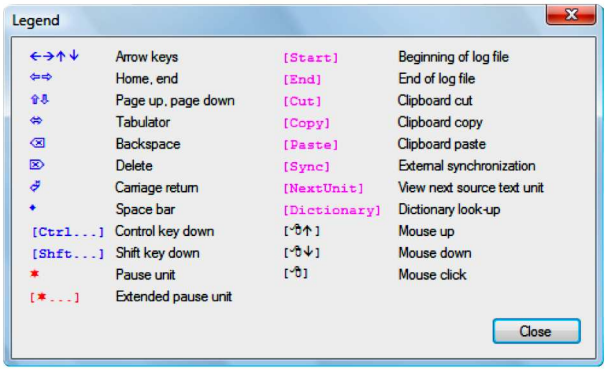


Fig. 8: Screen shot of *Translog* legend of the symbols used in the linear representation

Not only does Supervisor allow to gather linear and static information on the translation process but also offers a dynamic representation through the replay function, which shows the process as if one was watching the creation of the translation live. However, the static representation can already provide researchers with enough meaningful data, since the most interesting actions of users are those of creation and deletion of text along with the position and duration of pauses. The latter are indeed considered important indicators of cognitive processes and our basic assumption is that the longer the pause, the more articulated the cognitive process.

Furthermore, *Translog* Supervisor automatically produces statistics on the total number of user events (i.e. of all keystrokes including backspaces and mouse events), text production, text elimination, the number of user events per minute and text production per minute. These data can be used to gather objective and quantitative information on how learners go about translating and will be combined with qualitative analysis, as illustrated in the next sections.

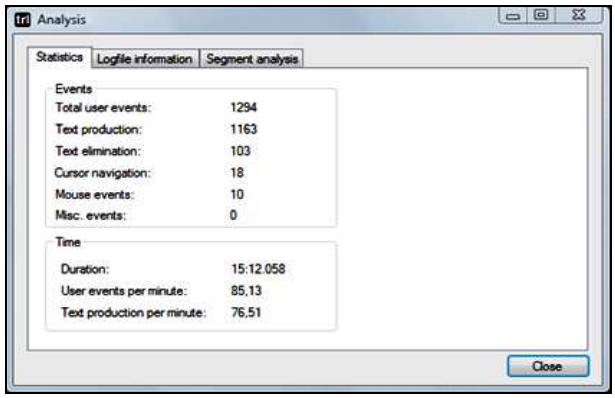


Fig. 9: Screen shot of the statistical analysis pane of a student's translation log file

The development of such software also reflects the progressive shift in TS from product- to process-oriented approaches or combined ones. It is believed that by comprehending (or at least trying to comprehend) what is "behind the mind" of translators and translation students we can also shed light on how learners' cognitive processes and strategies work as well as how we can help them improve through awareness raising. Within process-oriented research then, there has been a progressive shift from the so-called Think Aloud Protocols (TAPs) – an *in vivo* method for eliciting verbal data from students/translators, in a form similar to a stream of consciousness and which is based on the fundamental assumption that translation is a decision-making process – to keystroke-logging and eye-tracking, i.e. a method to extract "genuine", subject-independent data from users' activities, since these can focus only on the translation task proper without being occupied in elaborating and expressing their thoughts to an external observer. In some cases TAPs, key-logging and eye-tracking (both offered by *Translog*) have been triangulated in order to gather different types of data and ensure a more thorough view on cognitive processes in translation. TAPs have also been applied as a methodology for retrospective assessment.

The latter shift, however, is also justified by experimental data on TAPs showing that this method causes a delay in completing a translation task of around 25% (Krings in Carl et al. 2008: 115) and has a degenerative effect on text segmentation (Jakobsen in Carl et al. 2008: 115), thus exerting a negative influence on processing, as thinking aloud seems to require additional cognitive load. This is also the reason why key-logging has been preferred to TAPs in the experiments conducted for the present research.

Ever since its invention in the mid 1990s, *Translog* has aroused interest in the research community for it offers the unprecedented possibility to closely watch and analyse students or professionals' translational performances in an unobtrusive way. Research projects in the last decade have often made use of this tool and examples of its application to research on the cognitive aspects of translating can be found in the Copenhagen Studies in Language series (Göpferich et al.: 2009, Mees et al.: 2010;

Göpferich, Alves and Mees: 2010), which has collected a remarkable number of different experiences in the use of *Translog*.

4.2.1 Why combine LvS and *Translog*

To my knowledge the combination of a subtitling simulator and a keystroke recorder in order to explore the potential of subtitling activities on the development of translation and language competence has never been attempted before. As discussed in the literature review, authors interested in subtitling and language learning have mostly used software for the creation of subtitles coupled with pre- and post-viewing tests or questionnaires. In the light of the results of the preliminary study conducted (see section 4.3.1), it appeared important first of all to gain a deeper – and possibly more objective − understanding of what students exactly do when they translate and how they perceive their competence, and then to test a novel method to help them improve their work flow by raising their awareness and competence. Before we delve deeper in the discussion of the notion of translational competence, the following definition of translation is given as a general point of reference in the present research:

> [...] translation can be regarded as a specific case of creating a common ST author/TT reader horizon shaped by particular task specifications. The crucial aspect of translation is the intent to create the semantic, pragmatic, and stylistic preconditions for communication between the members of different linguistic and cultural communities. (Wilss 1996: 44)

In the light of all this, it was important to show students the relevance of approaching texts avoiding a word-for-word processing and focussing on aspects such as the importance of context for the determination of meaning and register to stimulate a shift from sign-oriented to sense-oriented behaviour. There is then a clear bond between such literal approach and language competence. In fact, such behaviour can be interpreted as a sign of a difficulty in fully understanding the source text because of a lack of competence, which then affects the ability of

transposing the different levels and nuances of the original into another language. When students translate literally, they do not challenge the ST through personal interpretation but rather consider it as an immutable entity that has to be reproduced as faithfully as possible, even sometimes at the detriment of meaning and coherence of their target text.

This is why the use of subtitles and video content was soon deemed particularly suitable, considering their "natural" constraints in terms of time and space, which do not allow a literal reproduction, and their evidently close relationship to visual input, which forces students to deal with the situational context, since it is displayed in front of their eyes and cannot be ignored. Besides, as translation is used with our students as an educational tool to improve their language skills, the creation of subtitles was considered a fundamental activity. Such stance is also supported by the claims of Talavan (2006: 49) who states that "[...] it [exercise with subtitling] avoids a word for word translation, and directly aims at a semantic and pragmatic transfer between both semiotic systems, which helps to better understand the inner workings of both systems". In fact, subtitling is deemed to force students to abandon such habit thanks to its "natural" constraints in terms of condensation and deletion.

However, this soon proved problematic because subtitle simulators do not allow the direct observation of processes but display only the product. This is why a keystroke recorder such as *Translog* was taken into consideration in order to gather objective data on students' translational performance. The biggest advantage brought about by the combination of LvS and *Translog* is that the potential progress induced by subtitling tasks can be assessed in terms of students' ability to improve their approach to texts in a more competent and "dynamic" way. In more concrete terms, this means that students will need to improve their problem-solving skills by learning and developing new strategies or by revising old ones, since these directly affect translational performance.

4.3 Experimental design

The following sections will provide a detailed description of all the stages of which the experimental design consists. However, for the sake of completeness the preliminary study and a synthesis of its results will be illustrated first, since its findings constitute the starting point of the whole dissertation. Afterwards, the pilot study and the trial will be described and examples of the activities carried out in class will be provided.

4.3.1 The preliminary study

The preliminary study consisted in a survey of twenty-one B.A. theses dealing with audiovisual translation (AVT) produced by students of the degree courses "Mediazione Linguistica e Culturale (MZL)" [Linguistic and Cultural Mediation] and "Lingue, Letterature e Culture Moderne (LCM)" [Modern Languages, Literature and Cultures] between the academic year 2004-2005 and 2009-2010 at the University of Padua. The analysis mainly aimed at observing how students dealt with the selection and discussion of translation problems in the dubbed and/or subtitled version of a film in order to assess their translational competence at the end of their studies.

Although neither degree course aims at training translation specialists, translation does play an important role in students' language training and is deemed fundamental to raise their linguistic awareness and competence. Once students are through with their exams, they are required to write a 40 something-page long thesis on a topic of their choice. The idea behind this kind of work is that students apply what they have learnt and trial their critical abilities by analysing a specific topic.

By observing students' work, a clear pattern in their translation problem assessment has emerged. They seem to rate the quality of translations by combining descriptive and evaluative criteria. On the one hand, they attempt to describe translators' decisions and try to figure out why they made them. Hence, chunks of the ST (problems) are compared to the corresponding TT segments (solutions) and

examined. On the other hand, assessment is made on the basis of whether the translation conforms to a certain standard, value or expectation. These two processes are combined forming a pattern like the following:

1. ST choice and initial analysis
2. theoretical framework (expectations)
3. detection of problems
4. critical analysis of TT on the basis of (a) fidelity to ST and (b) pragmatic/communicative effect
5. final assessment/conclusions.

In the first stage of this process students focus on a specific aspect and attempt to find consistent examples to observe the translator's behaviour. However, they miss one very important point: what can be a problem in a certain context is not necessarily a problem in another. In fact, the majority of them starts from the description of what they consider general translation problems (cultural references, humour, local accents etc.) and then look for them in the film. This is also proven by the fact that students tend to discuss a limited number of very similar issues (see table 2 below). The consequence of such attitude is that students approach the filmic text in an *a priori* manner (having already decided what to focus on) and risk overlooking more relevant issues of the specific film chosen.

Another drawback is that sometimes students are not very clear about the nature of the problems they are analysing and confuse the concept of objective translation problem with that of subjective difficulty. According to the definition given by Nord[53], a translation problem is something objective that any translator has to solve for a certain translation task, regardless of his/her competence and working conditions. On the other hand, a translation difficulty is subjective and has to do with the translator's skills and his/her specific working conditions. A helpful insight in the latter notion can be found in Hale and Campbell (2002:17) who state that

> difficulty relates to a number of different factors: the individual's own awareness of an incorrect choice, the individual's linguistic and stylistic competence, the individual's knowledge of the subject matter and of the world,

[53]See Nord, C., *Textanalysis in Translation*, Amsterdam, Rodopi, 1988.

the individual's comprehension of the source text, the text's inherent ambiguity or lack of clarity and the translatability of the text into different languages at the different levels (lexical, syntactic, semantic and pragmatic).

The lack of awareness of such distinction is reflected in the type of "problems" chosen. Their choices and judgements are informed by the fact that their training is mainly focused on active translation, while the analyses they carry out require passive translation skills. Probably, students tend to just apply the principles they are most accustomed to, so that the choice of translation problems is oriented towards a well-tested process of spotting and solving an individual difficulty. The table below illustrates the distribution and frequency of problems.

GENERAL TRANSLATION PROBLEM/NUMBER OF THESES	GENERAL PROBLEM/TOTAL NUMBER OF THESES %	SUB-CATEGORIES/ NUMBER	GENERAL PROBLEM/SUB-CATEGORY %
Cultural references and realia: 14/21	66.6%	Social terminology: 1 Food and drinks: 6 Units of measurement: 8 Entertainment: 9 Geographical names: 9 Proper names: 11 Institutions: 5 Quotations: 1	7.1% 42.8% 57.1% 64.2% 64.2% 78.5% 35.7% 7.1%
Allocution: 4/21	19.0%	Allocution: 4	100%
Humour: 7/21	33.3%	Humour: 2 Puns: 5	28.6% 71.4%
Idiomatic expressions: 11/21	52.3%	Slang: 2 Idioms: 9	18.2% 81.8%
Local accents: 10/21	47.6%	Local accents: 8 Foreign accents: 2 Speech impediments: 1 British vs. American English: 4 Black English: 2	80% 20% 10% 40% 20%
Multilingualism: 7/21	33.3%	Multilingualism: 7	100%
Register: 12/21	57.1%	Register: 9 Colloquialisms: 5 Foul language: 8	75.0% 23.8% 66.6%
Collocations: 1/21	4.7%	Collocations: 1	100%

Equivalence: 1/21	4.7%	Equivalence: 1	100%
Metaphors: 1/21	4.7%	Metaphors: 1	100%
Songs adaptation: 2/21	9.5%	Songs adaptation: 2	100%
Subtitling strategies: 7/21	33.3%	Subtitling strategies: 7	100%
Internal and external written language: 5/21	23.8%	Internal and external written language: 5	100%

Table 2: Topics discussed by students and their frequency

Cultural references/realia: a topic very often discussed is how to translate cultural-specific items. This category includes food, drinks, geographical names, institutions, games etc. All of these elements are taken as an *a priori* issue, as if they were always and indisputably causing problems in the adaptation process. In this way, sometimes examples are presented, although there is not much to say about them, as if students felt they needed to mention them just because they are in the film. Another reason is that they consider certain problems not because they are relevant in that film but rather because they have a subjective difficulty in understanding them. In cases in which adaptation to the target culture is required, i.e. when such elements need to be substituted with equivalents, made explicit or even omitted, students do accept the fact that some kind of substitution with a TL equivalent (for example in the case of famous people or typical food) is required, and most of them tend to prefer localising strategies, which are also the most quoted.

The idea of deletion of some cultural items instead appears a viable solution only in the case of subtitling; this can be explained by the fact that all the students analysing subtitles make use of Gottlieb's famous strategies, which contemplate deletion as well. However, this option is never mentioned in the case of dubbing even if deletion is certainly a viable (and often used) strategy. Probably students find it hard to accept that some kind of loss in dubbing may be unavoidable, although in their introductions to AVT they do maintain that pragmatic and communicative equivalence are of primary importance in films. This dichotomy probably reflects the fact that students have not fully developed their translational competence yet, as they still put fidelity to the ST at the top of their list of priorities.

Wordplay/humour: a further object of discussion is the impact of humorous utterances and the strategies used to render them. Students agree on the fact that

humour is not universal and that effect is to be preserved even to the detriment of semantic field (unless there are evident visual constraints). Sometimes however, students mistake wordplay for another phenomenon or do not see some potential renderings.

Idiomatic expressions: many theses cope with the translation of idioms from one language/culture to another. As in the previous case, students do realise that pragmatic/communicative equivalence needs to be preferred to a literal rendering. However, considering that translation is worth analysing only when problems arise, it appears that most of the idioms discussed are rather easy to render into Italian and it seems that students discuss them because they do not know exactly what they mean rather than because they are truly relevant; once again subjective difficulty plays a major role in the choice of students' case studies.

Local accents: the presence of different linguistic variants within the same film is sometimes taken as the starting point for the whole thesis. In particular, students focus their attention on the difference between British and American English or on one specific local accent relevant for the film. They often survey the diatopic and diastratic aspects of such variations, emphasising their importance in the design of characters and of their relationships. One of the biggest concerns and most debated aspects is – unsurprisingly – the problem of rendering such variation in dubbing and subtitling. As regards dubbing, the standardised accent of Italian dubbing actors and the fact that local accents cannot be “translated” requires the adoption of strategies at a different level, typically semantic, in order to render at least the diastratic variation corresponding to that accent (if possible). However, the real challenge for students seems to be subtitling. In a considerable number of these essays this problem is handled with a certain resignation, stating that there can be no effective rendering for local accents because of lack of space and time. However, there are two factors that students completely overlook: the possibility for the audience to hear the original soundtrack and their perceptions. The combination of these two allows viewers – even those who are not particularly proficient in English – to perceive that characters speak in a somehow different way. Moreover, we cannot exclude that an Italian viewer watching a subtitled film might be willing to taste the flavour of the original or to improve his/her language skills.

Multilingualism: some of the works analysed are (partially or entirely) devoted to the discussion of how the richness of films featuring different languages can be preserved in dubbing. The solutions of Italian adapters are taken as the starting point for students' critical observations. All of them are in favour of adaptations preserving the original multilingualism as much as possible and are ready to accept a mixture of dubbing and subtitling as a possible solution. In case where Italian is one of the languages of the original (as in *A fish called Wanda*), its substitution with Spanish is saluted as a suitable alternative (although subtitling could have been a viable option as well).

This approach demonstrates students' linguistic sensitivity towards the potential communicative power that different languages have when they are displayed together. Moreover, this attitude shows that students have well understood the interrelation between linguistic variation and socio-cultural stratum and the options available to preserve them in dubbing.

The observations provided so far can be further supported by other studies conducted on how language students cope with texts/films and their translation into Italian. The first set of data is taken from an M.A. thesis (Jamaleh: 2008) analysing the mental processes of 6 third-year students while translating a text into Italian by means of Think Aloud Protocols (TAPs).

TRANSLATION PROBLEMS	PERCENTAGE
Pragmatic/cultural problems	35.8%
Lexical/semantic problems	37.2%
Morpho-syntactic problems	27%

Table 3: Common translation problems (Jamaleh 2008: 131)

According to this study, the most relevant problems encountered by students are lexical and semantic, allegedly caused either by a completely unknown word/expression or by their difficulty in grasping the exact meaning of known items in specific/new contexts. The parts of speech students find it hard to cope with are nouns, verbs and adverbs, i.e. the basic information carriers. These data appear coherent with what has been found in the preliminary study illustrated here. The high percentage of students who find cultural references and pragmatics difficult to

translate seem to find a correspondence with the preference of graduating students for discussing such topics (66.6% discuss cultural references and 57.1% register issues). Moreover, the lexical and semantic problems encountered by the six sample students mirror the relatively high presence (52.3%) of examples on idiomatic expressions in the theses.

The second set of data comes from a survey I conducted on second-year students during lessons on AVT in 2008[54], in which active and passive translation exercises with films were proposed to the class. At the end of each lesson[55] students were asked to fill in a short questionnaire with a view to establishing whether these exercises had increased their awareness on various topics. The results showed that almost two thirds of the students were not familiar with the use of films for language learning purposes, which is confirmed by the pattern used in the introductions to the theses and by the presence of many background readings in the bibliographies of their third-year fellows. When asked about the most relevant factor in the translation of puns, almost 60% of the students answered that creativity is definitely the first requirement. This answer is probably influenced by a concept of translation that is still rather tied to an almost literal rendering of texts and which is also often emphasised in the theses.

Another interesting datum is the students' reaction to the question on what they found difficult about cultural references: 42.3% answered that it lies in their difficulty in understanding them and their specificity, so that they often need to be deleted or totally reworked, and 31.9% said that it was because of the untranslatability of certain items. These answers seem to match graduating students' attitudes towards the translation of cultural references and the way they treat them (i.e. as individual difficulties). Finally, when asked about the subtitled versions of the films shown, they almost unanimously declared that, although the original and the subtitled versions were not equivalent, they conveyed enough to understand the film. Here we see that the second-year students' notion of “equivalence” is still based on fidelity at word level, while graduating students appeared more tolerant towards

[54]Panizzon, R. *Audiovisual translation and language learning: the design of translation exercises based on the dubbed and subtitled version of Mel Brook’s Robin Hood: Men in Tights and Quentin Tarantino’s Pulp Fiction*, Padova, unpublished M.A. thesis, A.Y. 2008/2009.
[55]The same lesson was repeated four times, as students were divided into groups of about 40 people.

condensation and deletion strategies. This attitude could be the outcome of a better understanding of subtitling techniques, thanks to students' in-depth readings and concrete testing of such translation mode. The remarkable resemblance between the results of second and third-year students found in the other studies seems to bring us to the conclusion that graduating students' linguistic competence only partly improves in the last year or, alternatively, that they need more inputs to become better acquainted with the field of AVT.

One of the elements lacking in students' works is a holistic perspective on the films they analyse and, especially in the case of dubbing, they hardly ever look at compensation, as their comments are limited to specific utterances. Furthermore, though they sometimes deal with potentially interesting topics, their description of the problem is generally superficial, as more could be said and more acute observations would be welcome. As one of their main topics is dubbing, it would be interesting to have works which not only provide alternatives to renderings that are considered unsatisfying in terms of linguistic accuracy but also works focusing on synchronisation. In other words, the options proposed could be tested also in terms of their concrete applicability, as if students were to put themselves in the shoes of a dubbing director. Needless to say, the same could apply to subtitles.

4.3.2 The pilot study

A pilot study was set up in order to test the functioning of the two pieces of software installed in the language laboratories, students' reactions to them and to gather initial results about their translation process. To this end, 18 third-year volunteers of the degree course Linguistic and Cultural Mediation Studies were given information regarding AVT and its most important features at the beginning of the trial. They were then exposed to activities over three lessons, each lasting 90 minutes. Volunteers were divided into two groups, one of twelve and the other of six people, according to laboratory availability and students' schedule. No particular selection criterion nor requirement – except for active participation and attendance – were adopted, so the sample included learners with different proficiency levels.

The volunteers selected had not been previously informed about the final purposes of the study nor would they know anything about the tasks they were going to perform. When recruited, they were told that they were going to participate in experimental tasks involving the translation of subtitles with a subtitling simulator for a research project.

Lesson one consisted of an initial profiling stage and of an introductory activity to LvS. Two profiling activities were carried out, one by means of a self-perception questionnaire (see Appendix 2) and the other of the translation of a short text using *Translog*. These two complementary tasks were aimed at gaining a better understanding of students' perception of their translation performance, their actual abilities in translating and to then compare them.

The questionnaire was deemed important in order to gather information regarding both the characteristics of the sample of students and, most importantly, their perception of their translation competence. The first type of questions was also used as a distraction from the real purpose of the questionnaire and no specific instructions were given to students but to fill it in. The questions were designed on the basis of the Translation Portfolio developed at the University of Padua and trialled on undergraduate students of the degree courses in Linguistic and Cultural Mediation since 2007. One of the main goals of the Portfolio is to help students develop awareness of their abilities in translation and improve them by setting targets to achieve.

The second profiling activity consisted in a brief introduction on the use of *Translog*; afterwards, volunteers were asked to translate a 150-word long text (Appendix 3) on a general topic into Italian. The text was taken and adapted from the website of AITI (Italian Association of Translators and Interpreters), which offers a range of sample texts of general nature in preparation for the association entry test. The texts available focus on a number of general topics with no specific terminological issues, which aim at testing translators' overall linguistic and translation competence rather than specific terminology-related knowledge. Therefore, it was deemed suitable for the purposes of the study. A further selection criterion was the presence of a number of Rich Points mirroring the type of problems found in the preliminary study, which were then analysed and used to draw initial

conclusions regarding their approach to solving common translation problems such as false friends, and syntactical and lexical issues. Moreover, the data provided by *Translog* log files were used to assess the cognitive rhythm of learners.

The introductory activity to LvS – to which the second half of lesson one was dedicated – engaged students in learning the basic functioning of this tool such as how to load an activity, play a video, look up the slides loaded on the document viewer and enter subtitles. The video was displayed with English subtitles[56] to give students a clearer idea of what a subtitled video would look like on LvS. The short clip shown is an extract taken from episode 6 of series 1 of the popular British sit-com *Fawlty Towers*, broadcast on BBC2 in the late 1970s. This clip was selected because it was quite unlikely for students to know it, since it was never broadcast on mainstream Italian television and it is not very recent. Moreover, it was deemed a suitable content to introduce LvS because it did not contain particular linguistic difficulties and dialogues were uttered at an average speed – so that students could focus on the software –, and its entertaining character was thought to provide an anxiety-free working environment, so as to lower students' affective filter as much as possible. Students were invited to interact with the four areas of which the software consists and ask questions if they had doubts or problems in preparation for the tasks of the two following lessons.

All videos were adapted by using the video editor available on Youtube to anyone who has an account, however alternative tools such as Windows Movie Maker can be used. Communication with students outside of class was made possible through the Moodle platform, currently used at the University of Padua by our language centre for teaching purposes. The account was password protected, hence accessible only by the students enrolled in the trial. Here materials (e.g. slides and videos) were posted by the teacher and students could send their subtitled files.

Lesson two and three were structured so as to guide students through a four-stage translation process. First of all learners would be given guidelines on the general context of the video and instructions on the subtitling task displayed in the power-point presentation on the document viewer of LvS. Further explanations

[56] The intralingual subtitles provided both for the pilot and the trial were spotted and written by the author.

would be given to the class if required. Secondly, the video with English subtitles was projected and watched by the whole class (sometimes more than once to ensure full comprehension). Students were then asked to provide an oral summary in order to check comprehension gaps and invited to discuss what they think might be the most challenging bits to translate and how they would render them. The teacher here provides only minimum guidance and facilitates group discussion by asking students to critically assess peers' solutions. Thirdly, students are invited to open *Translog* and carry out the translation individually; if they need to, they can also watch the video again. Once finished, they enter their subtitles on LvS and watch their work. Finally, students propose their translations, which are projected for the whole class to see and the video is replayed with the subtitles created by students. These are used as source for discussion and comparison, which is believed to foster self-awareness, the ability to rationalise and express thoughts, and to critically assess own and others' work.

The two tasks proposed (see Appendix 8 and 11) were in order of growing difficulty. The first one is an extract taken from the American sit-com *Friends* (season 10, episode 2) and the second from another British BBC comedy, *Blackadder goes Forth* (episode 6). Both videos did not last longer than 90 seconds and contained specific translation problems, which were discussed in the pre- and post-translation discussions. The *Friends* video and slides are part of the sample activity designed by LvS developers and that can be downloaded from the project website[57]. This was considered suitable material for the first subtitling activity because there was a very circumscribed set of problems, most of which required the ability of adapting a number of puns that do not have a straightforward translation into Italian. Moreover, a number of visual constraints (i.e. what is being said is linked to what is displayed in the video) and the need to match subtitles with the rhythm of utterances. The *Blackadder* video was selected and designed by the author on the basis of the criteria described in 4.1.4. In particular, this video contained a more varied range of issues and required more advanced adaptation strategies.

[57] See the "Sample activity" folder at http://levis.cti.gr/index.php?option=com_docman&task=cat_view&gid=100&Itemid=27 (last accessed 4/01/2013).

The results of the activities and the preliminary conclusions drawn from the pilot study have been used to improve the methodology of the trial and can be found in Chapter 5.

4.3.3 The trial

The trial was designed on the model of the pilot study, though a number of improvements were deemed necessary to enhance students' abilities, also considering that more time and a larger sample were available. The study took place over ten 90-minute-long lessons (one lesson per week) in which 27 students of the undergraduate course in Linguistic and Cultural Mediation Studies (20) and the postgraduate course Modern Languages for International Communication and Cooperation (7) participated. Among these there were both native speakers of Italian (22) and foreign students (5) of other nationalities, who have been included in the sample because they are not visiting students who are still learning the language but permanently live (and sometimes work) in Italy and are regularly enrolled at the University of Padua. Hence, their level of Italian was deemed sufficient to be able to perform all tasks like their native speaker peers. Students were divided into two groups because of the limited capacity of the language laboratory and were used to fit their schedule. Once again, no particular requirement was necessary to join the trial but active participation in class and regular attendance (cf. Appendix 1).

Similarly to the procedure applied for the pilot study, students underwent initial profiling. The text students were asked to translate during the pilot study was reproposed since the problems (Rich Points), which had been initially identified on the basis of the results of the preliminary study, proved challenging for students of the pilot study as well. Translation problems were identified to be used as Rich Points on the grounds of what was considered to be their main characteristic. This does not mean that the translation problem cannot be classified in a different manner but choices were guided by what turned out to be more relevant for the purposes of the study and on the basis of what was found in the preliminary study and confirmed in the pilot study.

Afterwards, students were introduced to LvS and its functions (see 4.3.2 for a detailed description). However, in this case the introduction to LvS and *Translog* was completed on lesson two and students were also required to translate the *Fawlty Towers* video into Italian. As this video did not contain any specific Rich Point but was used only as a means for students to become better acquainted with the procedure, the translations provided were not object of evaluation. Unlike the pilot study, here students were formally lectured on specific topics in order to help them grasp the essentials of the subtitling technique and to highten their awareness of the translation process. Hence, a power-point presentation on subtitle line-breaking (Appendix 18) and one on the semiotic implications of combining words and images (Appendix 17) were delivered to students on lesson two[58].

The first and the second translation activity are the same as those used for the pilot study and so is the guided procedure followed by students, which characterises the whole study. Hence students were first introduced to the content of the video by consulting the power-point presentation on the viewer area of LvS or with a short oral presentation, they would watch the video all together, discuss its content and possible problems and solutions in their translation into Italian, do the translation on *Translog* and copy it to LvS, and finally compare and discuss their translations as a group.

Before moving on to activity three, students were instructed on the specifics of the translation process and its stages with a particular focus on background and terminology research, which appears a particularly weak spot in their preparation (see Appendix 19). In fact, one of the aims of the study was to train students to acquire a or improve their translation process in order to reach a satisfying time/performance quality ratio. Awareness of the various stages of the translation process and of how to carry them out effectively appears important also in the light of the so-called "Basic Processing Concepts (BPCs)", i.e. the major building blocks of actions at the level of mental representations (Carl et al. 2008:118). The theory underlying these concepts is that "actions are represented in functional terms as a

[58] I am indebted to Doctor Dimitris Asimakoulas of the University of Surrey for his advice on providing students with such content at the beginning of the course.

combination of action execution and the intended and/or observed effect"[59]. This means that BPCs are the cognitive tools that allow us to execute those complex actions requiring a high level of expertise without requiring an additional cognitive effort to control them. For example, this is what happens when we learn how to drive: the higher the expertise, the lesser the cognitive effort needed to perform all the necessary actions. It is believed that the same principle can be applied to the translation of a text by breaking it down into progressive stages, which can be learned and internalised.

When asked whether they were familiar with the stages of the translation process and how to carry them out, learners gave mixed and sometimes contradicting answers, thus somehow reflecting the great variety of approaches to the translation process found in the results of the profiling translation test (see 5.2.2). At the end of the presentation, students were engaged in a hands-on activity, so that they could put into practice the strategies discussed by analysing a short written text and become more familiar with background and terminology research. The text given to students is the following:

How fracking caused earthquakes in the UK

In April and May this year, two small earthquakes struck the UK near the town of Blackpool. Suspicion immediately fell on hydraulic fracturing, known as fracking – a controversial process to extract natural gas by fracturing the surrounding rock.
A magnitude-2.3 earthquake occurred on 1 April, followed by a magnitude-1.5 quake on 27 May. Both occurred close to the Preese Hall drilling site, where Cuadrilla Resources was using fracking to extract gas from a shale bed. [...]
The link with fracking has now been confirmed by an independent report commissioned by Cuadrilla, which states: "Most likely, the repeated seismicity was induced by direct injection of fluid into the fault zone."

(Edited from *New Scientist* 02/11/2011)

The possible issues in the translation of the text were addressed by the whole class and debate arose as to the type of resources students consulted in their research.

[59] *Ibidem.*

What became apparent during this discussion is that students find it difficult to tell the difference between reliable and unreliable sources when it comes to doing research on the Internet. Much to their surprise, the quality and veracity of the information found on Wikipedia or Wordreference is not comparable to that of an encyclopaedia edited by a scientific committee of experts or of a dictionary whose entries are created with the support of terminologists, linguists, phoneticians etc. In particular, not all students seemed to be aware of the fact that translating a text for a target readership also entails taking responsibility for the reliability of the information delivered. Legal and ethical issues aside, it appears that translation is still perceived by the majority of students as a language-learning exercise rather than a simulation of what they might be doing in the future. Internet can certainly be an unprecedented source of instant information but not everything found in it is suitable for the purposes of translating a text, hence the need to dedicate time to train students on these aspects of the process as well.

The decision to present this content after the first two translation activities was made on the basis of the principle of the progressive introduction of new content and tasks. Moreover, as can be inferred from the transcriptions of these activities, no specific background or terminological knowledge other than that given in the introductory session was necessary in order to translate the dialogues. Finally, the videos chosen for activity three and four dealt with much more specific content and terminology, so that students could put into practice what was learnt about subtitling and the use of the two pieces of software through the activities and about translation through the slides and the class discussion.

The material for activity three was taken from the Youtube popular-science channel Bigthink, where videos featuring leading experts in various fields explain domain-specific issues in layman terms. In the video chosen, a theoretical physicist explains the possible consequences of the recent discovery made at CERN that neutrinos might travel faster than the speed of light. A translation of this type of content required precisely the kind of background and terminological research previously discussed. Additionally, this time students were also asked to prepare the English subtitles first, and then to translate them. Thus, the procedure followed for this activity was the following:

1. Students watched the video (twice) and were asked to provide an oral summary of its content and support each other in trying to understand it;
2. They were given the full transcript (see Appendix 13) and asked to do background and terminological research both to ensure they completely understood the content and in preparation for the translation of the text. During this stage they could also watch the video on LvS from their computers as many times as they wished;
3. The results of their research were discussed in class and special emphasis was given to the quality and reliability of the sources used through targeted questions on the part of the teacher.
4. Students designed their subtitles following the guidelines given to them on the previous lessons and entered them on LvS, where the TC-in and TC-out were already provided along with the video, so that students would not need to deal with the technical aspects of subtitling.
5. Once their subtitles were ready, they loaded them on Moodle, where a specific activity folder was created. The teacher then converted students' .srt files into *Translog*-suitable files using *Translog* Supervisor.
6. Students translated their subtitles on *Translog* using the notes they took during the research stage.
7. Students' solutions were compared and discussed in class.

This twofold activity (subtitling and then translating) was particularly appreciated by students, who maintained that this gave them a bigger sense of empowerment and control over the whole process. Unfortunately, the time available during the semester did not allow students to repeat such activity, as the whole process required almost three lessons to be completed.

Activity four was centred on an extract taken from BBC News at Six of 21/03/2012 and learners followed the procedure described in activity three except for the English subtitling part. After having dealt with popular science, students were challenged with the translation of a piece of news regarding budget negotiations in the UK and in particular with the possible institution of a 50p top-rated income tax. Here again, learners needed to search for background information and terminology before starting to translate and received the transcription of dialogues (Appendix 15).

Once completed this step, they proceeded to the translation with *Translog*, which was then object of discussion in class.

Finally, learners filled in an end-of-course questionnaire (Appendix 20) in which they were asked to assess various aspects of the course such as working with the two pieces of software, the usefulness of learning through subtitling, the contents delivered, the quality of the teaching and the impact on their translation process.

CHAPTER 5

Results of the analysis of the pilot study, the trial and the end-of-course questionnaire

The present chapter will describe in detail the results of the pilot study and of the trial. For the seek of clarity, the data provided in tables and figures will be described and discussed in order to provide the reader with a key to their interpretation. However, the connection of results with the research questions outlined at the beginning of this work and the overall interpretation of their significance for the purposes of this study will be dealt with in Chapter 6.

5.1. Results of the pilot study

The pilot study had the purpose of gathering preliminary data on students' perception and performance in translation, besides testing the correct functioning of *Translog* and LvS. Since it consisted of only three lessons, no substantial improvement was expected, hence the analysis of variables described in 4.1.5 (translation process management, translation problem management, quality of the translation product and quality of results) was not carried out on pilot study data.

5.1.1 Self-perception questionnaire

A self-perception questionnaire (see Appendix 2) was administered in order to gather information on the sample of participants and the way they see various aspects of their translational performance. Questions 1 to 3, 6 to 8[60] were used to gain a profile of the sample as well as distractors, so that students would not understand the

[60] 1. What is your native language/s (L1)?; 2. Which are your second languages (L2)?; 3. How long have you been studying them?; 6. What do you usually do to improve your translation skills?; 7. Have you ever taken translation courses outside your university?; 8. Have you ever worked as a translator (for a company, during a job placement, etc.)? If so, describe your experience briefly.

real purpose of the questionnaire, and. As far as the learners' general profile is concerned, the questionnaire showed that 100% of them are native speakers of Italian; they all study English as L2 and at least another foreign language among French (61.1%), Spanish (50%), German (44.4%), Portuguese (22.2%), Russian (16.6%) and Serbo-Croat (5.5%); 11.7% have been studying English for 5-8 years, another 11.7% for 8-10 years and 76.4% for more than 10 years. Finally, 94.4% never took translation courses other than those offered by their university and none of them ever worked as a professional translator.

In question 4 students were then asked to rate their EN-IT translational skills in source-text analysis (4a), research background information and terminology (4b), translation process (4c), and revision (4d) respectively on a scale from 1 (lowest level) to 3 (highest level). In all the four stages of the translation process the majority of students rated their competence as average (level 2) (fig.10). This means that they thought they were capable of carrying out all of the required tasks in quite a satisfactory manner. However, such perceptions appear in contrast with the results of the profiling translation task during which students had an uneven performance in their approach to translation: in some cases they were able to solve the problems at hand but in many other cases they did not recognise that they were faced with a similar problem and struggled to overcome it or failed.

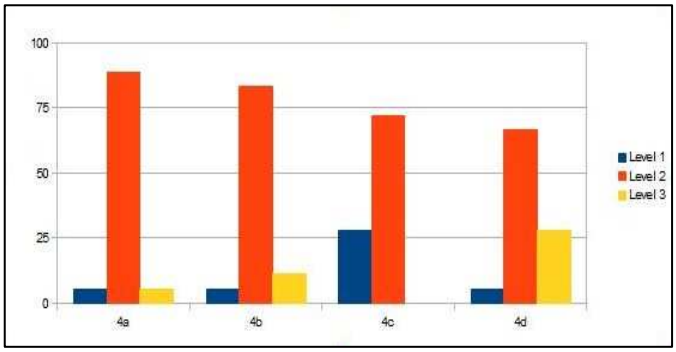


Fig. 10: Students' self-perception of their translational skills.

In question 5, volunteers had to rank seven common translation problems (see fig. 11) from most to least difficult. In particular, the problems were: syntax (pink), style (light blue), register (purple), pragmatics (green), puns (yellow), lexis/terminology (orange), cultural references (navy).

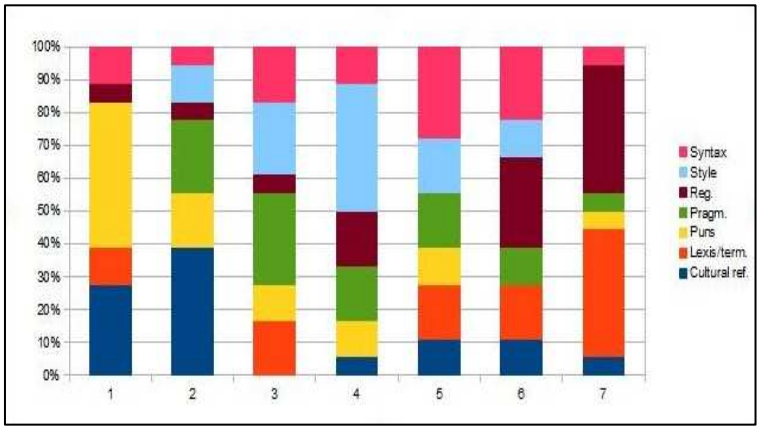


Fig. 11: Rating of translation problems.

The vertical axis of the graph indicates the percentage of students who ranked a certain problem in the same way, while the horizontal axis refers to the difficulty associated with it, where 1 indicates the highest and 7 the lowest difficulty. For example, if we look at column 1, we can see that more than 40% of students rated puns (yellow) as the most difficult translation problem, while lexis and register are mostly ranked as minor problems.

A closer look also reveals that the majority of volunteers considers puns and cultural references as the most challenging aspects of a text, since these occupy the biggest part of the left-hand side of the graph. In the middle we find style, pragmatics and syntax, which seem to be perceived as important, though still manageable. Finally, the right-hand side of the graph has a prevalence of register and lexis/terminology meaning that students consider these issues of secondary importance.

5.1.2 Translation test

The second profiling task, i.e. the translation from English into Italian of a short passage (see Appendix 3), was designed to look at how students deal with a

concrete text and then contrast the results with their perceptions. The text submitted consisted of 967 characters including spaces (150 words) and students had approximately 20 minutes to perform the task. The data analysed were taken from the statistics automatically produced by *Translog* regarding total user events, text production and elimination, user events per minute and text production per minute. What can be inferred from this set of data is the type of "relationship" they have with texts, meaning how much they produce and delete and how quickly. The mean values of students' performance were calculated and provided the following results:

Total user events	Text production	Text elimination	User events per min.	Text production per min.
1876.33	1402	236.16	85.07	63.98

Table 4: Mean values of students' performance in the profiling activity

What appears particularly meaningful here is the text production/text elimination ratio, which amounts to roughly 1/6 (or 16.84%). This means that one in six characters is erased when typing, hence students seem to do a substantial amount of rethinking and re-elaborating. This, in turn, indicates a still uncertain attitude towards the solution of problems (false friends and syntax) that should no longer be problematic at this stage of their studies. Moreover, even if Italian words tend to be longer than English words, the average number of characters produced after subtracting the characters eliminated is still substantially higher than the characters in the original text.

As mentioned in the description of *Translog* (4.1.1), this also provides information as to the duration and position of pauses. This means that we can actually see at which point of the text students stopped to think and how long for. In this way, if we assume that a pause indicates a potential problem or difficulty, not only can we see what they find most challenging but also how they go about texts. By comparing the results of pauses with what students stated in the questionnaire, a number of discrepancies become evident. While they affirmed being quite well versed in the preliminary stages of text analysis and that lexis was not an issue, according to the data yielded by *Translog*, only 61.1% of students read the text before starting to translate, hence another 38.9% started typing without any knowledge of the topic or the context. Interestingly, this difference in approach also

corresponds to two translation styles: those who paused before translating made a much lower number of lexical errors and managed to treat the false friends inserted as indicators correctly; conversely, those who immediately started writing were subject to a higher number of lexical errors, re-elaborated the text much more and were evnetually much slower translators than the others.

As we can see, self perception and actual performance did not always match. Although 88.8% of participants stated they have average skills both in the source-text analysis and background research stage, almost 40% do not even read the text before starting. Moreover, 72.2% of participants stated that they can select appropriate terminology: accordingly, this is at the low end of their list of problems. However, many students encountered difficulties in solving terminological issues in the text (they either paused or provided incorrect renderings or both).

5.1.3 Results of activities

In lesson two and three students were asked to translate audiovisual texts taken from the American series *Friends* and the BBC comedy *Blackadder Goes Forth.* Before starting to translate, students were given background information regarding the video and the task through a slideshow loaded on the viewer of LvS and the teacher showed the video once or twice for group viewing. A discussion regarding the most salient points of the text followed.

Below are the mean values of students' performance resulting from *Translog* statistics.

Activity 1: Friends (436 characters, spaces included)

Total user events	Text production	Text elimination	User events per min.	Text production per min.
978.13	584.1	106.2	55.62	38.84

Table 5: Mean values of students' performance in activity one.

Activity 2: Blackadder (1027 characters, spaces included)

Total user events	Text production	Text elimination	User events per min.	Text production per min.
1873.15	1381.8	234.7	95.72	75.04

Table 6: Mean values of students' performance in activity two.

In activity one, the text production/elimination ratio is 5.5, hence slightly higher than that of the initial task – which was precisely 5.9 – and of activity two. This means that in activity one 18.18% and in activity two 16.98% of the characters typed in were subsequently erased either during drafting or end-revision. However, in activity two students produced substantially more text per minute and erased less than in activity one in proportion to the length of the source text. It is quite clear though, that these data cannot be interpreted as a clear sign of improvement both for the limited duration of the study and the lack of post-treatment tests, as this was not the purpose of the pilot study. Still, the positive response of students to the type of activities proposed with LvS and *Translog* and along with the software information gathered regarding the students' profile and translation style were considered an encouragement enough to refine and improve the methodology and the material for further testing on a larger sample and on a longer time span.

5.2 Results of the trial

5.2.1 Self-perception questionnaire

Just as in the pilot study, students who volunteered for the trial filled in a self-perception questionnaire (see Appendix 2). Below are the results of each question.

Q1: Native language (L1)

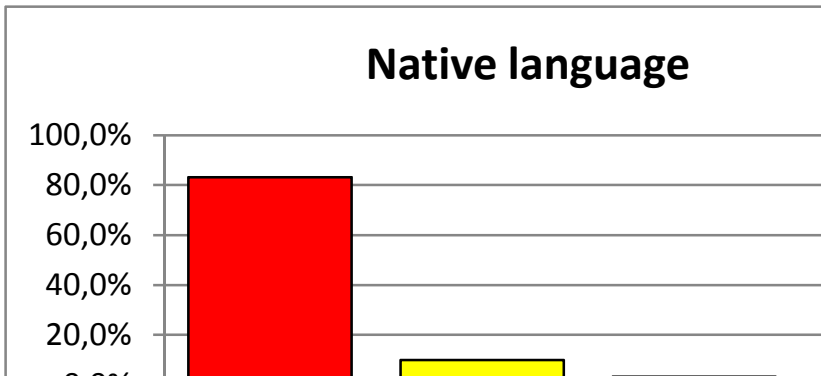


Fig. 12: Native language(s) of the trial group.

The composition of the sample of learners participating in the trial is somewhat different from that of the pilot study, where all students were native speakers of Italian. Here, 5 volunteers out of 27 (18.5%) are foreign students (3 from Romania, 1 from Spain and 1 from Croatia) and were accepted in the trial because they permanently live in Italy and are enrolled at the University of Padua, hence they are considered fluent enough to be able to translate into Italian like their course mates, with only some minor spelling or collocation errors. Moreover, all students of the degree course in Linguistic and Cultural Mediation are expected to pass an English to Italian translation exam in their third year anyway.

Q2: Second language(s) (L2)

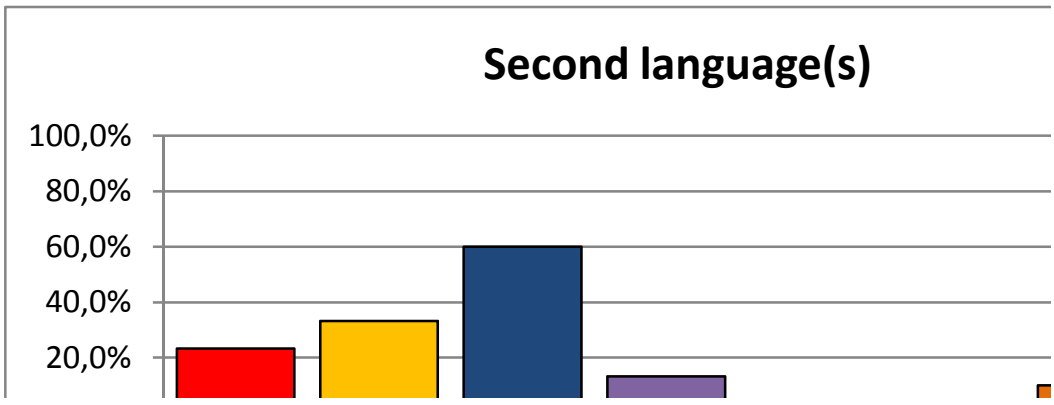


Fig. 13: Second languages studied by trial group.

Students are required to be fluent in at least two foreign languages of their choice. The graph above shows that 8 different languages other than English are studied, though Spanish (60%), French (33.3%) and German (23.3%) are the most popular among students, which also reflects the general trend in the undergraduate and postgraduate degree course.

Q3: Years of study (English only)

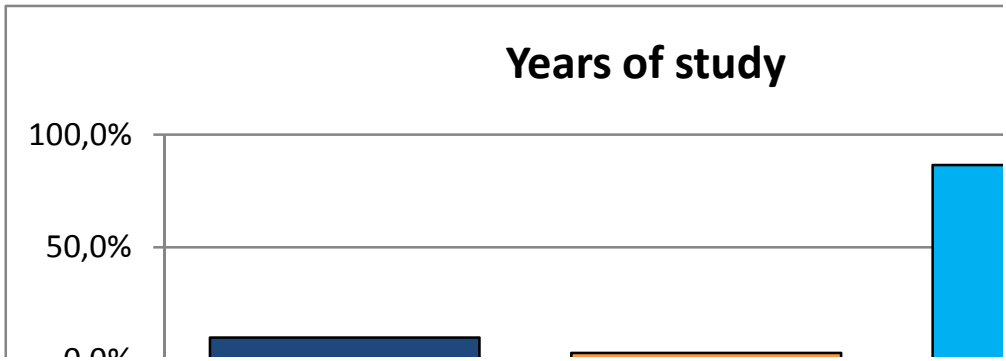


Fig. 14: Years of study (English only).

The majority of the students participating in the trial (86.6%) have been studying English for more than 10 years, while only 3 people (10%) between 5 and 8 years and one person between 8 and 10 years (3.3%). In view of this trial it was very important to test a sample that did not include beginners or intermediate learners, considering the complexity inherent to the translation of audiovisual material, as suggested in previous case studies (see section 2.2.1.4).

Q4: Translation process

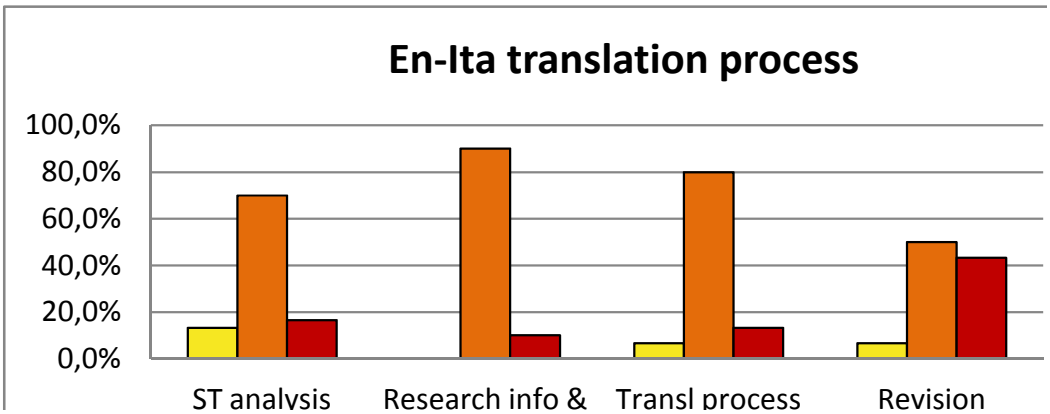


Fig. 15: Self perception of performance in the translation process.

The results of question 4 show that – similarly to results in the pilot study – learners tend to rate as average their competence in source text analysis, background information and terminology research, translation process and revision. However, the trial group appears much more self-confident in stage two and four than the pilot study group. This datum might be partly influenced by the presence of students of the postgraduate course, who can count on a longer experience in translating. However, this is not enough to justify a striking 90% of students stating that they can "research background information on general and special language about contemporary problems; carry out thorough searches of culture-bound lexis and general language used to express attitudes and viewpoints; search and study standard terminology". Equally striking appears that no-one ticked level 1 on this answer.

The experience of the trial will then partly confute this perception, as learners often found themselves at odds with selecting appropriate sources and terminology during the guided orientation stage and expressed perplexities when told about the necessity of singling out reliable sources from the *mare magnum* of the Internet.

Q5: Classification of translation problems

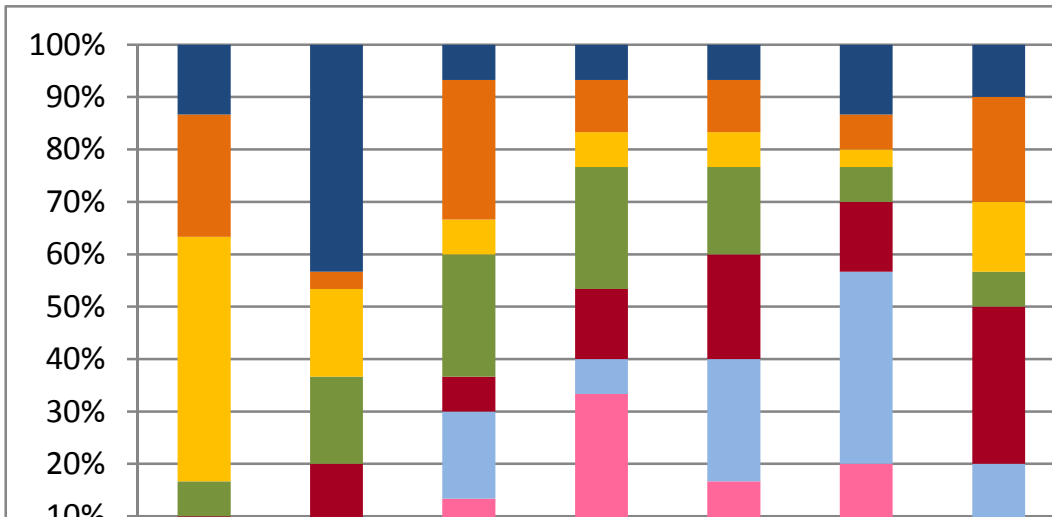


Fig. 16: Rating of translation problems difficulty.

The trial group's perceptions on the difficulty of the seven problems listed appears only partly similar to those of the control group. Puns are rated as most difficult by more students here and occupy the biggest part of column one. Cultural references are also perceived as particularly challenging, while the opinion of students on the difficulty of lexical/terminological problems appears quite mixed. In fact, exactly the same number of people rated them first and last on the scale from 1 to 7, and if we compare the first three positions with the rest of the chart, we can see that there is almost no difference between them either. This means that half of the students finds these problems amongst the most difficult parts of a text while the other half finds them least difficult. These two almost opposite stances on this issue might be originated by a partial lack of training in terminology management, which is hence either perceived as extremely challenging or not problematic at all.

Problems linked to pragmatics are mostly in the central area, thus indicating a perception of average difficulty while syntax is mostly present in the first half of the graph. Finally, register and style seem to be seen by students as quite manageable in comparison to the other problems.

Q6: Extra activities

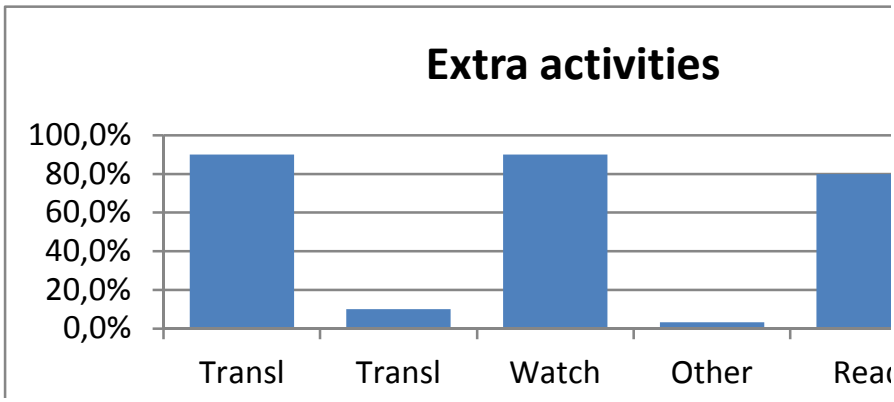


Fig. 17: Extra activities.

Question 6 asked students what they do to improve their translational competence. Apart from following translation classes (90%) we can see that almost the totality of the learners participating in the trial are already familiar with the benefits brought about by watching films in a foreign language. Books are also very popular in developing translational knowledge (80%). However, only one person took extra translation classes at another university and only 10% of students stated that they read translation journals, the latter being usually an activity students become first familiar with during the writing of their B.A. theses if they choose a topic in translation studies.

Q7: Extra translation courses

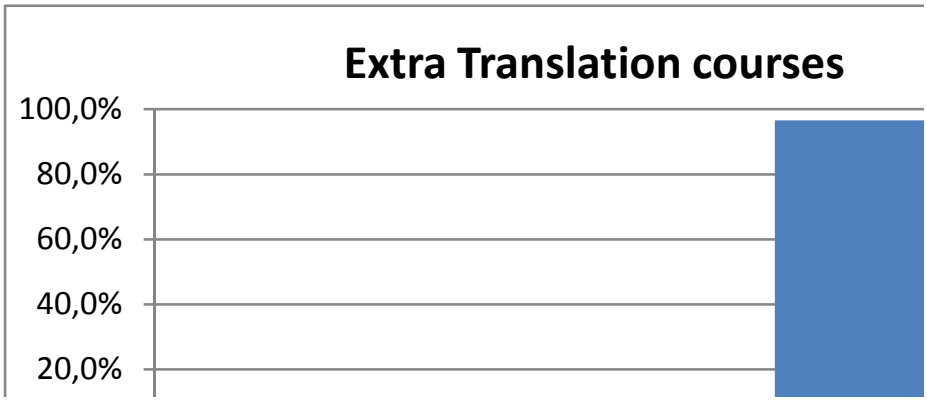


Fig. 18: Extra translation courses.

The majority of students (96.7%) has never taken translation courses other than those in their curriculum, which indicates that this does not seem to be an alternative that students take into consideration when it comes to improving their language and translation skills but rather prefer light and more entertaining ways of learning during their spare time.

Q8: Professional experience

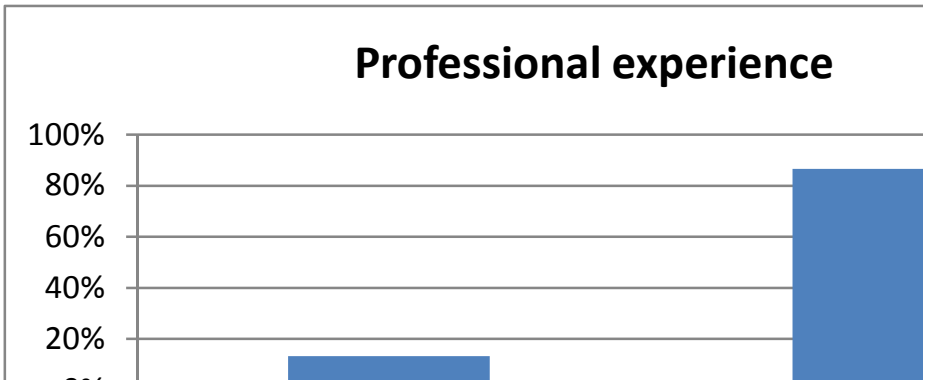


Fig. 19: Professional experience.

As we can see, only 13% of volunteers maintain that they have had some kind of professional experience as translators. However, it should be pointed out that the type of experiences described by students are all limited in time and in the extent of their tasks. Among these are for example job placements in translation agencies or in companies, or occasional small-scale freelance jobs.

5.2.2 Translation test

After completing the questionnaire, students moved on to the second profiling task, i.e. the translation of a short passage into Italian. Prior to data processing, every student was assigned a code consisting of the first letter of their name and the first two letters of their surname. If the student attended a "Laurea Magistrale" (postgraduate course), then an "M" was added at the end of the code. This method was preferred to the random assignment of numbers or letters, in order to make the

subject immediately recognisable by the author during the elaboration of the statistics though without breaching their anonymity when publishing the results.

5.2.2.1 Cognitive rhythm of the translation test

As discussed in the previous section (4.1.5), one of the variables calculated in the study is the so-called "cognitive rhythm", i.e. the duration of the three stages of the translation process as displayed in the *Translog* log files. Below are the results of the profiling translation test for each stage. As two students did not manage to save their files, the sample of translations available for analysis was 25 instead of 27.

Orientation:

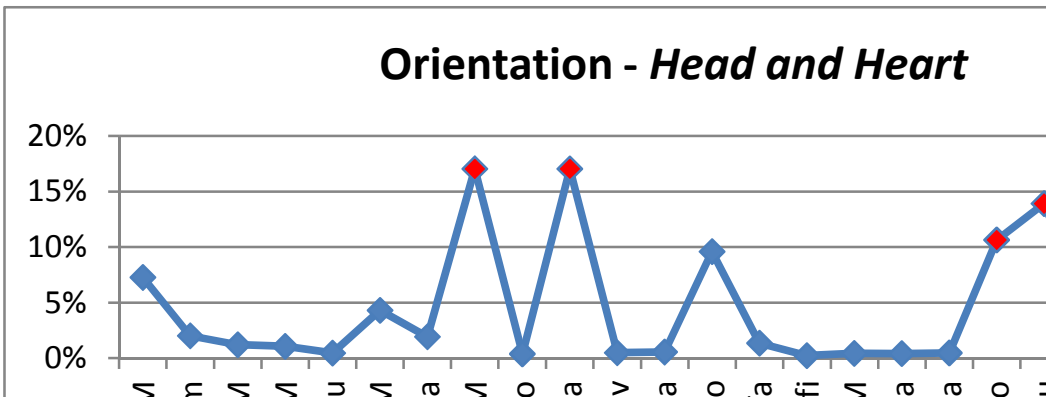


Fig. 20: Translation test - orientation - Head and Heart.

The amount of time dedicated to read and understand the text is subject to considerable variation within the sample. Yet we can isolate two different orientation styles among learners: those who spend between 10% and 17% of the total time of the translation reading the text (red dots) and those learners who almost seem to skip this stage altogether (blue dots). The latter corresponds to 84% of the students surveyed, who dedicate less than 10% of the total time to orientation.

The fact that so many students approach the translation of a text in a such a varied and "straightforward" manner indicates that students lack what could be called a systematic translation routine and approach this process in a rather intuitive way.

Such attitude might also be connected to the word-for-word approach that was also found in students' theses, as those who do not take time to read the text tend to translate very small chunks of text and then go back to them almost immediately once they realise they meant something different or that they were part of a longer phrase.

Drafting:

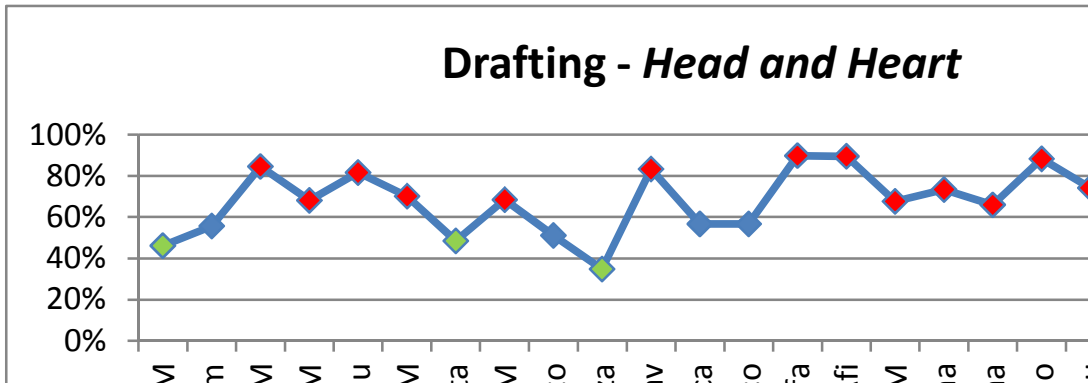


Fig. 21: Translation process - drafting - Head and Heart.

The second stage of the translation process, drafting, also reveals a certain variety, though not as striking as in the previous case. A first look at the table above immediately shows that the majority of students spends more than 50% of their time writing the translation.

A closer look shows that one group of students (16%) spends less than half of their time writing (green dots), while another 20% spends between 50% and 65% of the total time available (blue dots) and one (64%) is even above this percentage (red dots). The time subjects of the first group (FanM, Vta, Sza and SsaM) devote to drafting almost equals that of end-revision (see table below) while not much time is spent on initial orientation. The duration of the drafting stage of the second group can be considered in line with a standard rhythm, while in the third one students take far too long drafting the text and, again, spend most of the time left doing end-revisions. Hence, the cognitive rhythm of the majority of students appears uneven either because too much time is devoted to end-revision with little or no orientation or because too much time is taken to draft the text.

End-revision:

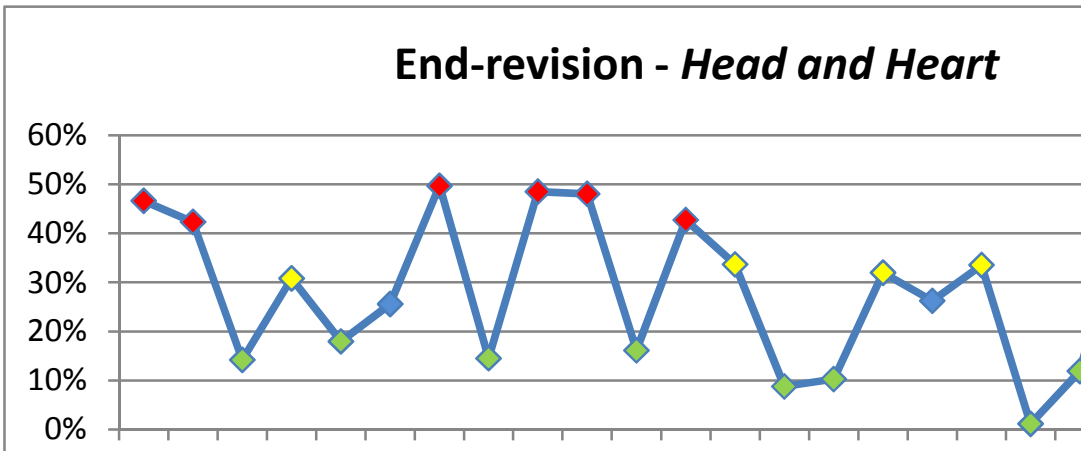


Fig. 22: Translation process- end-revision - Head and Heart.

This table too shows that the way students go about end-revision in quite different ways. In this case as well we can identify different cognitive rhythms: those who revise for less than 20% of their translation time (36%, green dots), those who invest between 20% and 25% of their time – which is considered the standard duration of revision in proportion to the whole process – (12%, blue dots), those who take between 26% and 40% of their time to revise (24%, yellow dots) and finally the students who dedicate more than 40% of their time (28%, red dots).

No group numerically prevails over the others, however the biggest part of students clearly take too long to revising their translations. This fact might also be connected with the insufficient time dedicated to orientation, so that students need to reorganise their translation after the drafting stage because they did not take enough time to look at the text as a macro unit and fully understand the connection between its elements. As can be inferred from the log files, during the end-revision stage many students changed those parts of the text that were initially drafted without having a bigger picture of the context. Once completed the drafting, students gain a broader perspective on the context and make adjustments.

5.2.2.2 Assessment of Rich Points

The text students translated for the profiling activity was also assessed using Rich Points (cf. 4.1.4 and 4.1.5). Each point is evaluated according to how many seconds students pause to translate that point, to the number of re-elaborations and to the degree of acceptability, which is assessed on a scale from 0 to 3. A second evaluation round was carried out on the quality of the translation of Rich Points (acceptability) by an external evaluator in order to provide a more balanced and objective assessment of students' initial performance. Appendix 4 containes the complete list of tables relating to each student's performance. In case of disagreement, the score given by the second evaluator is indicated in red and the final score is in blue. The mean value of acceptability was calculated considering the scores resulting from the mediation between the two evaluators (blue scores).

The mean value of the variables related to process and product is presented in the table below.

RP	Mean value of pauses (in sec.)	Mean value of re-elaborations	Mean value of acceptability
1	11.64	0.64	0.44
2	26.36	0.44	1.04
3	17.72	0.32	1.24
4	68.68	1.92	1.72
5	10.4	0.24	1.6
6	6.24	0.2	2.56
7	17.92	0.44	1.2
8	1.4	0.04	2.16
9	4.4	0.08	2.48
10	24.32	0.64	2.2

Table 7: Mean values of process and product results - Head and Heart.

If we look at the type of Rich Points selected for this text and at students' performance, we can see that, while the average number of re-elaborations is very low (mostly below 1), there is considerable variation as for the length of pauses and acceptability.

In the case of lexical problems (RP1, RP2, RP3, RP5, RP7 and RP10) pauses range from 10.4 seconds to 24.32 seconds and acceptability appears to be between

0.44 and 2.2, which means that most lexical problems scored an average acceptability around 1. Hence, most solutions proposed were considered acceptable only because they conveyed the meaning of the text but did not meet the other two criteria (correct function and appropriate language). We can say that students do not make particularly long pauses, reformulate their text very little but do not come up with fully acceptable solutions.

As for false friends (RP6, RP8, RP9) pauses appear to be very short (between 4.4 and 6.24 seconds) and the re-elaboration rate is close to zero. However, in this case acceptability is definitely higher with all scores above 2. This indicates that the translation process for false friends is smooth (solutions are provided quickly and with confidence) and most of the times the product meets two or three criteria out of the three used to rate acceptability (p. 97).

Finally, the syntactical problem (RP4) required the longest pause, certainly due to its greater complexity for it demanded the reconstruction of a whole sentence, a fact that is also mirrored in the higher re-elaboration rate. However, acceptability is on average less than 2, meaning that a high number of students managed to convey the overall meaning of the sentence but without rendering it with appropriate language and function.

5.2.3 Results of activity one: *Friends*

The first activity of the course was taken from the popular American sit-com *Friends*. The results shown below report the values of students' cognitive rhythm and the data related to the process and product of their translations. The volunteers participating in this task were 23 (0.85 dropout rate).

5.2.3.1 Cognitive rhythm (drafting and end-revision)

As the orientation stage was always carried out as a group task, all results on cognitive rhythm refer to drafting and end-revision. This type of procedure has also

had a particularly evident effect on *Translog* log files, where the drafting stage started out after a few seconds. For this reason, an acceptable drafting/end-revision ratio is estimated to be around 20%-35%, i.e. drafting should take approximately 65%-80% of the total amount of the time recorded by *Translog*.

Drafting:

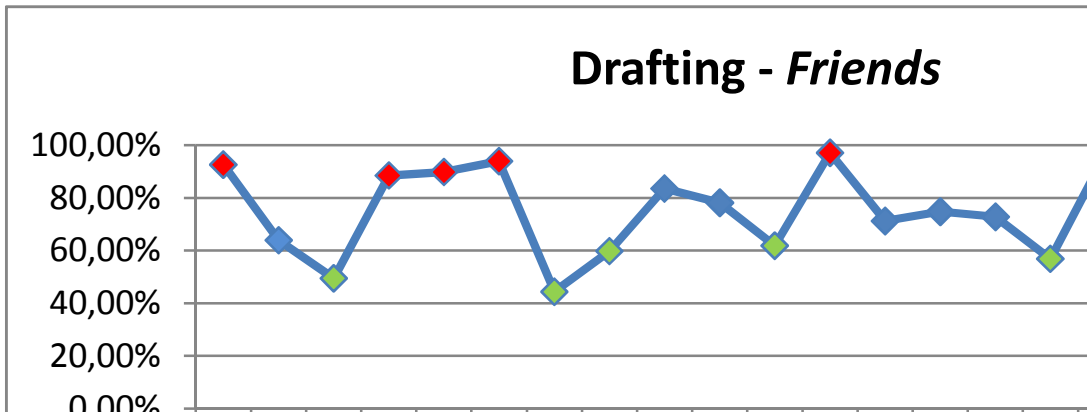


Fig. 23: Translation process - drafting - Friends

The data in the table above suggest that a high number of students still devote too much or too little time to drafting in comparison with revision. The red dots in the table indicate productions taking over 80% of the translation time (26.08%), while green dots account for productions lower than 65% of the total time (39.13%). Hence, only 34.78% of students display what is considered a standard drafting/end-revision ratio.

End-revision:

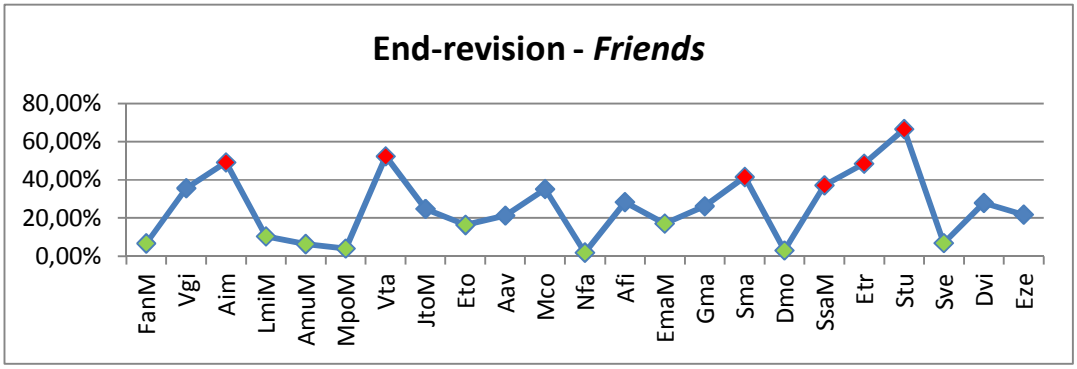


Fig. 24: Translation process - end-revision - Friends.

These are the corresponding percentages of end-revision for each student. However, we should remember that there is a difference between online revision and end-revision, the former consisting of all the changes made during drafting while the latter relates to all the editing procedures after translationing has been completed. For this reason, the data above show that there are students who probably do a great amount of online revision (i.e. those who have high drafting percentages) and those who draft their text relatively quickly to then revise it thoroughly afterwards. This reflects the two basic translation styles adopted by professionals too, however certain percentages of end-revision are considered far too low (some last only few seconds) or too high (they last longer than the drafting stage) to be included in either of these two translation styles.

5.2.3.2 Assessment of Rich Points

RP	Mean value of pauses (in sec.)	Mean value of re-elaborations	Mean value of acceptability
1	103.17	0.6	2.82
2	111.04	0.91	2.39
3	71.21	0.47	2.39
4	242.04	1.91	2.34
5	142.6	1.13	2.65
6	38.91	0.26	2.34

Table 8: Mean values of process and product results - Friends.

The translation of the extract taken from *Friends* contained two different categories of Rich Points: puns (RP1, RP2, RP3, RP4, RP5) and lexis/register (RP6)[61]. In the first case, students were expected to recreate the general effect of the original chain of puns and keep the coherence among its elements. The key word of the pun was "love" and to each letter was associated a word beginning with that letter (for example "L is for Life"). The difficulty students were supposed to overcome is that the Italian for the four-letter word "love" is the five-letter word "amore", with evident repercussions on the organisation of subtitles. Moreover, it was important to preserve at least part of the original meaning, as the whole situation displayed revolves around this pun. An additional difficulty was the strong visual and aural constraints present in the video, as the protagonist's mimics and acting contribute to the humorous effect and required special attention in the design of the Italian subtitles.

The amount of pauses required to elaborate solutions to the chain of puns goes from a minimum of 71.21 seconds to a maximum of 242.04 seconds, though the number of re-elaborations is substantially low. This means that students take relatively long to think about a solution but make few changes to what they write. Such long pauses might also be correlated to the specific type of problems present in the task, which not only require adaptation skills but also a certain deal of creativity in order to keep textual coherence. The acceptability rate of puns is then between 2.34 and 2.82, thus showing that the translations provided very often met the criteria discussed above. Hence, students need time to translate puns, hardly ever change their translations but come up with quite satisfactory solutions.

As for RP6, the translation of the word "dude" required the ability to find a word or expression with a corresponding meaning and register, also considering that Italian does not make such extensive use of appellatives as English. Here again, students hardly ever changed their first solutions and on average required almost 40 seconds to translate it. The acceptability rate here is substantially in line with that of the rest of the text.

[61] Cf. Appendix 8.

5.2.4 Results of activity two: *Blackadder goes Forth*

Activity two was again centred on an extract taken from a comedy, though this time the typpes of problems were much more varied and the level of difficulty of the video was definitely higher.

5.2.4.1 Cognitive rhythm (drafting and end-revision)

Drafting:

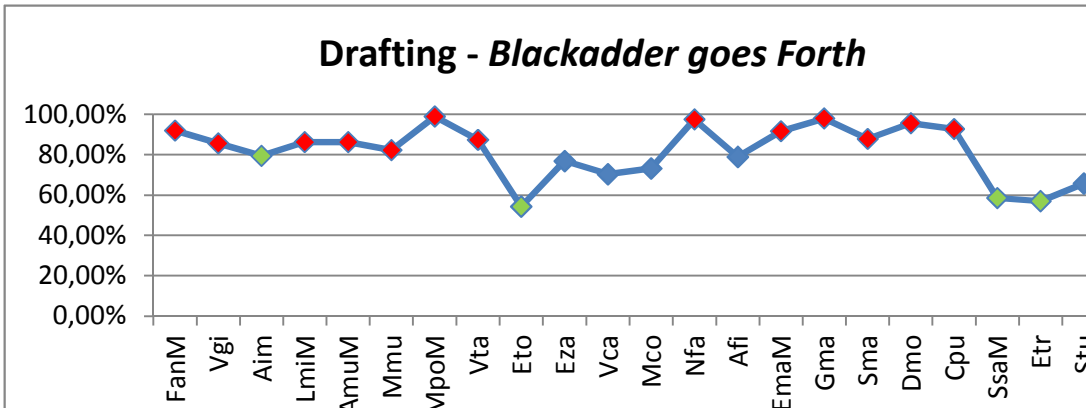


Fig. 25: Translation process - drafting - Blackadder goes Forth.

The data from activity two suggest that the increased difficulty of the text might be connected to an increase in the duration of the drafting and online revision stages. In fact, the number of volunteers who dedicated more than 80% of the total time to it is 60.86%, almost three times more than in activity one, with a consequent decrease of those who take less than 65% of the translation time without the orientation stage (13.04%). This leaves only 26.08% of people with what is considered a standard drafting time.

End-revision:

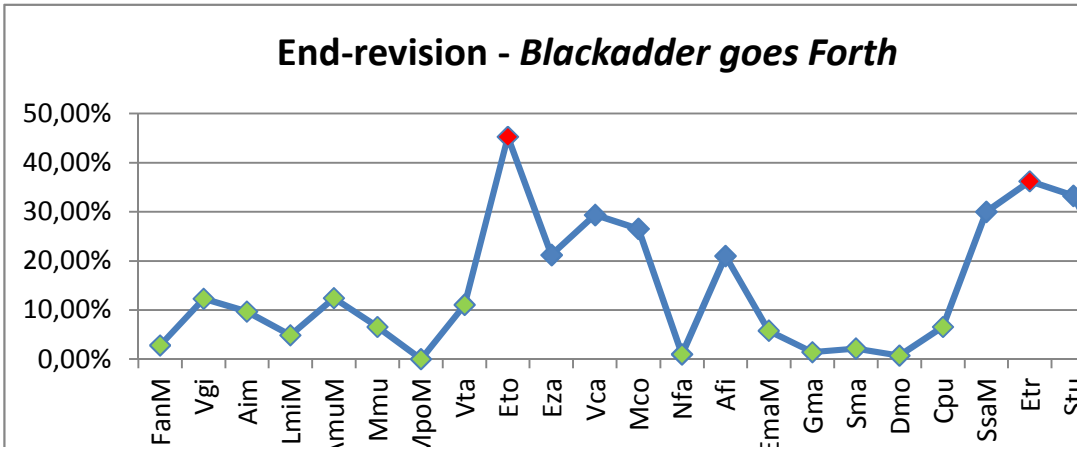


Fig. 26: Translation process - end-revision - Blackadder goes Forth.

A consequence of the spikes in drafting times is the clear decrease in the duration of end-revision, which in this case lasts between 0 seconds (student MpoM) and 03:11 minutes (student Sve). Only two people (8.69%) have exceeded the 35% limit of end-revision duration. This datum along with the recordings available from *Translog* indicates that the majority of the trial group responded to a more difficult task by concentrating on getting the translation done and spending a considerable amount of time to design solutions and then shortly re-read their final product.

5.2.4.2 Assessment of Rich Points

RP	Mean value of pauses (in sec.)	Mean value of re-elaborations	Mean value of acceptability
1	61.52	0.91	1.04
2	59.08	0.30	0.91
3	18.95	0.26	2.6
4	115.73	0.5	2.04
5	51.26	0.65	2.34
6	7.17	0	2.91

Table 9: Mean values of process and product results - Blackadder goes Forth.

The increased difficulty of the video material provided in this activity seems to have had an impact on students' performance in translating certain lexical items (RP1, RP2). Once again, the mean value of re-elaborations is below 1, though the time taken to translate these two items is around 60 seconds. The acceptability rate of RP1 and RP2 is around 1, which means that, on average, students were able to understand and translate the meaning of these utterances but without rendering them in fluent Italian. As for the first one, the expressions “there-not-being-a-war-on” and “there-being-a-war-on” were selected as Rich Points because this type of nominalisation does not occur in Italian, while it appears to be quite common in English. What some students did was to translate them almost literally, thus only one point was awarded, considering that such structure would not be considered idiomatic by an Italian audience. The second Rich Point (“vile Hun”) scored the lowest, indicating that while some students managed to translate it correctly, the majority proposed unacceptable solutions (see tables which are in Appendix 11) and did not change them (as shown by the 0.30 rate of re-elaborations), thus suggesting that they were happy with their first translation. Although students could not use dictionaries, the introduction to the activity was also used to clarify possible doubts about the meaning of the words in the text through a collaborative comprehension process. Hence, all unknown terms were either explained by a peer who knew them or by the teacher; moreover, students were supposed to be somewhat familiar with the historical context (the causes of World War I) of the video.

Although RP3 – the idiom “mad as a bicycle” – does not have a straightforward translation into Italian, there are several idioms expressing the same idea (e.g. “matto come un cavallo” – as mad as a horse –, “matto/pazzo da legare” – so mad that s/he needs to be tied up – etc.). This point does not seem to have been particularly challenging as demonstrated by the short average pause, the low re-elaboration rate and the 2.6 acceptability score.

Finally, the chain of puns (RP4, RP5, RP6) was without doubt the most complex task contained in the video. In fact, students were supposed to recreate a line containing both the humorous effect and something about the historical truth on the main cause of the war (the assassination of Archduke Franz Ferdinand of Austria). RP4, which contained the first half of the pun, was definitely the most

challenging as demonstrated by the long average pause (115.73 seconds), though students seem to confirm their tendency to think about various solutions and then write down what they consider the most satisfying one, making very few corrections afterwards. The second part of the pun appeared less complex to students, who took less than half the time to solve it (51.26) compared to the first part. Finally, the last Rich Point required to propose a solution coherent with the rest of the pun. The acceptability scores of these last three Rich Points ranges from 2.04 to 2.91, suggesting that in spite of the difficulty most volunteers managed to provide either a fully satisfactory solution or a 2-point solution, that is they conveyed at least part of the expected effect.

5.2.5 Results of activity three: *Einstein*

Activity three was preceded by an introduction to the stages of the translation process and background and terminology research (see Appendix 19), which also included a hands-on activity with a written text containing specific terminology on fracking (see 4.3.3). The volunteers who participated in this activity were fewer than those of the previous ones (17), with a consequent dropout rate of 26.09.

The audiovisual text students were confronted with belonged to a different genre, namely popular science. The reason why this text was chosen was the abundance of specific terminology and the topic (the recent discovery by CERN that neutrinos might travel faster than the speed of light), with which students were not familiar, thus ensuring that they carried out the background and terminology research needed.

5.2.5.1 Cognitive rhythm (drafting and end-revision)

Drafting:

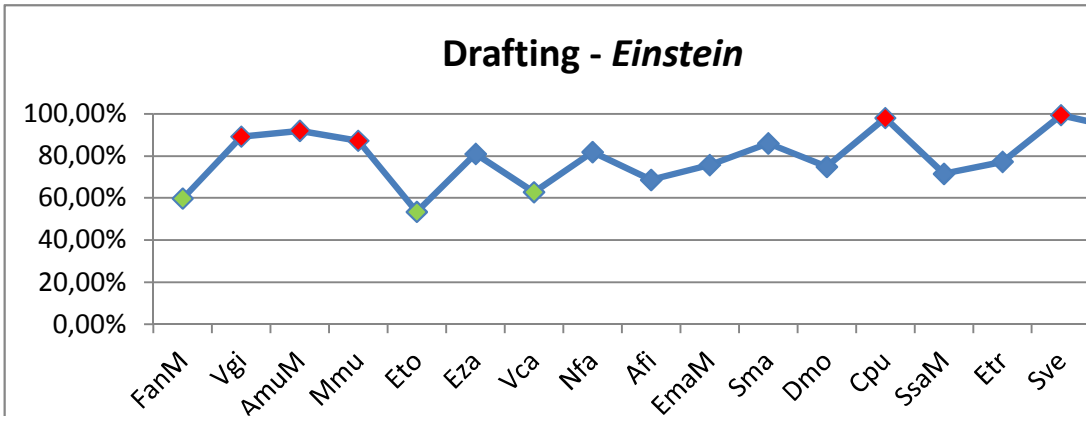


Fig. 27: Translation process - drafting - Einstein.

The statistics on the drafting stage of the *Einstein* activity reveal an apparent decrease in excessively long drafting times in comparison to the previous activity. In fact, only 35.29% of volunteers exceeded the 80% threshold set for drafting, while only three students (17.64%) dedicated less than 65% to this operation. This means that still more than half of the sample (52.93%) tends to produce translations with a non-standard drafting duration. However, there seems to be a considerable improvement if we look back to the profiling translation activity (see 5.2.2.1).

End-revision:

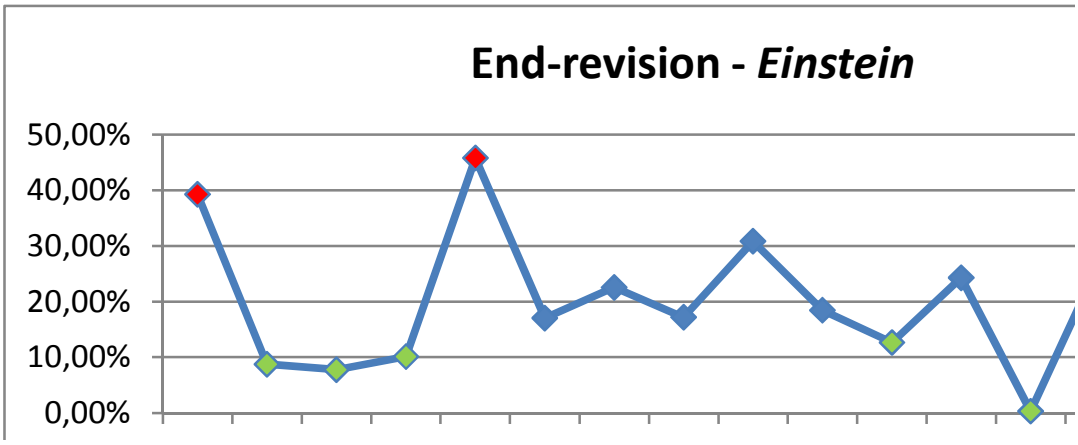


Fig. 28: Translation process - end-revision - Einstein.

As far as the duration of end-revisions is concerned, we can see that the situation here too tends to display a higher number of standard durations in comparison to the beginning of the trial. In fact, only two students (11.76%) devote 39.25% and 45.81% of their total translation time respectively to end-revision, however the majority of learners who do not meet the 20%-35% ratio (41.17%) are once again those who tend to revise the text very quickly before delivering it.

5.2.5.2 Assessment of Rich Points

RP	Mean value of pauses (in sec.)	Mean value of re-elaborations	Mean value of acceptability
1	45.58	0.41	2.47
2	33.41	0.11	0.52
3	25.35	0.05	2.47
4	23.34	0	2.58
5	135.76	0.88	2.11
6	119.05	0.94	1.29

Table 10: Mean values of process and product results - Einstein.

The results obtained from the statistical analysis of the Rich Points of this text show that the students' approach to the lexical problems relating to field-specific terminology (RP2, RP3 and RP4) has slightly improved. In fact, the duration of pauses is between 23.34 and 33.41 seconds and the re-elaboration rate is very close to zero. On the other hand, the acceptability of performance was very low on RP2 and almost entirely satisfactory for RP3 and RP4. The negative results of RP2 might be justified by the fact that students are not yet familiar with the terminological rigour required by technical and scientific translation, although they do have previous experiences from their courses. The term in question here was “quantum theory” whose correct translation into Italian is “teoria dei quanti” and not “teoria quantistica” as many learners wrote. The confusion probably arose from the fact that both terms are used in current Italian, though in technical texts “quantistico” only appears when it collocates with words like “campi” (fields), “luce” (light) or “materia” (matter) forming terms such as “teoria quantistica dei campi/della

luce/della materia" etc. but never in isolation as "teoria quantistica" without further specifications. This led to awarding zero points to those who picked this solution not only because it is not accurate but also because it showed that some students were unable to select reliable sources for their research, hence the low average score. In the case of RP3 and 4 instead, we see pauses are short, re-elaborations were almost inexistent and on average students came up with satisfying solutions, also considering that these terms had only one equivalent in Italian, which were also relatively easy to retrieve.

The translation of the idiom "all hell broke loose" (RP1) took on average 45.58 seconds, again with a very low re-elaboration rate (0.41). The acceptability of students' renderings was quite high (2.47), indicating that they were able to understand that this was an idiom and that it required a pragmatically acceptable solution in Italian.

RP5 included the translation of units of measurement, which – although they are clearly not translation problems proper – emerged as particularly problematic for students both in the preliminary study on B.A. dissertations and also in the discussion in class during the activity. In this case, what students needed to acknowledge was the fact that the average Italian audience for whom the subtitles were created is not familiar with the imperial system and distances such as 60 feet and 454 miles are almost meaningless to people used to the metric system, thus causing information loss. The time they spent translating these two portions of text was 135.76 seconds on average, a pause that might be attributed to the time required for the conversion. Elaborations were still below 1 and the results are only partially satisfactory (2.11), indicating that some students either did not do the conversion or that they got it completely wrong (though approximations were accepted).

Finally, the syntactical problem selected for RP6 scored 1.29, indicating that some students managed to render meaning but not the overall appropriateness required for an acceptable translation. Looking at *Translog* recordings, it becomes clear that the most serious problem encountered by students surprisingly laid in translating the phrase "time travel" and the adjective "commonplace" rather than in designing an acceptable syntactical structure in the target language. Sometimes the former was rendered as "il tempo/la durata del viaggio" (the time/duration of the

journey) and the latter with the direct Italian equivalent “luogo comune” (stereotype, preconception, cliché), which clearly does not communicate the meaning of the original. Such renderings were obviously held unacceptable and awarded zero points, which sensibly lowered the medium score.

5.2.6 Results of activity four: *BBC News*

The last activity designed for the trial was based on a short clip taken from BBC News at Six entirely dedicated to budget negotiations in the UK. This text typology was introduced last because it requires higher translation and adaptation skills. Moreover, the specific topic related to finance and institutions was chosen so that students could put into practice background information and terminology research skills again. This activity was carried out by 16 people (36% dropout rate).

5.2.6.1 Cognitive rhythm (drafting and end-revision)

Drafting:

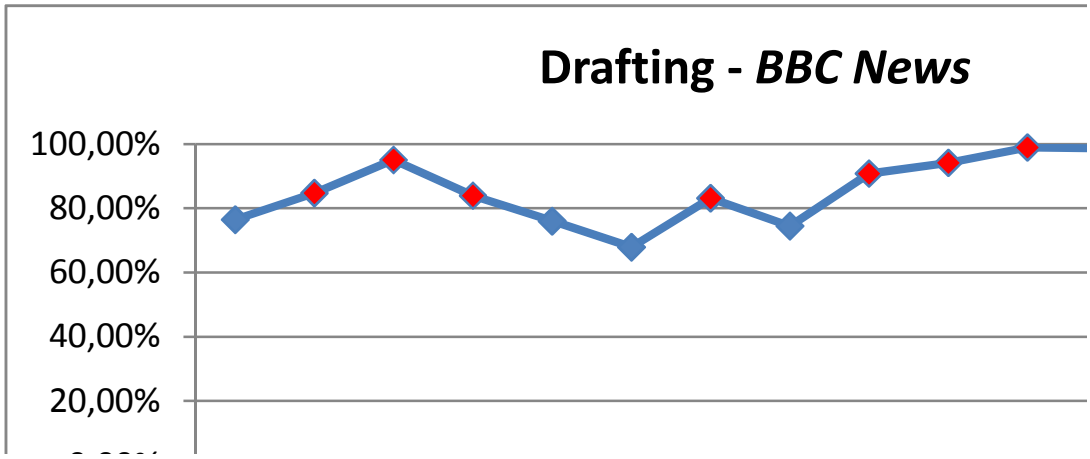


Fig. 29: Translation process - drafting - BBC News.

The increased difficulty in the text apparently affected the learners' cognitive rhythm with a consequent increase in the number of people devoting more than 80%

of the total translation time to the drafting stage and no student going below the 65% minimum threshold. In fact, only 4 students out of 16 show a regular drafting duration, although considerable time was spent in class discussing and analysing the text before students started to translate.

End-revision:

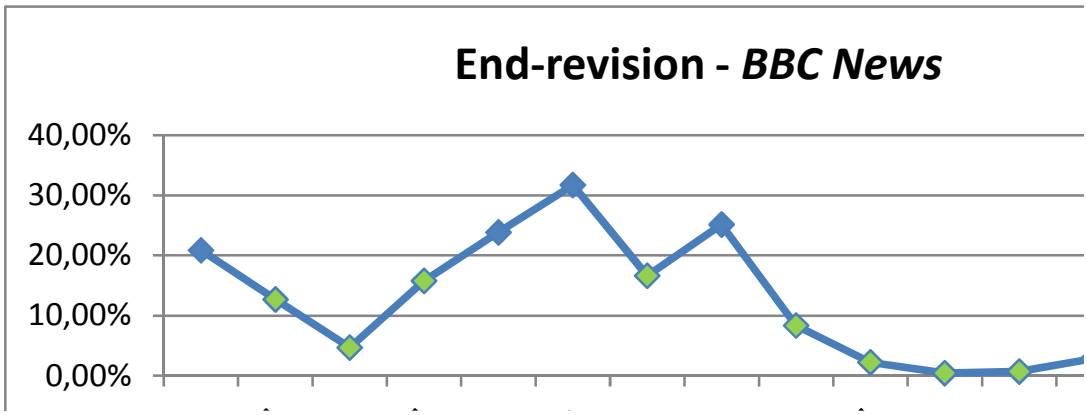


Fig. 30: Translation process - end-revision - BBC News.

The corresponding percentages of the end-revision stage show that online revision certainly prevailed in this case. However, *Translog* recordings also highlight that the duration of end-revision is also very short in terms of the actual time spent revising the text. This means that many students concentrate all their cognitive efforts on writing and adjusting the translation online, and end-revision appears to them almost superfluous since all options have already been exhausted in the previous stage.

5.2.6.2 Assessment of Rich Points

RP	Mean value of pauses (in sec.)	Mean value of re-elaborations	Mean value of acceptability
1	123.62	1	1.11
2	31.81	0	1.75
3	72.5	0.12	1.68
4	50.87	0.75	1.11

5	65.93	0.68	1.56
6	21.93	0.18	1.43

Table 11: Mean values of process and product results - BBC News.

The performance of volunteers participating in this activity immediately strikes for the low acceptability registered for all Rich Points. Although the range of problems proposed to students is very similar to that of the other activities and the text was previously discussed in class, the performance given was clearly influenced by the higher difficulty of the text proposed and the probable lack of familiarity with the news genre. All in all, learners seem to be able to understand and translate the basic meaning of the expressions selected but still have difficulties in terms of language and function accuracy.

The problems selected included cultural-lexical aspects (RP1, RP2, RP3 and RP4) found in the report of current events in the UK, in particular legislation and institutions. All these problems had no one-to-one equivalent in the Italian system, and translating them required finer research and terminological skills. As for RP1 (“50 p top-rated income tax”) students found themselves at odds with fully understanding this expression and struggled to find an equivalent expression in Italian, also considering the space limits imposed by subtitles. This process appeared quite lengthy (123.62 seconds on average) and students made at least one re-elaboration of this point. The second Rich Point (“Chancellor”) contains both lexical and cultural aspects students needed to find out about, since only in the UK this title is used to mean finance minister in the Anglo-Saxon world. Moreover, it could be typically confused with the false friend “cancelliere”, which in Italian is generally used to mean registrer (in a law court) or the German prime minister. Rich Point 3 had a similar difficulty and required to find an equivalent term for “Business Secretary”, as Italian institutions obviously have a different organisation and naming system. What in English is defined as “Secretary” corresponds in fact to what would be a minister in the Italian system. Finally, RP4 (“mansion tax”) required students to find an acceptable phrasing for a type of tax that does not exist in our system, although we do have taxation on property.

The acceptability scores of these four points show that students found the translation of these items particularly arduous and that the solutions they provided

were only partially acceptable. However, the number of re-elaborations is still in line with the data provided in the other activities – except for RP1 – as is the time needed to work them out.

The text also contained the pun “the budget [...] is taxing ministers' minds” (RP5), which could hardly be rendered as a pun into Italian because we lack a word with a double meaning and grammatical function like the English “tax”. Hence, learners had two equally viable options: either provide an idiomatic translation mostly based on the meaning of the original – since this play on words is not essential in the economy of the text – or try to create a new pun based on one of the words of the target text. Both alternatives were deemed correct in this case and awarded 3 points.

Finally, the metaphor “to be ideologically wedded to” (RP6) – which also required adaptation in terms of lexis and register – needed to be rendered with a contextually appropriate expression, considering that the Italian equivalent of the verb “to wed” would not be an acceptable choice in this context.

5.2.6.3 Summary of results of process management (V1), problem management (V2) and quality of the product (V3)

The detailed data on the results obtained during the trial discussed so far will be shortly summarised and interpreted in the light of the three variables they refer to, i.e. translation process management (Variable 1), translation problem management (Variable 2) and quality of the translation product (Variable 3).

First of all, in order to gain a more general view on the development of the cognitive rhythm throughout the activities and observe the results of Variable 1, the two summarising tables below were designed.

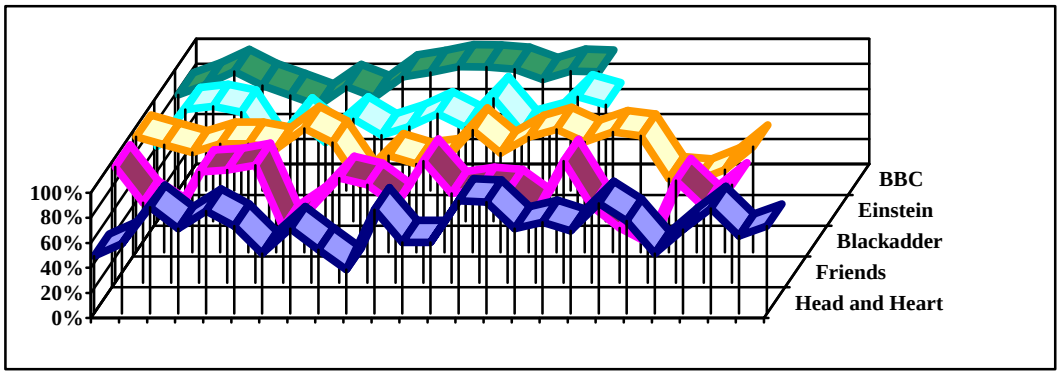


Fig. 31: Summary of drafting for all activities.

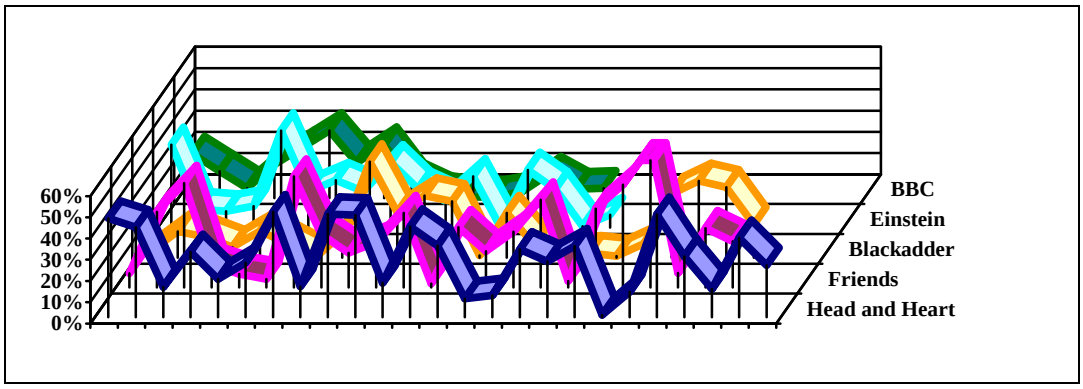


Fig. 32: Summary of end-revision for all activities.

Each line displayed in the graphs above refers to one activity (including profiling) and their length depends on the number of participants who completed each translation task. The shorter the line, the lower the number of students whose data could be collected. On the basis of the graph and numerical data (see table 12 below), it can be concluded that there was a progression throughout time towards a more stable cognitive rhythm until activity three (Einstein). After that, a significant increase in the drafting time and a corresponding decrease in the duration of end-revision can be observed in the last activity. This can be explained by the higher difficulty of the text in terms of the students' familiarity with its genre and, most of all, by the fact that the terminology students had to translate required both good research skills and the ability to “domesticate” (borrowing Venuti's expression) foreign cultural elements that do not have exact correspondents in the target culture.

If we look in detail at the percentage of learners who achieved a successful drafting/end-revision ratio throughout the activities, we can see that the ratio of the

profiling activity was quite low (28%)[62] and has increased for some activities of the trial, though in quite an uneven manner. However, we need to consider that the videos proposed materials of progressive difficulty within a short time span, hence the cognitive rhythm of participants might well be subject to fluctuations.

Activity	Successful drafting/end-revision %
Head and Heart	28%
Friends	34.78% ↑
Blackadder	26.08% ↓
Einstein	52.93% ↑
BBC News	25% ↓

Table 12: Successful drafting/end-revision ratio

As we can see from table 12, only 28% of students displayed a standard drafting/end-revision ratio at the beginning of the trial. The second activity shows signs of slight improvement which might be attributed to a successful group orientation, while the greater difficulty of the third one registered a 2% fall. However, the *Einstein* activity, which was far more complex than all the previous ones, appears to have been dealt with in a much more coherent manner in terms of process management.

Although the performance in the last activity did not produce better results than the initial activity and hence, at a first glance, this might lead the reader to think of it only as an indication of failure, it actually contributed to discover an unexpected fact. Lack of (or insufficient) familiarity with genre and still little refined skills in terminology research and selection contribute to increase the level of difficulty experienced by learners, which not only – quite obviously – lead to lower performance but also seem to be correlated with a sensible increase in the duration of the drafting stage (see table 31). Therefore, there seems to be some correlation between high difficulty and long drafting stages, with a corresponding shortening of the duration of end-revisions, which can be explained by the fact that very

[62] This figure was obtained by subtracting the orientation time from the total translation time and calculating the drafting/end-revision proportion on the basis of the parameters followed for the activities of the trial in order to obtain a comparable parameter.

challenging texts “exhaust” learners' cognitive strengths and resources, which are all concentrated on finding a suitable translation. It is then understandable that end-revision – which already tends to be neglected by most learners under normal circumstances – receives very little attention when such endeavour is required.

The results of problem management (Variable 2) based on the length of pauses and the number of re-elaborations for each Rich Point provide further information regarding the way students deal with the translation process.

Activity	Mean value of pauses (seconds)*	Mean value of number of re-elaborations**
Head and Heart	18.9	0.49
Friends	118.1	0.88
Blackadder	52.2	0.43
Einstein	63.7	0.39
BBC News	61.1	0.45

Table 13: Summary of mean values of pauses and re-elaborations

*figures are rounded up to the first decimal place
** figures are rounded up to the second decimal place

The way students go about the translation of problems does not seem to have been highly affected by the exposure to the trial as shown by the substantial stability of the mean values of pauses and re-elaborations, though with higher values than those of the profiling activity. One reason could be that such a short time was not enough to allow students to change the way they go about translating, although in this case too the stability of these values despite the greater difficulty of texts may be interpreted as a positive sign.

Finally, the results obtained for the quality of the translation product (Variable 3) are summarised in the table below.

Activity	Mean value of acceptability
Head and Heart	1.66
Friends	2.48
Blackadder	1.97
Einstein	1.90
BBC News	1.44

Table 14: Summary of mean values of acceptability

The mean values displayed here are purely indicative, as we saw that the performance of learners in dealing with problems is much more articulated and can hardly be summarised by one number. However, there seems to be little doubt that learners' performance during the trial was somehow stable (a part from that of the *Friends* activity) thus showing a general tendency: learners are still working on their abilities to cope with the effective translation of problems and cannot yet find fully satisfactory renderings in some cases. This is also one of the reasons why it was deemed necessary to subject volunteers to a delayed translation test and compare their results with those of a control group. Also, in the mean time learners had the chance to internalise the contents and practices learnt during the trial. The next section will therefore deal with such comparison.

5.2.7. Comparison with control group performance

In order to assess whether and to what degree the trial has had a beneficial effect on learners' translation performance, it was deemed necessary to make a number of comparisons with a control group (40) constituting of students in the same degree courses who had not participated in the activities of the LvS project. For these reasons the marks students of the two groups got for general English language performance, Italian to English and English to Italian translation, along with an assessment of Rich Points for the latter have been compared. It was deemed necessary to look at general English language and active translation too since the trial is supposed to have influenced the way students approach translation in general and also because this might provide a bigger picture of the development of their abilities.

The components of the control group were chosen randomly from all the students available, who sat the English to Italian translation exam in June 2012, in order to have a comparable sample. However, those who failed the exam were not selected to be part of the control group in order to avoid skewing the final results. The coding system followed to protect their anonymity is the same adopted for the trial group, i.e. the first letter of the code is the initial of the student's first name and

the other two or three letters are the initial of their surname (three letters were taken in case two students happened to have the same code).

All translation tests were assessed and graded by lecturers or professors with no intervention whatsoever on the part of the author, and the usual exam marking criteria were applied. Moreover, these were not aware of the identity of the participants in the trial and some of them were not even aware of the fact that a trial was being conducted at all. Readers who are not familiar with the Italian academic marking system should know that this is based on a scale ranging from 18 (sufficient) to 30 (excellent) or 30 cum laude (distinction), indicated in the tables below as 30+ (counted as 31 in the statistics). All tests scoring less than 18 are considered failed tests.

5.2.7.1 General English language mark

The general English language mark for students of the degree course "Linguistic and Cultural Mediation Studies" is obtained by the arithmetic mean of the marks in four exams, namely Italian to English and English to Italian translation and essay writing. In the case of students enrolled in the postgraduate course, the exam consists in an English to Italian translation test and a further exam (TAL - Test di Abilità Linguistica [Language Skills Test]) including a reading, a listening and a writing test. The final mark results from the arithmetic mean of the mark for each test.

The first table shows the mark awarded to each student in the trial group and the mean mark of trial group, the second table provides the same information for the control group.

TRIAL GROUP PARTICIPANT'S CODE	MARK
FanM	30+
Vgi	27
Aim	28
AmuM	30+

Mmu	29
MpoM	26
Vta	30+
JtoM	30+
Eto	27
Eza	29
Aav	26
Vca	30+
Mco	26
Nfa	27
Afi	27
EmaM	26
Gma	27
Sma	27
Dmo	27
Cpu	28
SsaM	28
Etr	27
Stu	29
Sve	24
Dvi	27
Eze	27
MEAN	**27.84**

Table 15: General English language marks - trial group.

CONTROL GROUP PARTICIPANT'S CODE	MARK
Cba	25
Dbi	24
Fbo	28
Ebo	28
Jbo	26
Ibo	26
Sca	21
Mca	24
Scat	19
Vco	25
Mda	25
Edl	27
Vdo	26
Een	24
Sfa	25
Afio	19
Mfr	27

Ggi	27
Mgr	28
Cha	24
Fin	28
Cla	25
Smar	24
Ama	29
Lpe	28
Spe	26
Mpi	25
Fpu	27
Fsa	22
Psa	22
Gsc	25
Msi	24
Ssi	27
Lst	29
Mta	28
Fte	20
Aur	20
Sur	19
Eva	28
Lza	22
MEAN	**24.9**

Table 16: General English language marks - control group.

5.2.7.2 Italian-English translation mark

Undergraduate students took an Italian-English translation test as part of their English language exams. Learners enrolled in the second year of the postgraduate course did not sit such an exam, as they already passed two IT-EN translation exams in their first year. Therefore, the results displayed in table 17 refer only to undergraduate students.

TRIAL GROUP PARTICIPANT'S CODE	MARK
Vgi	22
Aim	27
Mmu	28
Vta	29

Eto	26
Eza	27
Aav	23
Vca	30
Mco	21
Nfa	24
Afi	24
Gma	24
Sma	26
Dmo	23
Cpu	25
Etr	25
Stu	27
Sve	24
Dvi	24
Eze	23
MEAN	**25.1**

Table 17: Italian-English translation marks - trial group.

CONTROL GROUP PARTICIPANT'S CODE	MARK
Cba	22
Dbi	22
Fbo	25
Ebo	24
Jbo	24
Ibo	24
Sca	19
Mca	18
Scat	18
Vco	24
Mda	25
Edl	26
Vdo	24
Een	22
Sfa	20
Afio	18
Mfr	25
Ggi	25
Mgr	27
Cha	23
Fin	28
Cla	25
Smar	20
Ama	25

Lpe	24
Spe	25
Mpi	25
Fpu	24
Fsa	22
Psa	20
Gsc	19
Msi	21
Ssi	23
Lst	28
Mta	26
Fte	19
Aur	19
Sur	18
Eva	26
Lza	22
MEAN	**22.85**

Table 18: Italian-English translation marks - control group.

If we compare the Italian to English translation performance of the trial and of the control group, we can see that the first outperformed the latter by 2.25 points on average. Although the mean mark scored by the trial group is not very high in absolute value, since it is placed on a scale from 18 to 30, an average of more than two points in active translation can be considered a meaningful and encouraging result.

Even though students were not specifically trained in translation into English during the trial, it was deemed interesting to draw a comparison with the control group on this aspect because learners were instructed on the basics of the translation process, which can be applied to any language direction. In other words, learning more on how the translation process works and carrying out hands-on activities to put all this into practice might have had an impact on students' general ability to cope with translation regardless of the language direction. However, it should be made clear that the researcher is well aware of the fact that a 10-lesson course is not enough to bring about radical changes in students' routine. For this reason, only partial improvement in the aspects surveyed is expected from students.

5.2.7.3 English-Italian translation mark

Students also underwent a delayed post-trial test approximately seven months after attending the course, in which their English to Italian translation performance was assessed. Once again, the results obtained were contrasted with those of the control group on the same text. The low number of marks available for the trial group is due to the difficulty in contacting all students again after such a long time. In fact, some of them graduated or moved to another university and could not be reached.

TRIAL GROUP PARTICIPANT'S CODE	MARK
FanM	25
Vgi	25
LmiM	25
AmuM	26
Vta	26
JtoM	23
Aav	23
Nfa	28
Afi	20
Gma	26
Sma	25
SsaM	20
Etr	28
Stu	28
Dvi	27
MEAN	**25**

Table 19: English-Italian translation marks - trial group.

CONTROL GROUP PARTICIPANT'S CODE	MARK
Cba	28
Dbi	21
Fbo	20
Ebo	27
Jbo	27
Ibo	24
Sca	21

Mca	25
Scat	21
Vco	24
Mda	18
Edl	27
Vdo	23
Een	21
Sfa	23
Afio	18
Mfr	26
Ggi	26
Mgr	30
Cha	18
Fin	26
Cla	27
Smar	18
Ama	28
Lpe	28
Spe	26
Mpi	24
Fpu	26
Fsa	28
Psa	18
Gsc	25
Msi	26
Ssi	27
Lst	24
Mta	26
Fte	22
Aur	18
Sur	18
Eva	27
Lza	18
MEAN	**23.7**

Table 20: English-Italian translation marks - control group.

Here again, the trial group's performance seems to be slightly better than that of the control group, with a 1.3-point difference. Here too the trial group average performance is 25 (it was 25.1 in the IT-EN test), which can be considered quite a good mark, though with still much room for improvement. As specified in the comment to the previous test, the improvement that the trial is expected to bring about is clearly not striking because of the limited time available. Moreover, in order to gain more detailed information about the performance of the two groups in this

task – as English to Italian translation was the specific object of the training – ten Rich Points were selected (see Appendix 21) and evaluated utilising the same three-point scale proposed for the activities. The next section is devoted to their illustration and discussion.

5.2.7.4 Rich Points English-Italian translation

The tables below illustrate the acceptability scores awarded to every Rich Point for the text students of the trial and the control group were asked to translated into Italian.

Trial group:

Rich Points	FanM	Vgi	LmiM	Amu M	Vta	JtoM	Nfa	Afi	Gma	Sma	SsaM	Etr	Stu	Dvi
RP1	2	2	3	3	2	2	2	2	2	2	2	2	3	2
RP2	3	2	3	3	3	3	3	3	2	3	0	3	2	3
RP3	3	2	3	0	3	3	3	1	3	3	3	0	3	3
RP4	3	1	3	0	3	1	3	3	3	1	1	3	3	3
RP5	2	2	3	3	3	2	1	3	2	3	2	1	3	2
RP6	3	3	3	3	0	0	3	0	3	3	0	3	3	0
RP7	1	3	1	3	1	0	1	1	1	2	3	0	3	2
RP8	1	1	2	2	0	2	2	1	1	2	2	2	2	1
RP9	3	3	3	3	3	2	2	3	3	3	3	0	3	3
RP10	0	3	3	0	3	3	3	0	2	0	0	3	3	2

Table 21: Acceptability of Rich Points in English-Italian translation - trial group.

Control group:

Rich Points	Cba	Dbi	Fbo	Ebo	Jbo	Ibo	Sca	Mca	Scat	Vco	Mda	Edl	Vdo	Een	Sfa	Afi	Mfr	Ggi	Mgr	Cha
RP1	2	0	1	2	0	0	1	2	2	3	3	2	2	0	0	0	1	3	2	2

RP2	3	1	1	3	3	3	1	3	3	2	1	2	1	2	1	1	3	2	2	3
RP3	2	0	3	3	0	3	3	3	3	3	3	3	2	3	3	3	3	3	0	0
RP4	0	3	3	2	0	1	1	1	1	1	1	3	1	3	1	3	3	3	1	0
RP5	2	3	3	0	3	2	1	3	0	0	1	2	0	2	2	0	3	3	3	2
RP6	3	0	0	3	1	3	3	0	2	3	3	3	1	3	3	0	0	2	3	3
RP7	3	2	0	2	3	3	1	0	0	3	0	1	3	0	1	1	3	3	2	3
RP8	2	0	1	3	3	2	1	0	1	3	3	2	2	1	1	1	1	3	3	1
RP9	2	2	2	2	3	3	3	3	3	3	1	3	0	2	2	3	2	2	3	3
RP10	3	0	3	3	0	0	0	0	0	0	0	0	1	0	0	0	3	0	3	0

Rich Points	Fin	Cla	Smar	Ama	Lpe	Spe	Mpi	Fpu	Fsa	Psa	Gsc	Msi	Ssi	Lst	Mta	Fte	Aur	Sur	Eva	Lza
RP1	2	2	0	0	2	2	2	0	2	2	0	0	2	2	2	0	0	0	1	2
RP2	2	2	3	3	1	2	0	1	2	3	3	2	2	3	3	1	2	3	3	2
RP3	3	3	3	3	3	3	3	1	3	3	0	3	3	3	1	3	3	1	3	0
RP4	0	1	1	3	2	1	0	0	1	0	1	3	3	1	3	1	0	1	3	1
RP5	2	3	0	0	3	3	3	2	2	2	3	0	3	2	2	0	0	3	1	3
RP6	3	0	0	3	1	3	3	3	1	0	3	3	2	3	3	1	3	3	1	0
RP7	3	3	3	2	3	1	3	1	3	2	0	2	3	3	3	1	2	2	3	0
RP8	2	2	1	2	2	3	3	3	3	0	2	2	1	2	1	1	1	1	2	3
RP9	3	2	1	3	3	3	2	2	3	2	2	2	3	1	1	2	3	1	2	3
RP10	0	0	0	3	3	3	0	3	3	0	0	2	3	0	3	1	0	0	0	0

Table 22: Acceptability of Rich Points in English-Italian translation - control group.

Since the data provided above might be complex for the reader to interpret, the results are summarised in the table below, with the highest scores highlighted in bold. Furthermore, a detailed description of the typology of the Rich Points analysed is also given.

Rich Points	Trial group's mean score	Control group's mean score
RP1	**2.21**	1.27
RP2	**2.57**	2.1
RP3	2.35	2.35

RP4	**2.21**	1.45
RP5	**2.28**	1.8
RP6	1.92	**1.95**
RP7	1.57	**1.92**
RP8	1.5	**1.77**
RP9	**2.64**	2.27
RP10	**1.78**	1

Table 23: Comparison of trial group and control group mean scores in acceptability of Rich Points.

- RP1, RP3 and RP7 refer to items representing cultural and pragmatic problems. This type of problems seems to prove particularly challenging for – especially undergraduate – students because they require the ability to develop an understanding of cultural differences, which are then reflected in language use. Depending on how much learners manage to identify them and render them with pragmatically appropriate language, one can ascertain their degree of confidence in approaching such problem.
- RP2, RP4, RP6 and RP10 are all related to the field of discourse analysis, i.e. the choice of how to translate these points is determined by the comprehension of the purpose of the text and its overall message. Students were hence required to be able to place language in context, which can be seen as exactly the opposite of the literal approach that the method adopted in the trial tried to discard.
- RP5 and RP9 were about the ability to create a target text that ensured a fluent syntactic organisation of the text and effective cohesion between its elements. Similarly to the previous case, this ability is part of a larger competence in organising the target text, so that it reads like an original rather than a word-for-word translation.
- RP8 presented students with a lexical and syntactical problem. In fact, neither the structure nor the wording in the original could be reproduced in Italian so as they were. Once again, this point proved interesting in order to test students' ability to re-organise contents in a lexically and syntactically effective way.

The table below further summarises the final data gathered from the acceptability of Rich Points, comparing the performance of the two groups for each category of problems. These figures have been obtained by adding the scores of the Rich Points belonging to the same category for each group.

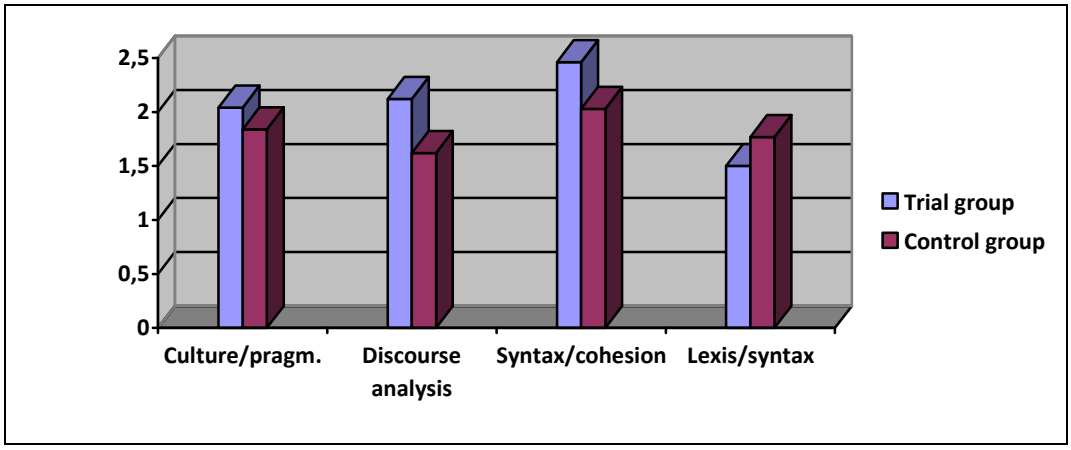


Fig. 33: Comparison of performance per problem category between trial group and control group.

As we can see, the trial group outperformed the control group in three categories out of four. In particular, students of the trial group performed better in culture/pragmatics, discourse analysis and syntax/cohesion and scored slightly less in the fourth category, which also justifies the higher average mark shown in 5.2.7.3. The fact that the control group performed better in RP8 (lexis/syntax problem) but worse in the other categories may suggest that students who did not participate in the trial still tackle the translation of texts in a rather atomistic manner, managing to correctly translate small-scale units but failing to analyse and render larger chunks of text that require a holistic approach. The discourse analysis and syntax/cohesion categories are those exhibiting a greater gap in performance between trial group and control group. This can be read as an encouraging sign of improvement in these key areas of translation competence and language learning.

5.2.8. Results of LvS-project end-of-course questionnaire

The present research project not only aimed at testing the possible effectiveness of working with the methodology and the tools presented so far on the improvement of learners' language and translation competence but also on their impact on learners. To this end, it was deemed important to collect learners' impressions on various aspects of the trial, so as to gain a better insight into their perceptions of this brief learning experience and to understand whether methodological improvements should be made in the future. Since obtaining truthful information was central to the purpose of the questionnaire, students were asked to fill it in anonymously.

The questionnaire (see Appendix 20) consists of 8 open-ended questions, each centred on one specific aspect of the trial. First of all, students were asked whether their initial expectations regarding the course were met. Since they mostly participated because the course would give them the chance to learn the basics of the subtitling process and how to go about the translation of subtitles, the responses were almost all positive except for two students who expected more formal instruction subtitling.

Question two dealt with students' response to the use of Lvs and *Translog* and their impressions on working with them. They were also asked whether they would be ready to use them again in the future. All students agreed on the usefulness of these two pieces of software, though some of them were clearly more enthusiastic about LvS than *Translog*, considering they did not have access to all the functions of the latter. They would all use them again in the future if possible.

Question three aimed at discovering what students think about the usefulness of subtitling for language and translation learning purposes after their concrete experience with it. While all participants agree on its usefulness, different aspects emerged from their answers. According to volunteers subtitling helps to:

- develop the ability to convey the meaning and effect of utterances in a short space;
- improve writing and listening skills;

- acquire new vocabulary and idiomatic expressions that cannot be rendered literally;
- become acquainted with everyday spoken language;
- translate better and stimulates background and terminological research;
- use world knowledge and develop cultural awareness;
- make activities more engaging by combining listening and viewing;
- improve SL and TL expertise along with translation competence and summarising skills.

Question four surveyed students' opinion on the quality of the contents delivered during the course, with special emphasis on what they found most useful. No student found the contents repetitive or non pertinent and what was found particularly helpful was learning about the technical aspects of subtitling, the translation of puns and idiomatic expressions, how to carry out accurate terminology research with reliable sources and the slides on the interaction between words and images in video content.

Question five aimed at discovering whether the translation routine taught has influenced students' translation process. Some students were already acquainted with the steps of the translation process (mostly postgraduate students[63]) but considered class discussion important; others emphasised that they became more aware of the importance of doing background and terminology research; others still that they now pay more attention to rendering the pragmatic effect of a text, or that they are better organised.

Question six asked to assess the quality of teaching and the organisation of the course in general. Most students were happy with both and stated that the course was stimulating and involving, though some postgraduate students said the initial activities were too easy for them. Technical problems were signalled as disrupting the flow of the class and one person wished for more personal feedback.

Question seven dealt with the influence of technical issues on students' learning, since sometimes there were problems with the software or the computers

[63] As already said, questionnaires were anonymous and the only reason why I know that certain answers were given by postgraduate students is that they specified it themselves in their answers.

due to system restrictions or failures. A few students highlighted that they wasted class time though mostly affirm that this did not affect their learning.

Finally, question eight proided greater scope for learners' comments. The largest part of students did not provide any observation or said that they were happy with the course. Those who did, expressed the wish to have more individual feedback; deal with other text types like the “David Letterman show” or one of those starring Gordon Ramsay because they are poorly translated into Italian; or to have more training on the use of the software.

CHAPTER 6
Discussion and interpretation of results

The results illustrated in the previous chapter will now be discussed in the light of the theoretical framework provided in the methodology (cf. Chapter 4). Although data have already been elucidated in Chapter 5, here they will be discussed in view of the general research questions presented at the beginning of this work and the adapted version of the PACTE competence model used, with particular reference to the four variables and the sub-competences associated with them.

The first research question asked was predominantly of theoretical nature and read:

> *1. How can we make the most of interlingual subtitling to develop students' linguistic and translation competence in formal settings?*

Significant data have emerged from the present investigation that helped shed light on how to make subtitling activities effective for learners needing to improve their linguistic and translation competence. In the literature review presented at the beginning of this work (see Chapter 2) the advantages arising from the use of subtitles and subtitling are considered manifold. This hypothesys has been tested on different types of samples and with various foci. However, the novelty of this research work lies in the design of a methodology centred on interlingual subtitling applied to a specific target in a specific environment, namely language – not translation – students who undergo translation training in a formal setting. As specified in the previous chapters, such training is not aimed at preparing students to become professional translators (or this is only one of the options available) but is rather a tool deemed helpful to develop language skills and language awareness through enhanced translation competence.

This particular angle has been adopted because there seems to be a gap in the literature regarding this particular category of learners, since interlingual subtitling has been mostly implemented on translation trainees or on learners in vocational

courses, as emerged in the literature review. Moreover, the learning environment considered here is exclusively formal and limited to advanced learners at university, while studies on the general effectiveness of subtitles and subtitling have also been conducted on samples of younger learners and in informal settings.

According to the results obtained in the trial (cf. Chapter 5), it appears that the methodology implemented in the study has brought about some improvements in students' translation and language competence and performance. Needless to say, expectations regarding the outcomes of the trial were commensurate with the relatively limited exposure of students to the contents and activities designed. Therefore, although improvement in terms of language and translation competence (measured through the evolution of the learners' cognitive rhythm, of the quality of their work and the comparisons with the control group) was deemed possible from the start, the premises called for realistic expectations; no radical changes on the part of students were envisaged but rather signs of partial progress, especially as far as deviation from their discourse analysis of small chunks of text and initially literal approach to translation is concerned. Moreover, results of the delayed translation test also suggest that the methodology proposed in this investigation has had a long-term impact on learners' competence and performance. However, this should by no means be interpreted as an attempt to "re-invent the wheel" but rather be regarded as a possible integration to existing teaching and learning practices either using audiovisual material or not.

For this methodology to work properly, a number of important premises needed to be set. First of all, some theoretical aspects were taken into consideration before designing the concrete structure of the activities when centred on the use of audiovisual material. As could be seen in section 4.1.2, a significant role is played by theories on the cognitive processes taking place during the learning process, in particular Paivio's Dual Coding Theory, Mayer's Cognitive Theory of Multimedia Learning and Information Processing Theory. These three theories appear particularly helpful in showing how the use of subtitles and subtitling in particular, and of audiovisual material in general, can be beneficial to language learning.

As mentioned in 4.1.2, Allan Paivio and his "dual coding theory" are one of the most prominent examples of studies conducted on the relationship between words

and images in our mind in the 1980s. In particular, he postulated that if we are provided with verbal and non-verbal representations of the same information, this will be remembered more easily, thus enhancing successful learning. Another important concept associated to this is Jo and Berkowitz's "priming effect", which is triggered when semantically related memory contents are activated in our minds by means of association with information we were previously exposed to.

The second author – Richard Mayer – dedicates special attention to the elaboration of a model showing that external visual and verbal stimuli are processed by two different systems by the human mind and then pass through three types of memory, where part of this information is retained. This model constitutes the rationale for the design of multimedia learning materials, which should be structured so as to exploit the capacity of both processing systems. However, we should also consider that visual and verbal stimuli do not deliver messages in exactly the same way because of their intrinsic differences, which – rather than be seen as a disadvantage – can be exploited for enhancing learning. In order to do so, visual and verbal information need to integrate each other and be mutually pertinent, so that learners are led to construct coherent mental representations. Mayer then emphasises another key factor in multimedia learning, i.e. the need for learners to be both behaviourally and cognitively active. In other words, the activities proposed should entail some kind of information processing in order to be completed.

Finally, information processing theory – which is encompassed in Mayer's model – describes the structure and functioning of the memory system. By understanding the mechanisms of this three-storage (sensory memory, short-term memory and long-term memory) structure can help reinforce external input and better exploit the capacity of the visual and verbal channel.

The concrete teaching practice was then based on both the learner-centred approach and task-based learning. These two approaches are considered here as complementary rather than mutually exclusive and have been integrated in the design of classes. In particular, the first requires that activities be designed considering students' real needs and abilities (which were assessed prior to the beginning of the trial through the preliminary and the pilot study) and that teachers act as facilitators, thus stimulating interaction and discussion and proposing contents in an interactive

way rather than adopting a top-down transmission of notions. The use of technology here is seen as instrumental to learners' needs and abilities and is adjusted accordingly rather than vice versa. For this reason, theoretical and practical pre-task training was offered at the beginning of the course and materials were always presented with ready-made time code (TC)-in and TC-out to avoid overburdening students. As for task-based learning, the development of translation sub-competences (see 4.1.3) was taken as one of the points of reference in the design of tasks and activities along with the principle of growing difficulty. The material was accurately selected in terms of language and translation problems, genre and characters' elocutionary speed. Moreover, learners have been actively involved as much as possible in all the stages of the learning process.

Secondly, practical aspects are also crucial for the success and smooth implementation of such a course. Hence, measures should be taken in order to avoid the breaking of local copyright laws when selecting materials and an accurate testing of compatibility between software and laboratory computers should be carried out. It is also indispensable to make sure that audiovisual materials will be readily available and working smoothly during classes in advance in order to avoid wasting class time, although it is very likely that a certain amount of time will be dedicated to solving technical problems or individual difficulties with software. Finally, classes should be carefully scheduled in collaboration with learners and according to their needs in order to have as many participants as possible. Since the trial was not a compulsory activity in students' curriculum, a certain drop-out rate was considered an inevitable drawback of working with volunteers. This condition can certainly be improved, should teachers willing to experiment the methodology described here have the chance to work on an official course.

The success of this methodology was also evaluated on the basis of students' reactions to it and to the tools used, since these were deemed as important as the successful development of translation and language competence. For this reason, their level of satisfaction with various aspects of the course were surveyed by means of a questionnaire. Additionally, collecting the impressions of participants was thought helpful in identifying possible flaws that went unnoticed. The conclusions that can be drawn from students' answers to each question (see 5.2.8) seem to point

to a general positive response to the key elements of the trial, i.e. the experience with LvS and Translog, the effectiveness of subtitles/subtitling in foreign language learning, the quality of contents, of exercises, of the teaching and the impact of technical problems. Furthermore, students' appreciation of the course is not only demonstrated by the results of the questionnaire but also by the fact that six participants decided to write their final dissertations on various aspects of subtitling or on other topics in audiovisual translation. In particular, one student specifically used LvS to design a subtitling proposal.

The second research question along with the two sub-questions instead were centred on more practical aspects related to the two pieces of software and to their contribution in discovering the possible positive effects that working with subtitles and subtitling can have on language and translation competence. As already stated, the improvement expected is commensurable with the limited exposure of students to the trial.

> *2. Are LvS and Translog effective tools and can their combined application contribute to implement the above mentioned methodology?*
>
> *a. does the type of training applied contribute to improving students' cognitive rhythm?(V1 knowledge of translation and strategic competence; V2 instrumental and strategic competence)*
>
> *b. can instruction and practice on the translation process lead to an improvement in performance? (V3 bilingual and strategic competence; V4 all four sub-competences).*

While the combined application of LvS and Translog seems to have been successful as for its impact on learners (see 5.2.8), establishing whether they bring about tangible outcomes in the development of language and translation competence needed to be validated through more objective tools. This is why research question two was broken down into two more specific questions, the first addressing the issue of whether the training applied contributed to the development of a more balanced

cognitive rhythm (with an impact on the PACTE group sub-competences knowledge of translation, strategic and instrumental competence) and the second of whether theoretical and practical instruction on the translation process may lead to translate a text more correctly and fluently (with an impact on all four PACTE group sub-competences).

As for sub-question 2a, we need to look at the progression of the cognitive rhythm of learners participating in the trial (see table 31 and 32). The results of the profiling activity showed a discrepancy between students' perceptions of their abilities in the four main stages of the translation process and their actual performance. In fact, the graphic representation of the stages of their cognitive rhythm showed that they have not yet developed a full strategic competence and a knowledge of translation competence, since every learner seems to approach the translation process very differently. Hence, what we sought to achieve was at least a partial regularisation and homogenisation of their translation process stages.

As already discussed in section 5.2.6.3, the greater difficulty of the BBC News video caused a spike in the drafting stage, which means that when students were not ready to deal with the news genre and with cultural-specific terminology, they concentrated all their work in drafting and online revision. However, given that they should become cultural mediators at the end of their studies (or already be if they are postgraduate students), it seemed appropriate to propose such text type.

If we look at the progression of learners' drafting/end-revision ratio (V1) from the trial to activity three (section 5.2.2.1 ff.), we can observe that their management of the translation process becomes partially smoother and there is a corresponding increase in the percentage of students sticking to the parameters set for drafting and end-revision for activity one and three (see table 12). However, as already mentioned, we should also bear in mind that their cognitive rhythm proved to be connected to the level of difficulty of each task and that an immediate change in their routine cannot be expected, although the guided procedure has certainly had an impact on their approach to texts. Furthermore, the in-depth analysis of single types of problems carried out in the previous chapter showed that issues such as plays on words and certain instances of lexical problems were dealt with successfully and with greater ease.

The results for Variable 2 (translation problem management) were based on the average pause and on the number of re-elaborations per each Rich Point and accounted for a further development of learners' instrumental and strategic competence. As we saw in 5.2.6.3, the data collected do not seem to display clear signs of improvement but rather a certain stability for both parameters. Considering that the level of complexity of tasks was progressively higher, however, such stability might well be interpreted as a positive sign, meaning that although problems certainly became ever more articulated (especially in the last activity), students did not make longer pauses or more re-elaborations on average.

The data provided for Variable 2 (translation problem management) are clearly closely related to those of Variable 3 (quality of the translation product), since the length of pauses and the number of re-elaborations also need to be interpreted in the light of the quality of the translation product. If we look at the average acceptability of Rich Points in the activities (see 5.2.6.3) we can see that the general stability of the values of V2 corresponds to a slight improvement in performance of activities one, two and three in comparison to initial profiling. As already discussed, the results of the last activity did not display signs of improvement. By comparing the results of V2 and V3, it appears that the ability of students to translate has partially moved from rendering only the meaning of short translation units to providing more detailed nuances either in terms of language appropriateness or function. This is confirmed by mean values which are very close to or above 2. In other words, there have been positive signs of an improved bilingual and strategic competence.

Finally, Variable 4 (quality of results) was set up in order to allow the comparison of the trial group's performance with that of the control group. Unlike the other variables, this includes three sub-variables (V4a, b, c and d) calculated on the basis of the marks awarded in general English (4a), in both active (4b) and passive (4c) translation tasks and the acceptability of Rich Points in the English to Italian post-trial translation task (4d). The decision of looking at both active and passive translation – although only the latter was addressed in the trial – is justified by the fact that the theoretical and practical training provided was supposed to lead students to change their approach to the translation process and learn to reflect on problems by analysing context and terminology and by taking into consideration factors such

as pragmatics and language appropriateness. The table below summarises the final average marks of the two groups (V4a, b and c).

General English		Italian-English translation		English-Italian translation	
Trial group	Control group	Trial group	Control group	Trial group	Control group
27.84	24.9	**25.1**	22.85	**25**	23.7

Table 24: Summary of average marks of trial and control group.

The results of general English and translation tests show that the trial group outperformed the control group in all three cases. Although the translation mark of the participants in the trial is around 25 – hence still subject to improvement – it is nonetheless indicative of an ability to deal with texts in a more dynamic manner, which is precisely the opposite of the word-for-word approach to translation that this methodology has tried to discard. In fact, marks below 25 are usually awarded to students showing little awareness of linguistic and pragmatic issues in translation.

As for variable 4d – the comparison of the acceptability scores of ten Rich Points – four categories of problems were selected and then contrasted. The results obtained have shown that in three out of four of these categories learners of the trial group have given a better performance than the control group (see table 33). This indicates that in areas such as culture/pragmatics, discourse analysis and syntax/cohesion, exposure to the trial has been to some extent beneficial despite the short amount of time available.

If we look at the overall results provided by Variable 4, we can say that the trial has contributed to an increase in the four competences selected for the study and described in section 4.2.3, i.e. bilingual, knowledge of translation, instrumental and strategic. Such improvement, though not striking, can be interpreted as a positive sign of the effectiveness of the methodology and as an encouragement for further research possibly with a broader sample and on a longer time span.

CHAPTER 7
Conclusions

Audiovisual translation (AVT) and its various avenues is a fairly novel research area in Translation Studies (TS) both because only recent technological advances and the advent of the internet have allowed for extensive and in-depth research and because of the initial resistance on the part of translation scholars to accept it as integral part of TS. Such stance was initially motivated by the need for TS in general to become a fully-fledged discipline, which required to rely on a solid theoretical framework that was at odds with the features of multimodal texts and the peculiarities of their translation. In fact, a monomodal notion of text has persisted until relatively recent times and AVT started to become a proper field of research only in the mid 1990s. However, it is only after 2000s that we witnessed an outburst in works, dissertations and conferences on this topic and an exponential growth of the scholarly community. This has without doubt been favoured by a new approach to translation and the increasing presence of audiovisual products in our daily life.

The boom of AVT has also coincided with the progressive re-introduction of translation in language learning classes after the long ban introduced by the Communicative Method and by a methodological re-evaluation of the way translation can be used in the foreign language class. The Grammar-Translation Method has been abandoned by most teachers and the approach to translation is now more oriented towards both micro- and macro-text analysis with attention for elements such as *skopos*, function, prospective audience and pragmatic effectiveness. The combination of such all-encompassing stance in translation for FLL purposes and the growing interest in audiovisual material has recently given rise to new research avenues focused on the application of AVT to translation and language learning.

Early studies trialling the possible benefits of ready-captioned material on foreign language learners started in Europe and North-America in the early 1980s and surveyed a variety of (mostly small) samples exposed to either intralingual or interlingual subtitles. The promising results – though hardly generalisable or

exhaustive because of the variety of approaches, methodologies, language combinations and types of samples – have led scholars to continue their research in this field and explore the impact of subtitles in both incidental and formal settings on the development of vocabulary acquisition, listening comprehension, pronunciation or reading skills.

The recent technological advances that now allow for the manipulation of video content and of its components – including subtitles – have opened up new research avenues focussing on the introduction of intralingual and interlingual subtitling activities mostly in translation and translator training. However, this trend is still in its infancy and few studies on limited samples are available at the moment.

The work presented here was hence developed in the light of two interconnected factors: on the one hand a preliminary study conducted on twenty-one B.A. dissertations regarding AVT which highlighted an insufficient language and translation competence of students of the degree courses "Mediazione Linguistica e Culturale" [Linguistic and Cultural Mediation] and "Lingue, Letterature e Culture Moderne" [Modern Languages, Literature and Cultures]; on the other hand a review of the literature regarding the use of subtitles and subtitling for language learning purposes which has revealed the various benefits brought about by learners' interaction with audiovisual material (see 2.2.2). Therefore, it was deemed worthwhile to design a methodology that might contribute to help students to acquire a more solid language and translation competence, in particular to abandon a word-for-word approach that appeared the most salient feature of their works. This methodology was inspired by the promising results of the use of subtitles and subtitling obtained by other scholars and by the need to fill in a gap in the literature, namely the application of these tools to translation training for foreign language students.

The methodology in question was implemented through the use of two complementary pieces of software, whose combination had never been attempted before to the author's knowledge: LvS 2.5.2, a subtitling simulator, and *Translog 2006*, a keystroke recorder. The first was used to create and carry out subtitling activities from English to Italian, while the latter to record all events occurring on the keyboard and mouse movements during the translation of texts thus allowing to

gather and analyse students' processes and products. Moreover, it was deemed necessary to define translation competence more accurately for the purposes of the study and in the analysis, hence the PACTE group's translation competence model was taken as starting point and adapted to the scopes and sample of the investigation. In particular, four sub-competences i.e. bilingual, knowledge of translation, instrumental and strategic competence were thought to indicate progress. Another element drawn from the extensive work on competence of this group is the notion of Rich Point, i.e. a set of translation and culture-related problems present in each video, which constituted one of the selection criteria of the material and the basis of part of the analysis.

After conducting a short pilot study in order to ensure the correct functioning of the two pieces of software as well as a positive impact on students, a 10-lesson trial was conducted on a broader sample. The main purpose of the trial was to assess whether and to what extent the methodology and tools applied can contribute to improving learners' language and translation competence by approaching the translation of audiovisual texts. Furthermore, it was important for students to become familiar with LvS and *Translog* and be comfortable with their use in order to work in a pressure-free and collaborative environment.

Progress in students' competence was assessed by observing four variables, each corresponding to one or more of the four sub-competences selected. In particular, Variable 1 and 2 surveyed the development of learners' cognitive rhythm and translation process, while Variable 3 referred to the degree of acceptability of students' solutions to the Rich Points of the texts translated during the trial. Finally, Variable 4 consisted of four sub-variables (a, b, c and d) and aimed at comparing the performance of the trial group with that of a control group by observing the marks obtained in general English (4a), Italian to English translation (4b), English to Italian translation (4c) and the acceptability of the Rich Points (4d) found in it.

Expectations regarding results were commensurate to the relatively short exposure of students to the trial and the relatively small sample (27). Hence, no radical change in the students' way of dealing with translation was expected but rather signs of progress towards a greater awareness of the translation process and of key aspects such as the role played by context, pragmatics and language

appropriateness. The non-compulsory nature of the trial caused a number of students to skip some classes and technical problems sometimes gave rise to file losses, so that the data gathered during activities are not always complete.

The results obtained in the trial and from the comparison with the control group have highlighted important aspects and sometimes contributed to discover unexpected facts. First of all, what emerged from the pilot study was that students' perceptions of their abilities and of translation problems usually do not match actual performance was confirmed in the trial too. Such gap is very likely to be connected with an insufficient knowledge of translation and its mechanisms along with partial lack of strategic behaviour – which are two of the four sub-competences the trial aimed to develop. As a consequence, students are not fully able to assess their own work against these abilities.

By looking at the development of cognitive rhythm during the trial we can see that students did progress towards a more balanced proportion between drafting and end-revision duration, also considering that every text presented a higher difficulty than the previous one. However, when confronted with a text genre and specific terminology they were particularly unfamiliar with, a sensible increase in drafting time and a corresponding slump in the duration of end-revision were observed. This fact seems to point to a correlation between the difficulty of a text and the students' response in terms of cognitive rhythm. Apparently, whenever a text requires sophisticated background knowledge and research skills along with a certain linguistic and pragmatic sensitivity learners focus on drafting and online revision much more and tend to neglect end-revision.

Information regarding the way students deal with the translation process was also gathered through the observation of the duration of pauses and the number of re-elaborations for each of the Rich Points selected. Results of trial activities do not display any evident change in learners' translational behaviour, with a substantial stability in the duration of pauses and the (low) number of re-elaborations throughout the experiment. However, such overall stability can also be interpreted as a positive sign if correlated with the increased difficulty of activities. Finally, the acceptability rate of Rich Points has displayed a variation throughout activities that can be hardly summarised by average values. It appeared that certain areas or specific items

(mostly plays on words and lexical elements) were dealt quite satisfactorily in many cases. What we can infer from a general view on the data is that learners are still developing their skills to deal with a correct and effective translation of texts, which is also why it was deemed necessary to ask them to take a delayed translation test.

The last set of results was drawn from the comparison with the performance of a control group consisting of 40 students. Students in the trial group outperformed the control group in variables a, b and c and obtained better results in three out of four Rich Point categories of variable d. In particular, the trial group was more successful in the translation of culture/pragmatics, discourse analysis and syntax/cohesion problems while it scored slightly less in the lexis/syntax area, as pointed out in 5.2.7.

Finally, feedback from volunteers was collected through the completion of eight open-ended questions regarding various aspects of the course and their impact in order to gather their opinions on initial expectations, work with the software, the value of subtitling for foreign language learning, quality of contents and teaching, influence of the trial on their routine and technical problems. The feedback collected suggests that students found the experience rewarding and would like to work again with LvS and *Translog* in the future.

APPENDIX 1

Participation requirements

Dear all,

I just wanted to give you a few details about the LvS project, should you decide to participate. I am carrying out this experiment for my PhD dissertation; the aim is to see whether the creation of subtitles can help students improve their linguistic and translational skills. I will give you some general guidelines on subtitling but remember that this is not a professional subtitling course.

There is no specific requirement to join the experiment, however your active participation in class is indispensable. This means that you will be asked to make translation proposals, assess your peers' performance and do some active translating/subtitling on the spot with a subtitling simulator. The data recorded will be kept strictly anonymous.

Some of you have already asked me about the project schedule: depending on the number of participants, I will divide you into small groups (max. 15 people) and try to find a compromise between your classes and lab availability. I will give you more details as soon as I have second semester timetables.

For any enquiry please contact me at: raffaella.panizzon@studenti.unipd.it

Best

Raffaella

APPENDIX 2

Profiling: Self-perception questionnaire

LvS PROJECT: PRELIMINARY QUESTIONNAIRE

NAME_____

SURNAME _____ DATE_____

Please answer ALL the following questions:

1. What is your native language/s (L1)?

_____

2. Which are your second languages (L2)?

_____

3. How long have you been studying them?

_____

4. Think of when you translate from English into Italian. For each translation stage, tick the option you think matches your skills best:

a) Source-text analysis:

- ☐ I can analyse texts about everyday or job descriptions as well as descriptions of events, feelings and wishes.
- ☐ I can analyse articles and reports on contemporary problems in which the writers adopt particular attitudes or viewpoints, as well as contemporary literature, cinema and advertising.
- ☐ I can analyse long and complex factual, literary or media texts, appreciating distinctions of style. I can also analyse specialised articles, long technical instructions and fairly complex media texts.

b) Research background information, lexis and terminology:

- ☐ I can research background information on everyday and job activities, whether culture-bound or not. I can carry out thorough searches of general language and simple terminology.
- ☐ I can research background information on general and special language about contemporary problems. I can carry out thorough searches of culture-bound lexis and

general language used to express attitudes and viewpoints. I can search and study standard terminology.

- ☐ I can research background information on general and special language of complex factual, literary and media texts. I can carry out thorough searches of complex culture-bound lexis and general language. I can search and study complex technical and scientific terminology.

c) Translation process:

- ☐ I can decide how to translate everyday and job descriptions, using appropriate translation strategies, suitable lexis and terminology, syntax (tenses, word order, punctuation) and style (for formal or informal language).
- ☐ I can select the most suitable translation strategies, lexis, terminology, syntax (tenses, word and phrase order, paragraphing, punctuation) style (for formal, informal, attitudinal language) and reformulate texts where necessary.
- ☐ I can select translation strategies, lexis, terminology, syntax (tenses, word-, phrase- and clause-order, punctuation, paragraphing) and style and justify their choice. I can easily reformulate a wide range of texts and produce target texts with a different purpose from their source texts.

d) Revision:

- ☐ I can make a simple revision of my translation, checking if I missed out any parts and if lexis, terminology and syntax are appropriate.
- ☐ I can revise my translation checking if I missed out any parts, if lexis, terminology, syntax and style are appropriate and adapting language and paragraphing to the intended purpose(s) of the target text.
- ☐ I can thoroughly revise my translation checking if I missed out, added or deleted any parts, if lexis, terminology, syntax and style are appropriate, adapting language, paragraphing and text type(s) to the intended purpose(s) of the target text and justifying the reasons of my choices.

5. Order the following problems from what you find most difficult (1) to less difficult (7):

- ☐ cultural references
- ☐ lexis/terminology
- ☐ plays on words
- ☐ pragmatics
- ☐ register
- ☐ style
- ☐ syntax

6. What do you usually do to improve your translation skills? (You can tick more than one option)

- ☐ Attend translation classes
- ☐ Read translation journals
- ☐ Watch films
- ☐ Take other translation courses (in the summer, during my erasmus period etc.)
- ☐ Read books

□ Other _____

7. Have you ever taken translation courses outside your university?

_____

8. Have you ever worked as a translator (for a company, during a job placement, etc.)? If so, describe your experience briefly.

_____
_____
_____
_____
_____

APPENDIX 3

Profiling: Translation test with Rich Points

Head and heart (RP1)

The portrait, as it is known today, was born in the Renaissance. Portraits had existed before the 15th century, of course: just think of the Pharaohs, with their colossal statues, the busts of the Roman emperors or the painted faces of donors (RP2) in Medieval altar pieces (RP3). But those figures seemed very remote. Renaissance artists, by contrast sought to create not just a likeness of their subjects, but also something of their spirit. (RP4)

Portraiture became very popular. Indeed, the principle question addressed by "Renaissance faces"(RP5), a new exhibition (RP6) at London's National Gallery is why, at this time, did so many patrons (RP7) commission portraits of themselves, their lovers, friends and children (RP8)? Answers emerge in seven rooms filled with paintings, medals, drawings and sculptures. The show (RP9) also seeks to correct the misconception (RP10) that Renaissance portraits were the exclusive invention and preoccupation of artists in the south of Europe, especially Italy.

Categorisation of Rich Points:

Rich Point	Text	Category
1	Head and heart	Lexical problem
2	donors	Lexical problem
3	altar pieces	Lexical problem
4	sought to create not just a likeness of their subjects, but also something of their spirit	Syntactical problem
5	Renaissance faces	Lexical problem
6	exhibition	False friend
7	patrons	Lexical problem
8	children	False friend
9	show	False friend
10	misconception	Lexical problem

APPENDIX 4

Profiling: individual length of pauses, number of re-elaborations and acceptability of Rich Points

FanM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	2	0	0 1 0
2	44	1	3 1 1
3	0	0	3
4	121	8	2
5	11	0	2 3 3
6	7	2	0
7	39	0	1 2 2
8	3	1	3
9	9	0	3
10	24	2	2 1 2

Aim			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	8	0	0
2	20	0	0
3	12	1	3
4	44	1	2 1 1
5	13	0	2 1 2
6	12	1	3
7	79	1	0
8	0	0	3
9	6	1	3
10	25	1	2 1 1

LmiM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	2	1	0
2	23	1	0
3	24	1	0
4	43	0	2
5	10	0	3
6	9	0	3
7	29	2	3
8	6	0	3
9	3	0	3
10	22	1	2 1 2

Mmu			
RP	Pause (in sec.)	N. of re-elab.	Acceptability

1	7	0	0 1 0
2	25	0	2 3 2
3	30	0	0
4	72	0	3
5	51	2	1
6	1	0	3
7	63	0	0
8	2	0	3
9	4	0	3
10	24	0	0

AmuM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	16	1	0 1 0
2	173	1	2 3 2
3	9	0	0
4	9	0	2
5	5	0	1
6	43	1	0
7	23	0	0 2 2
8	0	0	3
9	8	0	0
10	16	0	2

MpoM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	16	1	0 1 1
2	28	1	0 2 2
3	26	1	1
4	185	7	0
5	29	1	2 1 2
6	0	0	3
7	6	0	1 3 1
8	3	0	0
9	0	0	3
10	13	0	2

Vta			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	15	0	0 1 0
2	24	2	1 2 1
3	44	1	0 2 2
4	230	9	1 0 0
5	0	0	1
6	2	0	3
7	31	1	2
8	0	0	3
9	2	0	3
10	86	2	3

JtoM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	3	1	2
2	1	0	2 3 2
3	3	0	0
4	4	0	3 2 2
5	0	0	0
6	4	1	3
7	0	0	2
8	0	0	0
9	1	1	3
10	0	0	1 2 1

Sza			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	10	2	3
2	10	0	1 2 1
3	7	0	0
4	2	0	1
5	1	0	1
6	5	0	3
7	2	0	0 1 0
8	0	0	3
9	1	0	3
10	3	2	3

Eto			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	9	1	0
2	7	0	2 3 2
3	0	0	0
4	234	9	2
5	4	0	3
6	0	0	0
7	31	1	2
8	0	0	0
9	7	0	3
10	13	2	2 3 2

Eza (damaged file, only acceptability available)			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	nt	nt	nt
2			0
3			0 2 2
4			0
5			1
6			3

7			2
8			0
9			3
10			3

Aav			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	5	0	0 1 0
2	49	0	0
3	11	0	2
4	66	0	1
5	21	0	0
6	5	0	3
7	1	0	0 1 0
8	1	0	3
9	3	0	3
10	4	0	3

Vca			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	20	2	0
2	3	0	3
3	30	0	2
4	53	2	1
5	7	0	2
6	15	0	3
7	6	0	2
8	3	0	3
9	0	0	3
10	6	1	2

Mco			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	34	1	0 1 0
2	46	0	0
3	38	0	2
4	70	1	1
5	7	0	3
6	9	0	3
7	7	0	0
8	1	0	3
9	12	0	0
10	19	1	1

Nfa			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	nt	nt	nt
2	35	0	2 3 2

3	8	0	2
4	66	1	3
5	7	0	1
6	6	0	3
7	12	0	3
8	0	0	3
9	3	0	3
10	23	0	3

Afi			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	1	0	0
2	6	0	0
3	5	0	3
4	62	0	0
5	18	1	1
6	6	0	3
7	2	0	0
8	2	0	3
9	0	0	3
10	18	0	2

EmaM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	12	0	0 1 0
2	3	1	3 1 3
3	0	0	3
4	14	0	3
5	5	0	1
6	11	0	3
7	25	1	3
8	1	0	3
9	10	0	0
10	10	0	3

Gma			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	6	0	0
2	nt	nt	nt
3	3	0	2
4	16	0	3
5	5	0	1
6	6	0	0
7	9	0	2
8	0	0	3
9	10	0	0
10	87	1	0

Sma			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	17	2	0 1 0
2	nt	nt	nt
3	24	1	0
4	45	1	3
5	11	0	1
6	0	0	3
7	22	1	0 1 0
8	2	0	3
9	15	0	3
10	140	1	3 2 3

Cpu			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	2	0	0
2	35	1	1
3	107	1	0
4	31	0	2 3 2
5	11	0	3
6	3	0	3
7	9	0	0 1 0
8	1	0	3
9	7	0	0
10	5	0	2

SsaM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	2	0	0 1 0
2	9	0	0
3	2	0	2
4	164	2	2
5	2	1	3
6	2	0	3
7	7	0	0 1 0
8	0	0	0
9	0	0	3
10	15	0	3

Etr			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	7	1	2
2	59	1	0
3	0	0	0
4	40	2	2
5	11	0	1
6	1	0	3
7	7	0	3
8	7	0	3

9	2	0	3
10	10	0	3 2 3

Dmo			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	26	1	0
2	10	1	0
3	21	1	0
4	52	3	1
5	15	0	1
6	3	0	3
7	1	0	0
8	1	0	0
9	0	0	3
10	16	0	3

Stu			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	26	0	0 1 0
2	1	0	2 3 2
3	0	0	2
4	13	1	2
5	9	1	3
6	0	0	3
7	35	0	0 1 0
8	0	0	3
9	6	0	3
10	5	0	2 3 2

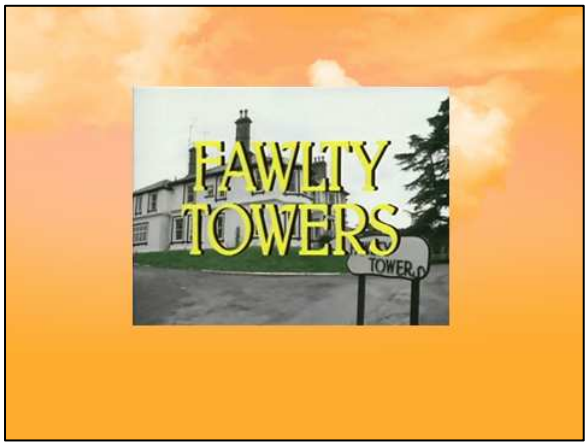
Eze			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	42	3	3
2	14	0	0
3	13	0	0
4	31	1	2
5	5	0	1
6	2	0	0
7	23	0	1 3 1
8	2	0	0
9	0	0	2
10	4	1	0 1 1

Sve			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	3	0	0 1 0
2	48	1	2
3	26	1	0

4	50	0	2 3? 2
5	2	0	0
6	4	0	3
7	33	4	1 3 1
8	0	0	0
9	1	0	3
10	20	1	3

APPENDIX 5

Introductory activity to LvS: background information on *Fawlty Towers*



Fawlty Towers is a British sitcom first broadcast by BBC2 in 1975.

The series revolves around the homonymous hotel and the misadventures of its rude and clumsy owner, Basil Fawlty.

In the clip we are watching today, we will see Manuel, the hotel's Spanish waiter, struggling with the English language.

Hands-on activity

STEP 1:
Load the Fawlty Towers file into LVS. Watch the clip by pressing the play button  .
As you will see, the video has already been subtitled in English, so that the TC-in and the TC-out are already given.

STEP 2:
Now, it is your turn to create subtitles! Use the TC-in and TC-out given as a track to make the Italian version of the clip.

Open Translog and select the "Fawlty Towers" project file. Load the file with the subtitle text and start translating.

Tip: consider that the English text of the subtitles is a reduction of dialogues. When you design the Italian version, remember to consider both.

STEP 3:
Copy and paste your final translation into the LVS subtitle grid and play your video!
If you need to make changes, remember to start by modifying your text in Translog and then in LVS.

Once you are finished, different versions will be compared and discussed. Think about what you found problematic and how you tried to solve it.

APPENDIX 6

Introductory activity to LvS: transcription of subtitles provided for the extract taken from *Fawlty Towers* (series 1, ep.6)

Manuel: You see I speak English well, I learn it from a book. Hello! I am English. Hello! How are you Sir? I can speak English. Ah, hello Major! How are you today?

Major: I... I ... I ...I'm fine thank you!

Manuel: Is a beautiful day today!

Major: Is it? Yes, yes, I suppose it is.

Manuel: Yes, I can speak English. I learn it from a book.

Major: Did you? Did you ...eh...There you are Fawlty!

Fawlty: I'm just going to open up, Major!

Major: Oh fine! I say that's a remarkable animal, Fawlty. Where did you get it?

Fawlty: Samson's... in the town.

Major: Really? Was it expensive?

Fawlty: 12 pounds

Major: Good Lord ... Japanese, was it?

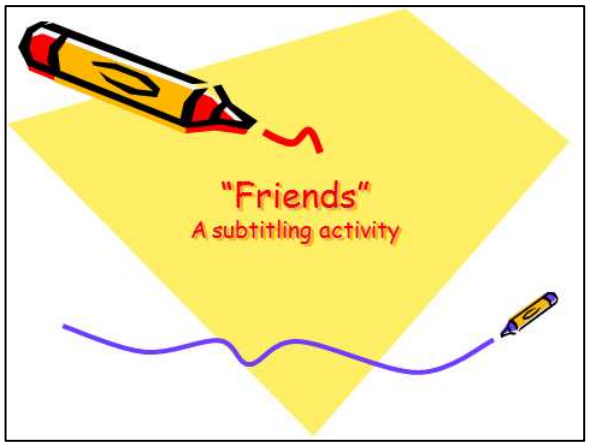
Fawlty: Canadian I think, Major.

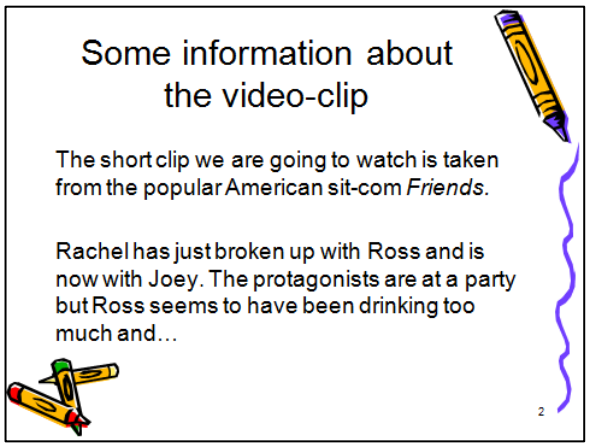
Major: I didn't know Canadians were just as clever as that, my God!

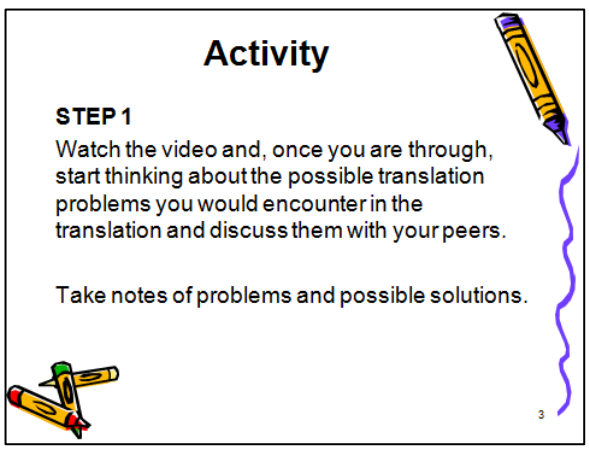
Fawlty: They started early!

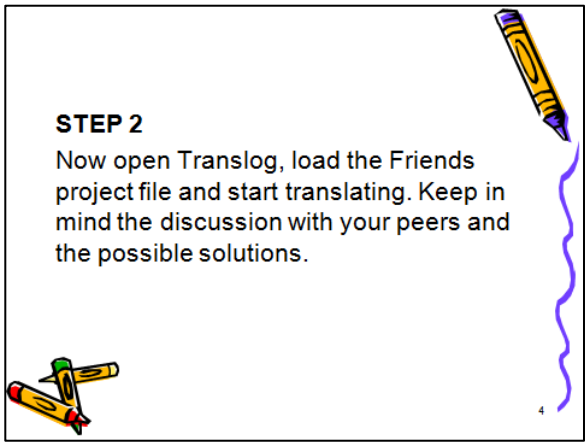
APPENDIX 7

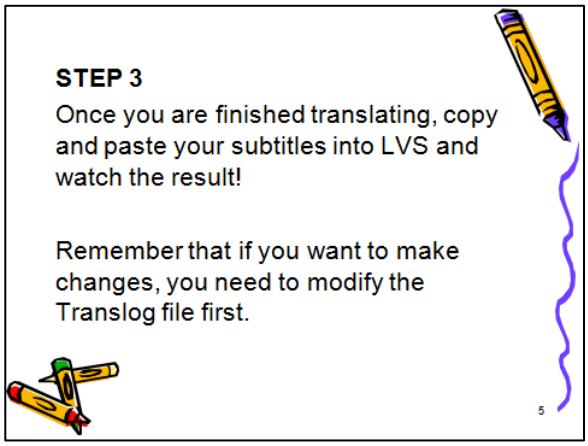
Introduction to activity one: background information on *Friends* (edited from http://levis.cti.gr/index.php?option=com_docman&task=cat_view&gid=100&Itemid=27)








STEP 2
Now open Translog, load the Friends project file and start translating. Keep in mind the discussion with your peers and the possible solutions.
4


STEP 3
Once you are finished translating, copy and paste your subtitles into LVS and watch the result!
Remember that if you want to make changes, you need to modify the Translog file first.
5

APPENDIX 8

Activity one: transcription of subtitles provided for the extract taken from *Friends* (season 10, ep. 2) and Rich Points

Ross: Everyone, I would like to make a toast. To Rachel and Joey. And... to love. Ah... love, L-O-V-E (RP1)...love. L is for life and what is life without love? (RP2)

Rachel: Oh my God are we supposed to answer?

Ross: O is for...oh wow (RP3)! V is for this very surprising turn of events, which I am still fine with by the way (RP4). E... is for how... extremely normal I find it that you two...are together (RP5) and how one day you might...get married and have children of your own.

Joey: Dude (RP6) are you ok?

Ross: Totally!

Categorisation of Rich Points:

Rich Point	Text	Category
1	L-O-V-E	Pun
2	L is for life and what is life without love?	Pun
3	O is for...oh wow	Pun
4	V is for this very surprising turn of events, which I am still fine with by the way	Pun
5	E... is for how... extremely normal I find it that you two...are together	Pun
6	Dude	Lexis/Register

APPENDIX 9

Activity one: individual length of pauses, number of re-elaborations and acceptability of Rich Points

FanM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	371	1	3
2	217	4	3
3	55	1	3
4	252	2	3
5	52	2	3
6	6	0	2

Vgi			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	70	1	3
2	91	0	3
3	232	2	3
4	149	1	3
5	123	3	3
6	7	0	3

Aim			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	74	1	3
2	468	1	3
3	18	0	3
4	275	2	0
5	45	1	3
6	6	1	3

MpoM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	131	2	3
2	96	1	3
3	171	2	3
4	231	4	3
5	85	3	3
6	3	0	2

LmiM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	155	0	3
2	166	0	3

3	180	0	3
4	411	0	2
5	536	1	3
6	10	0	3

AmuM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	72	1	3
2	150	2	3
3	119	0	2
4	230	0	3
5	372	1	3
6	2	0	0

Vta			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	12	0	3
2	24	0	3
3	54	0	3
4	690	5	3
5	29	0	3
6	48	2	2

JtoM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	18	0	3
2	148	0	3
3	53	1	3
4	88	1	2
5	40	0	3
6	0	0	3

Eto			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	17	0	3
2	84	0	3
3	1	0	0
4	356	1	2
5	433	5	3
6	558	1	0

Nfa			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	28	0	3
2	15	0	2
3	3	0	3
4	20	0	3
5	23	0	3
6	12	0	3

Mco			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	78	1	3
2	71	2	0
3	50	2	3
4	180	3	3
5	108	0	3
6	7	2	2

EmaM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	347	0	2
2	132	1	3
3	108	0	3
4	253	0	3
5	193	1	3
6	14	0	3

Afi			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	16	0	3
2	57	2	3
3	255	1	3
4	112	3	3
5	66	0	0
6	2	0	3

Gma			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	76	0	3
2	122	1	3
3	28	0	3
4	222	2	3
5	87	2	3
6	27	0	3

Sma			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	49	0	0
2	4	0	0
3	27	0	0
4	81	1	0
5	23	0	0
6	40	0	2

Dmo			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	311	3	3
2	123	1	2
3	108	1	0
4	173	1	2
5	62	0	2
6	48	0	3

SsaM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	91	1	3
2	125	1	3
3	70	0	3
4	185	0	3
5	55	1	2
6	4	0	3

Etr			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	124	0	3
2	43	0	3
3	13	0	3
4	375	6	2
5	206	1	3
6	21	0	3

Stu			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	31	0	3
2	35	0	2
3	11	0	0
4	733	6	2
5	46	1	3
6	6	0	3

Sve			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	59	2	3
2	5	1	2
3	15	1	3
4	132	3	3
5	385	0	3
6	0	0	0

Dvi			
RP	Pause (in sec.)	N. of re-elab.	Acceptability

1	27	1	3
2	105	1	3
3	24	0	2
4	150	2	2
5	72	1	3
6	5	0	3

Eze			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	110	0	3
2	111	3	2
3	27	0	3
4	46	1	1
5	127	3	3
6	20	0	3

Aav			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	106	0	3
2	162	3	0
3	25	0	3
4	223	3	3
5	112	2	3
6	6	0	2

APPENDIX 10

Introduction to activity two: background information on *Blackadder goes Forth*

BLACKADDER GOES FORTH

Blackadder is a BBC tv series consisting of four seasons, each set in a different historical period.

The clip we are watching today is taken from season 4, which takes place during world war I. Blackadder is a captain of the British army talking to his fellows about the causes of the war.

Activity

STEP 1

Watch the video until 00.01.21.10 (i.e. as long as the video is subtitled).

Once you are through, start thinking about the possible translation problems you would encounter in the translation and discuss them with your peers.

Take notes of problems and possible solutions.

STEP 2

Now open Translog, load the Blackadder project file and start translating. Keep in mind the discussion with your peers and the possible solutions.

STEP 3

Once you are finished translating, copy and paste your subtitles into LVS and watch the result!

Remember that if you want to make changes, you need to modify the Translog file first.

APPENDIX 11

Activity two: transcription of subtitles provided for the extract taken from *Blackadder goes Forth* (ep. 6) and Rich Points

Baldrick: Permission to ask a question, sir?

Blackadder: Permission granted, Baldrick, as long as it isn't the one about where babies come from.

Baldrick: No. The way I see it, these days there's a war on, right? And ages ago, there wasn't a war on, right? So there must have been a moment when there-not-being-a-war-on went away, and there-being-a-war-on came along (RP1). So... what I want to know is, how did we get from the one case of affairs to the other case of affairs?

Blackadder: Do you mean, how did the war start?

Baldrick: Yeah.

George: The war started because of the vile Hun (RP2) and his villainous empire-building.

Blackadder: George, the British Empire at present covers a quarter of the globe, while the German Empire consists of a small sausage factory in Tanganyika. I hardly think we can be absolved from blame on the imperialistic front.

George: Oh, no... no sir, absolutely not. Mad as a bicycle! (RP3)

Baldrick: I heard that it started when a bloke called Archie Duke shot an ostrich because he was hungry. (RP4)

Blackadder: I think you mean it started when the Archduke of Austro-Hungary got shot. (RP5)

Baldrick: No, there was definitely an ostrich (RP6) involved, sir.

Blackadder: Well, possibly.

Categorisation of Rich Points:

Rich Point	Text	Category
1	when there-not-being-a-war-on went away, and there-being-a-war-on came along	Lexical problem
2	vile Hun	Lexical problem

3	Mad as a bicycle	Idiom
4	I heard that it started when a bloke called Archie Duke shot an ostrich because he was hungry	Pun
5	when the Archduke of Austro-Hungary got shot	Pun
6	ostrich	Pun

APPENDIX 12

Activity two: individual length of pauses, number of re-elaborations and acceptability of Rich Points

FanM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	111	2	3
2	39	2	3
3	13	0	3
4	293	1	3
5	168	0	3
6	9	0	3

Vgi			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	49	0	3
2	22	0	0
3	30	1	3
4	115	0	3
5	34	2	3
6	33	0	3

Aim			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	37	0	0
2	31	1	0
3	2	0	3
4	40	0	3
5	17	1	3
6	8	0	3

LmiM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	45	0	0
2	134	0	0
3	7	0	3
4	113	2	3
5	103	1	2
6	8	0	3

AmuM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability

1	87	0	3
2	78	2	0
3	35	0	3
4	28	0	3
5	26	0	3
6	16	0	3

Mmu			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	53	3	2
2	65	1	0
3	17	0	3
4	133	1	2
5	107	1	3
6	7	0	3

MpoM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	72	0	2
2	47	0	3
3	16	0	3
4	370	0	3
5	30	1	0
6	3	0	3

Vta			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	18	1	0
2	119	0	0
3	1	0	3
4	19	0	3
5	19	1	3
6	3	0	3

Eto			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	20	0	0
2	81	1	2
3	29	0	0
4	10	0	3
5	12	0	3
6	0	0	3

Vta			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	18	1	0
2	119	0	0

3	1	0	3
4	19	0	3
5	19	1	3
6	3	0	3

Eza			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	44	1	0
2	52	0	0
3	23	0	3
4	297	3	0
5	108	0	3
6	11	0	1

Vca			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	168	3	0
2	122	0	3
3	4	1	3
4	25	0	3
5	7	0	3
6	2	0	3

Mco			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	51	0	0
2	86	0	0
3	32	1	3
4	184	0	0
5	87	0	0
6	25	0	3

Nfa			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	45	0	3
2	45	0	0
3	4	0	3
4	70	1	3
5	40	1	3
6	17	0	3

Afi			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	89	2	0
2	12	0	0
3	11	0	3
4	196	2	0
5	75	1	1
6	3	0	3

Gma			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	71	2	3
2	136	0	0
3	7	0	3
4	47	0	3
5	27	0	3
6	0	0	3

EmaM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	44	0	2
2	81	0	3
3	12	0	3
4	92	0	3
5	29	1	3
6	0	0	3

Dmo			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	117	1	0
2	7	0	0
3	7	0	3
4	30	0	0
5	23	0	3
6	4	0	3

Sma			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	19	0	0
2	0	0	0
3	11	0	3
4	66	0	3
5	14	0	0
6	5	0	3

Cpu			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	38	2	3
2	62	0	3
3	34	1	3
4	323	1	2
5	61	1	3
6	0	0	3

Ssa			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	44	1	0
2	15	0	0

3	9	1	3
4	17	0	3
5	115	2	3
6	1	0	3

Etr			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	62	1	3
2	85	0	1
3	30	0	0
4	68	1	1
5	21	1	1
6	0	0	3

Stu			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	50	1	3
2	5	0	3
3	73	1	3
4	72	0	3
5	28	1	2
6	2	0	3

Sve			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	81	1	0
2	35	0	0
3	29	0	3
4	54	1	0
5	28	0	3
6	8	0	3

APPENDIX 13

Activity three: transcription of the extract taken from the speech delivered by Michio Kaku "What if Einstein is wrong?" and Rich Points

Many physicists had a heart attack when we got news from Geneva, Switzerland, that Einstein might be wrong. All hell broke loose (RP1) in the physics community. Every physicist I know was taking a position on this hot topic because relativity is the foundation of modern physics along with the quantum theory (RP2). Now, what they found was: if you take a beam of neutrinos (RP3) from the atom smasher (RP4) in Geneva, Switzerland, shoot the beam through the mountains to Italy over a distance of 454 miles, the neutrinos outraced a light beam by a distance of 60 feet. 60 feet over a distance of 454 miles (RP5) ...well, that doesn't sound like much but to a physicist this is a disaster. It means that the foundations of modern physics have to be called into question. First, it means that time travel could become commonplace because as you approach the speed of light, time slows down (RP6); if you exceed the speed of light, time goes backwards. Remember that scene in Superman I when Lois Lane dies and Superman goes into outer space and re-goes around the planet Earth in the opposite direction the earth stops, and then rotates in the opposite direction and then all of a sudden Lois Lane springs back to life? Well, that kind of scenario might be possible if the speed of light is not so special that particles can exceed the speed of light. Not to mention that we'll have to recalibrate everything: the age of the universe, the age of stars, the distance of the stars; the basic structure of modern electronics has to be changed: GPS, nuclear weapons all of that will have to be recalibrated and re-thought through, if Einstein's theory of relativity is wrong.

Categorisation of Rich Points:

Rich Point	Text	Category
1	All hell broke loose	Idiom
2	quantum theory	Lexical problem
3	beam of neutrinos	Lexical problem
4	atom smasher	Lexical problem
5	454 miles; 60 feet; 60 feet over a distance of 454	Unit of measurement

	miles	
6	time travel could become commonplace because as you approach the speed of light, time slows down	Syntactical problem

APPENDIX 14

Activity three: individual length of pauses, number of re-elaborations and acceptability of Rich Points

FanM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	15	0	3
2	15	0	0
3	1	0	3
4	3	0	3
5	192	1	3
6	70	1	3

Vgi			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	27	0	3
2	56	0	0
3	58	0	3
4	22	0	3
5	175	0	3
6	163	1	0

Mmu			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	8	0	3
2	40	0	0
3	7	0	3
4	68	0	3
5	32	0	0
6	151	1	2

Eza			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	126	4	0
2	5	0	0
3	11	0	3
4	2	0	3
5	19	0	0
6	98	1	0

Eto			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	1	0	3
2	4	0	3

3	0	0	3
4	2	0	3
5	63	2	3
6	30	0	2

AmuM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	2	0	3
2	9	0	0
3	54	0	1
4	59	0	3
5	251	1	2
6	76	0	2

Vca			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	86	0	3
2	40	0	3
3	9	0	3
4	17	0	3
5	143	0	3
6	38	0	3

Nfa			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	36	0	2
2	4	0	0
3	3	0	3
4	4	0	0
5	138	2	1
6	166	1	0

Afi			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	15	0	3
2	49	0	0
3	60	0	0
4	6	0	3
5	43	1	3
6	73	4	2

Ema			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	14	1	2
2	12	0	0
3	12	0	3
4	1	0	3

5	153	2	3
6	278	1	2

Sma			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	39	0	2
2	29	0	3
3	11	0	3
4	82	0	2
5	124	0	2
6	237	1	0

Dmu			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	10	0	1
2	106	2	0
3	85	0	3
4	21	0	0
5	63	0	0
6	94	2	0

Cpu			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	12	0	3
2	2	0	0
3	32	0	3
4	180	0	3
5	154	1	3
6	54	1	1

Dvi			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	128	0	3
2	29	0	0
3	31	0	3
4	18	0	3
5	69	0	0
6	56	1	3

Sve			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	157	0	2
2	146	0	0
3	28	0	0
4	23	0	3
5	397	2	3

6	125	1	0

SsaM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	55	1	3
2	10	0	0
3	3	0	3
4	3	0	3
5	178	2	3
6	37	0	0

Etr			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	44	1	3
2	12	0	0
3	26	1	2
4	26	0	1
5	114	1	3
6	278	1	2

Dvi			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	128	0	3
2	29	0	0
3	31	0	3
4	18	0	3
5	69	0	0
6	56	1	3

APPENDIX 15

Activity four: transcription of the extract taken from BBC News at Six of 21/03/2012 and Rich Points

Good evening and welcome to the BBC's News at Six. The liberal democrats have taken the highly unusual step of going public about one key choice in the government's budget: what to do about the 50 p top-rated income tax (RP1)? Pressure has been put on the Chancellor (RP2) - George Osburne - to scrap the tax but today the Business Secretary (RP3) Vince Cable made it clear that the Lib-Dems ask to replace it with the so-called "mansion tax" (RP4), which would affect those with the most expensive homes. Now to James Landale, our deputy political editor.

The budget's weeks away and is taxing ministers' minds (RP5). Should they catch income tax from low earners, should they raise a new tax on expensive houses, should they cut the 50 p top-rated tax to high earners? Once upon a time, budget negotiations took place behind closed doors, here at the Treasury with the Chancellor firmly in charge. When the Lib-Dem Business Secretary was asked this morning what he thought of getting rid of the 50 p tax, he said this: "My colleagues are not ideologically wedded to (RP6) the 50 p tax. If that's what has to go, it should be replaced by taxation of wealth because the wealthy of the country have got to pay their share. The mansion tax is actually a very economically sensible solution".

Categorisation of RP:

Rich Point	Text	Category
1	50 p top-rated income tax	Cultural-lexical problem
2	Chancellor	Cultural-lexical problem
3	Business Secretary	Cultural-lexical problem
4	"mansion tax"	Cultural-lexical problem
5	is taxing ministers' minds	Pun
6	not ideologically wedded to	Metaphor

APPENDIX 16

Activity four: individual length of pauses, number of re-elaborations and acceptability of Rich Points

Aim			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	123	0	2
2	36	0	3
3	5	0	2
4	136	1	0
5	135	0	2
6	19	0	3

AmuM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	58	1	1
2	2	0	3
3	5	0	2
4	43	0	0
5	60	5	3
6	21	0	0

Mmu			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	74	2	3
2	13	0	3
3	19	0	2
4	96	2	3
5	77	1	0
6	40	1	0

JtoM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	25	1	3
2	2	0	3
3	18	0	1
4	24	0	3
5	204	2	1
6	21	0	0

Eto			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	11	0	2

2	32	0	0
3	144	1	0
4	35	4	3
5	2	0	3
6	6	0	2

Vca			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	147	3	0
2	8	0	0
3	5	0	3
4	2	0	3
5	4	0	3
6	26	0	3

Mco			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	53	0	0
2	67	0	3
3	6	0	0
4	127	1	0
5	125	0	2
6	19	0	1

Nfa			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	13	0	0
2	34	0	3
3	19	0	3
4	61	0	0
5	177	nt	nt
6	40	1	2

EmaM			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	62	0	0
2	2	0	0
3	26	0	2
4	17	0	0
5	81	0	0
6	17	1	0

Sma			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	3	0	0
2	3	0	3
3	2	0	3

4	1	0	0
5	nt	nt	nt
6	57	0	2

Dmo			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	133	3	0
2	37	0	0
3	5	0	0
4	9	0	0
5	53	3	0
6	13	0	3

Cpu			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	30	0	3
2	85	0	0
3	70	0	3
4	20	0	3
5	88	0	3
6	12	0	2

Etr			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	935	0	0
2	165	0	1
3	690	0	0
4	106	3	0
5	nt	nt	nt
6	nt	nt	nt

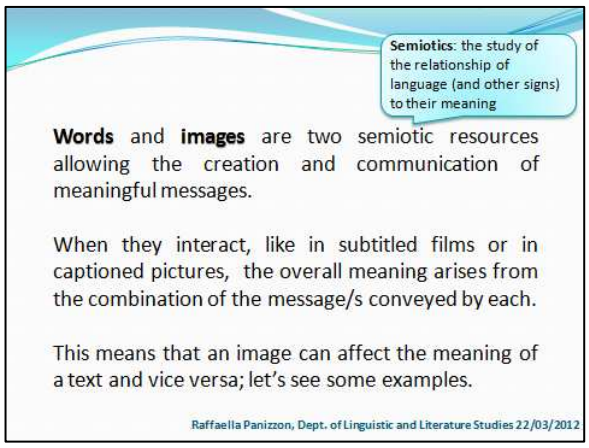
Stu			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	42	2	2
2	11	0	3
3	5	0	3
4	17	1	0
5	23	0	3
6	32	0	0

Sve			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	231	4	0
2	0	0	0
3	136	1	0
4	40	0	0
5	23	0	2
6	7	0	3

Dvi			
RP	Pause (in sec.)	N. of re-elab.	Acceptability
1	38	0	2
2	12	0	3
3	5	0	3
4	80	0	3
5	3	0	3
6	21	0	2

APPENDIX 17

Slides of lesson 1 “Word and Images. Implications in meaning-making”



Look at ex. # 1 and describe a possible context of reference (i.e. an image) you would associate it to.

Ex. # 1:

Ex. # 1a

=

Overall message: a cat is sitting next to a bowl asking for food.

+

Ex. # 1b

=

Overall message: someone is asking to be provided with updates on the content of a website.

+

Ex. # 2:

Look at the picture below and imagine a caption you would use to describe it.

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Ex. # 2a

Riots in Greece: buildings set on fire by protesters

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Ex. # 2b

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Ex. # 3:
Watch this short video:

http://www.youtube.com/watch?feature=endscreen&NR=1&v=zCGtcnfisBg

What do you think is the relationship between the images and the words in the video? Do they affect each other?

In examples 1a and 1b we have seen captions reinforcing or repeating the meaning conveyed by the image: *"the verbal text restates the meanings of the image or vice-versa. In other words, the same meanings are communicated by the verbal code and the visual code"* (Astorga: 1999).

Redundancy effect

In examples 2a and 3, images and words complete each other's meaning, so that the verbal text extends the meanings of the image *"with word and image in a complementary relation"* (Astorga: 1999).

Completion effect

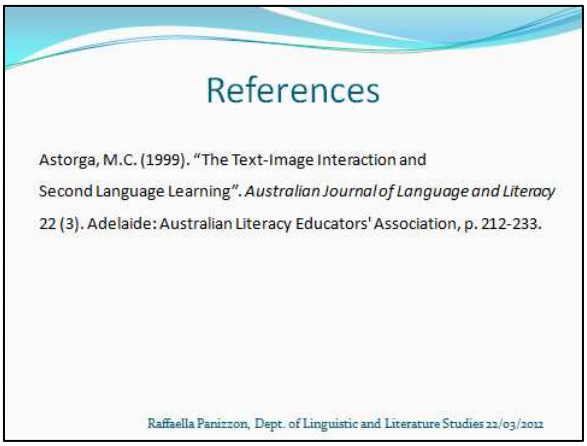
However, there are also cases in which images and captions send out different or contradictory messages (2b). This device is often used for humorous purposes or to create a surprise effect.

Contradiction effect

Summarising...

- A phrase/sentence in a caption can take up different meanings according to the image(s) it is associated with;
- The meaning of an image can be (sensibly) changed by a caption.

When words and images are put together, they affect each other's meaning by reinforcing, completing or contradicting each other. In any case, the final message is always the result of their interaction.


References
Astorga, M.C. (1999). "The Text-Image Interaction and
Second Language Learning". Australian Journal of Language and Literacy
22 (3). Adelaide: Australian Literacy Educators' Association, p. 212-233.
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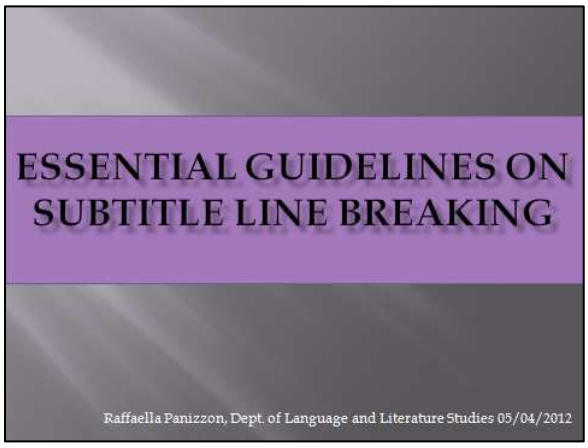
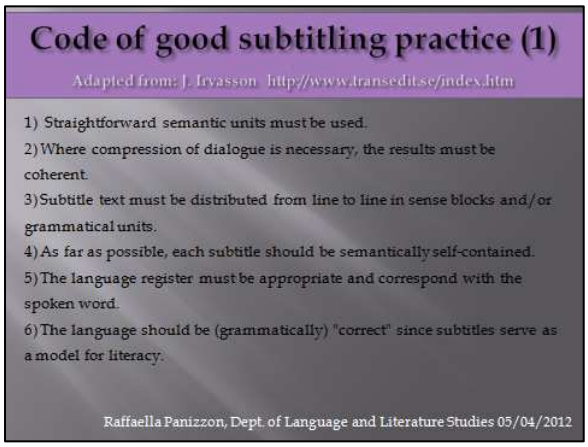
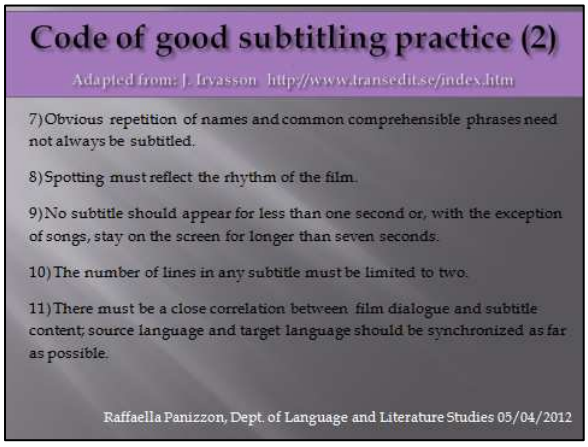
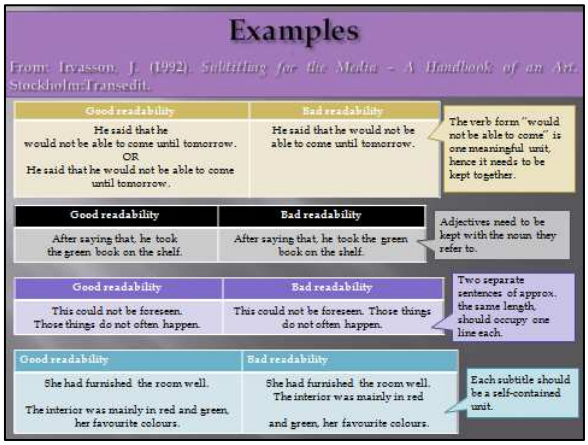
APPENDIX 18

Slides of lesson 2 “Essential Guidelines on Subtitle Line-Breaking”



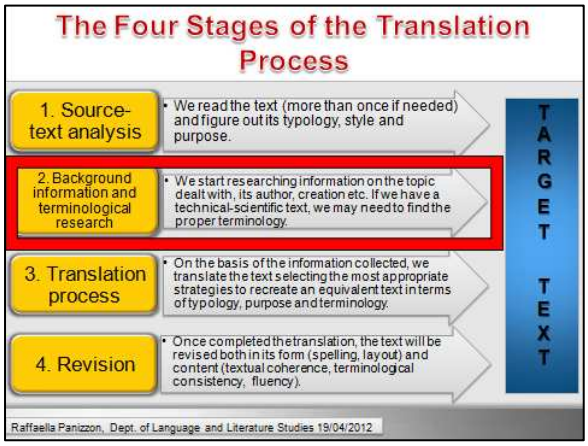


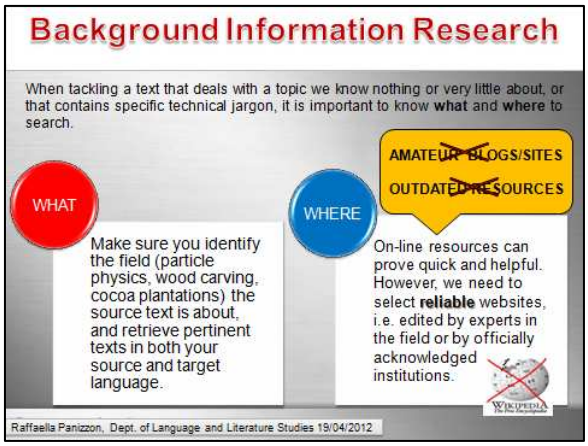


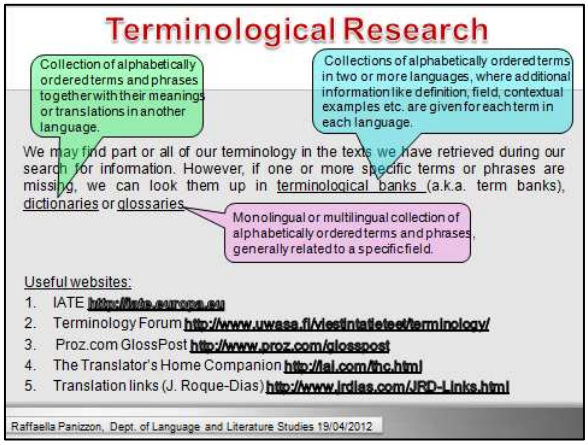

Examples
From: Ivasson, J. (1992). Subtitling for the Media – A Handbook of an Art. Stockholm:Transedit.
Good readability
He said that he would not be able to come until tomorrow.
OR
He said that he would not be able to come until tomorrow.
Bad readability
He said that he would not be able to come until tomorrow.
The verb form "would not be able to come" is one meaningful unit, hence it needs to be kept together.
Good readability
After saying that, he took the green book on the shelf.
Bad readability
After saying that, he took the green book on the shelf.
Adjectives need to be kept with the noun they refer to.
Good readability
This could not be foreseen. Those things do not often happen.
Bad readability
This could not be foreseen. Those things do not often happen.
Two separate sentences of approx. the same length, should occupy one line each.
Good readability
She had furnished the room well.
The interior was mainly in red and green, her favourite colours.
Bad readability
She had furnished the room well. The interior was mainly in red
and green, her favourite colours.
Each subtitle should be a self-contained unit.

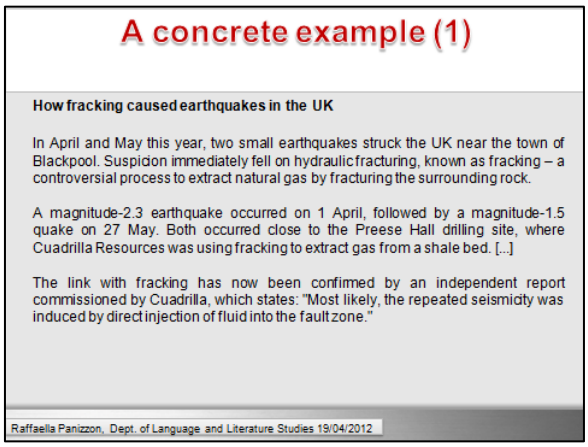
APPENDIX 19

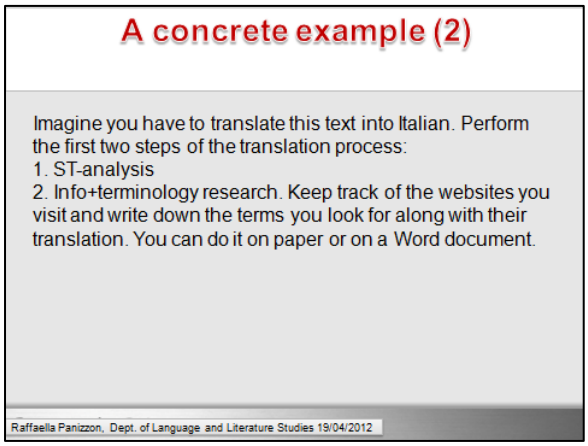
Slides of lesson 5, “Background Information and Terminological Research: an Introduction to Translation Practice”




Background Information Research
When tackling a text that deals with a topic we know nothing or very little about, or that contains specific technical jargon, it is important to know what and where to search.
WHAT
Make sure you identify the field (particle physics, wood carving, cocoa plantations) the source text is about, and retrieve pertinent texts in both your source and target language.
WHERE
AMATEUR BLOGS/SITES
OUTDATED RESOURCES
On-line resources can prove quick and helpful. However, we need to select reliable websites, i.e. edited by experts in the field or by officially acknowledged institutions.
Raffaella Panizzon, Dept. of Language and Literature Studies 19/04/2012


Terminological Research
Collection of alphabetically ordered terms and phrases together with their meanings or translations in another language.
Collections of alphabetically ordered terms in two or more languages, where additional information like definition, field, contextual examples etc. are given for each term in each language.
We may find part or all of our terminology in the texts we have retrieved during our search for information. However, if one or more specific terms or phrases are missing, we can look them up in terminological banks (a.k.a. term banks), dictionaries or glossaries.
Monolingual or multilingual collection of alphabetically ordered terms and phrases, generally related to a specific field.
Useful websites:
1. IATE http://iate.europa.eu
2. Terminology Forum http://www.uwasa.fi/viestintatieteet/terminology/
3. Proz.com GlossPost http://www.proz.com/glosspost
4. The Translator's Home Companion http://tai.com/thc.html
5. Translation links (J. Roque-Dias) http://www.jrdias.com/JRD-Links.html
Raffaella Panizzon, Dept. of Language and Literature Studies 19/04/2012


A concrete example (1)
How fracking caused earthquakes in the UK
In April and May this year, two small earthquakes struck the UK near the town of Blackpool. Suspicion immediately fell on hydraulic fracturing, known as fracking – a controversial process to extract natural gas by fracturing the surrounding rock.
A magnitude-2.3 earthquake occurred on 1 April, followed by a magnitude-1.5 quake on 27 May. Both occurred close to the Preese Hall drilling site, where Cuadrilla Resources was using fracking to extract gas from a shale bed. [...]
The link with fracking has now been confirmed by an independent report commissioned by Cuadrilla, which states: "Most likely, the repeated seismicity was induced by direct injection of fluid into the fault zone."
Raffaella Panizzon, Dept. of Language and Literature Studies 19/04/2012


A concrete example (2)
Imagine you have to translate this text into Italian. Perform the first two steps of the translation process:
1. ST-analysis
2. Info+terminology research. Keep track of the websites you visit and write down the terms you look for along with their translation. You can do it on paper or on a Word document.
Raffaella Panizzon, Dept. of Language and Literature Studies 19/04/2012

APPENDIX 20

LvS end-of-course questionnaire

LvS-project end-of-course questionnaire

Thinking about the LvS course you have attended, please answer all the following questions and, if needed, justify your answers.

1. Did the course meet your initial expectations (if you had any)? Why?
2. If you were to assess your experience in using LVS and *Translog*, what would you say? Would you use them in the future if you had the chance to?
3. Do you think the use of subtitling can be helpful in improving your language and translation skills? How and why?
4. Think about the contents delivered during the course, what did you find most useful? Was there anything you found repetitive or not pertinent?
5. Think about the translation exercises you have done in class and the procedure followed for each of them (fist viewing of the material, then discussion in class/research, translation, post-translation discussion). Have they changed something in the way you do your translations? If so, what?
6. How would you rate the overall quality of the teaching? Was the course well-structured enough?
7. There have been a number of technical issues during the course. How much do you think they have affected your learning?
8. Please write here any observations or criticism about the course or the teacher you want to express.

THANK YOU FOR YOUR TIME!

APPENDIX 21

Delayed translation test and Rich Points

Fareed Zakaria

Broken and Obsolete

An immigration deadlock makes the U.S. a second-rate nation

Americans think of the U.S. as the world's great immigrant society, and of course, for most of the country's history, that has been true. But something fascinating has happened over the past two decades. Other countries have been transforming themselves into immigrant societies (RP1), adopting many of America's best ideas and even improving on them. The result: the U.S. is not as exceptional as it once was, and its immigration advantage is lessening (RP2).

Would you have guessed that Canada and Australia both have a higher percentage of foreign-born citizens than the U.S.? In fact, in this respect, America – which once led the world (RP4) – increasingly looks like many other Western countries. France, Germany and the U.K. have only slightly fewer foreign-born residents (RP3) than America (as a percentage of the population). And some of these countries have managed to take in immigrants mostly based on their skills, giving a big boost to their economies.

Canadian immigration policy is now centered on recruiting talented immigrants with abilities the country needs. Those individuals can apply for work visas themselves; they don't even need to have an employer (RP5). The Canadian government awards points towards the visa (RP6), with extra points for science education (RP7), technical skills and work experience.

The results of the system are evident in Vancouver, where American high-technology companies (RP8) have large research laboratories and offices. The people working in these offices are almost all foreign graduates of American universities who could not get work visas in the U.S (RP9). They moved a few hours north to

Vancouver (RP10), where they live in a city much like those on the American West Coast.

Time Magazine, June 18, 2012

REFERENCES

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