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Declaration Regarding the Work

I, the Candidate, certify that the Thesis is all my own work and that I have not obtained a degree in this University or elsewhere on the basis of any of this work.
Acknowledgments

I would like to express my most sincere gratitude to my supervisor, Dr. Laura Incalcaterra McLoughlin, for her thoughtful guidance, encouragement and the insightful discussion she offered on the topic and my research.

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Finally, a special thanks goes to all the students who contributed to this research project - without their cooperation this study would not have been possible.
Abstract

Promoting language learning is a long-term objective of the European Union with a view to fostering a comparable and improved proficiency among European citizens. To this end, European institutions have recognised the potential of subtitling - the active creation of subtitles by language learners - as an effective pedagogical tool in language learning. Subtitling is considered an innovative teaching strategy which involves language learners in an Audiovisual Translation task while exposing them to spoken dialogue in a foreign or second language. Subtitling can enhance language learning by improving language skills (listening, reading and writing) and transferable skills (such as digital literacy), facilitating mnemonic retention, and raising awareness of cultural and intercultural issues as well as pragmatic aspects of communication. In addition, it can prove highly motivating to learners. Although research on the subtitling practice is still limited, recent empirical studies have reported encouraging results on its use in Second Language Acquisition.

This thesis aims to contribute to shedding light on subtitling in the field of vocabulary acquisition while indicating possible directions for future research. It investigates the effects of subtitling on incidental vocabulary acquisition, in view of previous research and considering the central role of vocabulary knowledge in communicative competence and language learning. It is based on an experimental study carried out, after extensive piloting, with 25 Irish undergraduate students of Italian as a Foreign Language at the National University of Ireland, Galway, levels A1-A2 of the Common European Framework of Reference for Languages. By triangulating quantitative and qualitative methods, the main experimental study shows that interlingual subtitling promotes the incidental acquisition of new word meanings in terms of productive recall. While respecting a broad range of different preferences in learning styles, subtitling may be particularly suitable for learners with a kinesthetic preference.
Abstract

La promozione dell’apprendimento linguistico è un obiettivo a lungo termine dell’Unione Europea che mira a migliorare e rendere comparabile la competenza tra i cittadini europei. A tal fine, le istituzioni europee hanno riconosciuto il potenziale della sottotitolazione, vale a dire la creazione di sottotitoli da parte di apprendenti di lingue, come un efficace strumento pedagogico per l’apprendimento linguistico. La sottotitolazione è considerata una strategia d’insegnamento innovativa che impegna gli apprendenti di lingue in un task di Traduzione Audiovisiva mentre vengono esposti ad un dialogo in una lingua straniera o seconda. La sottotitolazione può potenziare l’apprendimento delle lingue migliorando abilità linguistiche (ascolto, lettura e scrittura) e abilità trasversali (come l’alfabetizzazione digitale), facilitando la memorizzazione, e aumentando la consapevolezza di questioni culturali ed interculturali oltre ad aspetti pragmatici della comunicazione. Inoltre, può essere estremamente motivante per gli apprendenti. Nonostante la ricerca sulla pratica della sottotitolazione sia ancora limitata, recenti studi empirici hanno riportato risultati incoraggianti sul suo uso in Linguistica Acquisizionale.

Questa tesi intende contribuire a far luce sulla sottotitolazione nel campo dell’acquisizione lessicale indicando possibili direzioni future per la ricerca. Analizza quindi gli effetti della sottotitolazione sull’acquisizione incidentale del lessico, in base alla ricerca previa e considerando il ruolo centrale della conoscenza lessicale nella competenza comunicativa e nell’apprendimento linguistico. La presente tesi si basa su uno studio sperimentale condotto, dopo vari studi pilota, con 25 studenti universitari di italiano come lingua straniera presso la National University of Ireland, Galway, livello A1-A2 secondo il Quadro Comune Europeo di Riferimento per le Lingue. Attraverso la triangolazione di metodi quantitativi e qualitativi, lo studio sperimentale principale mostra che la sottotitolazione interlinguistica promuove l’acquisizione incidentale del significato di parole nuove in termini di produzione. Pur rispettando una vasta gamma di diversi stili di apprendimento, la sottotitolazione può essere particolarmente adatta per apprendenti con una preferenza cinestetica.
List of Abbreviations and Acronyms

AV - Audiovisual

AVT - Audiovisual Translation

BA - Bachelor Degree of Arts

BC - Bachelor Degree of Commerce

CEFR - Common European Framework of Reference for Languages

CG - Control Group

CLIPS - Corpora e Lessici di Italiano Parlato e Scritto

CLT - Communicative Language Teaching

CTML - Cognitive Theory of Multimedia Learning

DCT - Dual Coding Theory

EFL - English as a Foreign Language

EG - Experimental Group

ESL - English as a Second Language

EU - European Union

FL - Foreign Language

FQ - Final Questionnaire

GTM - Grammar-Translation Method

IFL - Italian as a Foreign Language

IIO - Input-Interaction-Output

IQ - Initial Questionnaire

ISL - Italian as a Second Language

L1 - First Language/Mother Tongue
L2 - Second Language
LC - Learner Corpora
LE - Lessico Elementare
LeViS - Learning via Subtitling (project)
LIF - Lessico italiano di frequenza
LIP - Lessico di frequenza dell'italiano parlato
LIPS - Lessico italiano parlato da stranieri
LTC - Learner Translation Corpora
LvS - Learning via Subtitling (software)
MT - Mother Tongue
NUI - National University of Ireland
P - Productive
Precall1 - Productive Recall
Pretest - Pre-test
PS - Preliminary Study
R - Receptive
RLDs - Reference Level Descriptions
Rrecall2 - Receptive Recall
SD - Standard Deviation
SDH - Subtitles for the Deaf and Hard-of-Hearing
SLA - Second Language Acquisition
SLVA - Second Language Vocabulary Acquisition
SPSS - Statistical Package for the Social Sciences
ST - Source Text
TBLT - Task-based Language Teaching
TILT - Translation in Language Teaching
TT - Target Text
UD - Unità Didattica
VAD - Vocaboli di alta disponibilità
VARK - Visual Aural Read/Write Kinesthetic
VAU - Vocaboli di alto uso
VdB - Vocabolario di base
VF - Vocaboli fondamentali
VELI - Vocabolario Elettronico della Lingua Italiana
VLE - Virtual Learning Environment
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**Introduction**

Promoting language learning is a priority for *Education and Training 2020*, the new strategic framework for European cooperation in educational issues as a part of a wider policy for targeted future economic and social outcomes in the European Union (EU). The most recent Eurobarometer survey, carried out by the European Commission (2012a) on almost 27,000 people from different age and social groups in the 27 EU countries, reveals that Europeans have a very positive attitude towards multilingualism. Most Europeans believe that all EU citizens should be able to speak at least one language (or more) in addition to their mother tongue. However, the levels of foreign language competence of young Europeans is quite low, as revealed by the first *European Survey on Language Competences*, which assesses pupils’ knowledge in two foreign languages at the completion of lower secondary education (European Commission, 2012b).

The European Commission (2012c) therefore encourages Member States to take several actions both in terms of language teaching quality and quantity. One way to boost language competence is to improve the quality of teaching by employing innovative methods and approaches which can increase learners’ motivation. It is thus important to foster positive attitudes towards languages and learning. Further opportunities are afforded by increased exposure to foreign languages inside and outside the classroom in order to improve learning outcomes. This can be effectively done through the use of audiovisual material in its original language, accompanied by subtitles.

The European Commission launched an action plan (2004-2006) for promoting language learning and linguistic diversity in Europe in 2003, and acknowledged that, according to research, subtitles in film and television can encourage and facilitate language learning (Commission of the European Communities, 2003). In the last decade, European institutions have recognised not only the potential of subtitle consumption but also that of subtitling - the active creation of subtitles by language learners - as an effective pedagogical tool in language learning. In 2006, the European Commission, within the Socrates Programme, funded the Learning via Subtitles (LeViS) project, aimed at promoting the subtitling practice in language teaching and learning. Based on the positive outcome of the LeViS experience (Sokoli et al., 2011), a new project, ClipFlair
(Foreign Language Learning through Interactive Captioning and Revoicing of Clips),
was funded in 2011 under the Lifelong Learning Programme. The aim of the
ClipFlair project is to promote the use of other Audiovisual Translation (AVT)
modes, including dubbing and audio description, along with subtitling in language
learning.

Subtitling is now considered an innovative teaching tool which can enhance
language learning. It involves language learners in an AVT task while exposing them
to spoken and written dialogue in the original language. Subtitling has the potential
to improve language skills (listening, reading and writing) and transferable skills
(such as digital literacy), facilitate mnemonic retention, and raise awareness of
cultural and intercultural issues as well as pragmatic aspects of communication. In
addition, it can help increase motivation and enhance the overall learning experience.
Although research on the subtitling practice as a pedagogical tool is still limited, it is
fast growing. Recent empirical studies have reported encouraging results on the use
of subtitling in Second Language Acquisition (SLA)\(^1\) with regards to overall
improvement in L2 and in vocabulary (Williams & Thorne, 2000), recognition and
production of idioms (Bravo, 2008), pragmatic awareness (Incalcaterra McLoughlin,
2009a) and listening comprehension (Talaván, 2010, 2011). In addition, a
methodology-based subtitling model to be applied in the language classroom has
been proposed by Incalcaterra McLoughlin and Lertola (2011), while Borghetti
(2011) suggests that subtitling can be employed specifically for enhancing
intercultural competence.

This thesis investigates the effects of subtitling on incidental vocabulary
acquisition, in view of previous research on the topic and considering the central role
of vocabulary knowledge in communicative competence and language learning. It
focuses on word meaning knowledge which is assessed through productive and
receptive recall tests in a pre-test/post-test design. The main experimental study of
this research was carried out with 25 Irish undergraduate students of Italian\(^2\) as a

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\(^1\)The term ‘Second Language Acquisition’ will be used as an umbrella term including both second and
foreign language acquisition. For the differentiation between ‘second language’ and ‘foreign
language’ see §1.3. In addition, the terms ‘learning’ and ‘acquisition’ are used interchangeably unless
otherwise specified.

\(^2\)According to the 2012 Eurobarometer, although Italian is the second most widely spoken mother
tongue - together with English (13% each) - in Europe, it is considered as one of the two most useful
languages for personal development by only 5% of Europeans and 4% of Irish people, who share the
same opinion when asked about its usefulness for the personal development of their children.
Foreign Language (IFL) at the National University of Ireland, Galway, level A1-A2 of the Common European Framework of Reference for Languages (CEFR), after extensive piloting to finalize materials and methods.

The thesis is made up of five chapters and can be divided into two main sections: one theoretical (Chapter I, II and III) and the other empirical (Chapter IV and V). Chapter I presents the theories, methods and approaches within SLA studies which underpin this research. Chapter II focuses on subtitling as an AVT mode and its application in language teaching, while Chapter III concerns Second Language Vocabulary Acquisition (SVLA) research and the main concepts related to vocabulary teaching and learning. Chapter III concludes with a review of tools for assessing word meaning knowledge, which is particularly relevant for the following empirical section. Chapter IV opens the empirical section and offers a description of the preliminary and pilot studies which led to the main experimental study of this research project. The main experiment is also described in detail: research question and hypotheses, method, participants, material and procedures. The most relevant outcomes of the study are discussed in Chapter V, together with details of the statistical analysis used and an interpretation of the results. An overall evaluation of the study is then provided in the Conclusion, and possible further steps are explored regarding the future investigation of the vast potential of the subtitling practice in SLA.
CHAPTER I - Theories, Methods and Approaches in SLA

1.1 Introduction

In this study subtitling is proposed as a new teaching tool. It is therefore necessary to contextualise it within the relevant learning and teaching theories which have been developed over the years. Before doing so, however, the Common European Framework of Reference for Languages will be presented as the overarching conceptual framework underlying this study (§1.2). The CEFR is one of the results of the Council of Europe’s long-term commitment to breaking down the barriers in language teaching across Europe and has been a key document for professionals in this area for more than a decade.

The first part of the chapter will illustrate the methods and approaches upon which this study draws. Reference will be made to Second Language Acquisition research with particular attention to the theories which underpin the present study and the approaches which are directly related to the use of translation as a pedagogical tool and subtitling as a learning task (§1.3 and §1.4). Stephen Krashen’s five hypotheses will be analysed first since they have greatly influenced SLA research (§1.3.1). Krashen (1981) introduced an important distinction between acquisition and learning and accounted for this differentiation in his Learning-Acquisition Hypothesis. Krashen’s main argument is that acquisition and learning are two different processes. Learning is conscious and explicit while acquisition is subconscious and implicit. This dichotomy embodies the concepts of explicit versus implicit learning as well as those of intentional versus incidental learning in SLA. These four concepts are not so easily defined, Ellis (as cited in Loewen et al., 2009), however, proposes a methodological definition for distinguishing prototypical tasks which can help to investigate these four types of learning as discussed in §1.3.1.1.

Gass’s (1997) five-stage model for second language acquisition will then be presented (§1.3.2), as it complements Krashen’s model. The role of input is of paramount importance in Gass’s model as well, but rather than Krashen’s comprehensible input from the interlocutor’s perspective, Gass concentrates on comprehended input from the learner’s perspective. The sequential stages in the model account for the conversion of input into output through interaction.
Schmidt’s (1990, 2001) Noticing Hypothesis and Laufer and Hulstijn’s (2001) Involvement Load Hypothesis will also be discussed with regard to the subtitling task as a form of translation and its effects on vocabulary acquisition (§1.3.3). Kolb’s (1984) learning styles and experiential learning theory will then be considered, given that language learners are active participants in the learning process and they have personal learning preferences which can influence their performance in a certain type of task (§1.3.4).

In order to evaluate subtitling as a new teaching and learning tool, reference will be made to the history of language teaching. The approaches and methods most relevant to translation and the subtitling practice will be outlined: the Grammar-Translation Method (§1.4.1), the Reform Movement (§1.4.2), Communicative Language Teaching approach (§1.4.3) and Task-based Language Teaching (§1.4.4). The Lexical Approach, particularly relevant for this study, will be presented in Chapter III. It is necessary to note that the concept of method itself and the quest for the ‘best method’ in language teaching was heavily criticised at the end of the Twentieth century. These critiques led to the rise of the Postmethod era (§1.4.5) in which an alternative to methods, rather than an alternative method, was sought. This is the context in which language teachers at present find themselves and in which a revival of Translation in Language Teaching (§1.4.5.1) is taking place. This is also the context in which subtitling, as a form of Audiovisual Translation (AVT), finds support for its integration in the language classroom.

Since the present study is also contextualised within Italian as a Second Language (ISL) research, attention has been given to the Italian Glottodidattica and its foundation (§1.5). The neurolinguistic learning principles identified by Danesi (1998) as bimodality and directionality are analysed from a teaching perspective (§1.5.1). The Unità Didattica theorized by Freddi (1994) serves for practical implementation of the subtitling practice in the language classroom following principles of bimodality and directionality (§1.5.2).

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3The term ISL will be used as a general term to include the study of Italian other than L1 regardless of the context where the study takes place.
1.2 The Common European Framework of Reference for Languages

The Common European Framework of Reference for Languages (CEFR) was developed by the Council of Europe and officially launched in 2001. The CEFR is a key document for all professionals involved in language teaching and testing as well as for language learners. The Manual for Relating Language Examinations to the CEFR and the Reference Level Descriptions (RLDs) for national and regional languages accompanied the CEFR. The Manual aims to provide developers of examination material with practical and transparent procedures for designing exams related to the CEFR, while the RLDs specifies “the levels of the CEFR (which were developed independently of any specific language) for a given national or regional language” (Council of Europe, 2005: 3). The Centro per la Valutazione e la Certificazione Linguistica of the Università per Stranieri di Perugia is currently developing Italian language RLDs for the A1, A2, B1 and B2 levels.  

1.2.1 Communicative Language Competence

Communicative language competence is considered here as described in the CEFR (2001), comprised of three subcomponents: linguistic, sociolinguistic and pragmatic (see Table 1). The linguistic subcomponent is the most relevant to the present study.

Since there is no agreement on a universal model of language description, the CEFR (ibid.: 109) “attempts to identify and classify the main components of linguistic competence defined as knowledge of, and ability to use, the formal resources from which well-formed, meaningful messages may be assembled and formulated”. Linguistic competence includes lexical, grammatical, semantic, phonological, orthographic and orthoepic competence. The lexical aspect of linguistic competence, of particular interest to this study, will be further explored in

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Chapter III. Sociolinguistic competence refers to the social dimension of language use and the knowledge and skills it requires. Thus, the CEFR deals with issues in language use such as linguistic markers of social relations, politeness conventions, expressions of folk-wisdom register differences, dialect and accent. Finally, pragmatic competence can be further divided into discourse, functional and design competence. These three last subcomponents require the learner to be able to arrange sentences in a coherent sequence, carry out oral or written communication for particular functional purposes and respect patterns of social interactions.

Table 1. Communicative language competence as described in the CEFR.

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<tr>
<td><strong>Linguistic competence</strong></td>
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<td>Lexical competence, grammatical competence,</td>
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<tr>
<td>semantic competence, phonological competence,</td>
</tr>
<tr>
<td>orthographic competence and orthoepic competence.</td>
</tr>
<tr>
<td><strong>Sociolinguistic competence</strong></td>
</tr>
<tr>
<td>Linguistic markers of social relations, politeness conventions, expressions of folk-wisdom, register differences and dialect and accent.</td>
</tr>
<tr>
<td><strong>Pragmatic competence</strong></td>
</tr>
<tr>
<td>Discourse competence, functional competence and design competence.</td>
</tr>
</tbody>
</table>

According to the CEFR (ibid.: 14), learners activate their communicative language competence when performing “various language activities, involving reception, production, interaction or mediation (in particular interpreting or translating). Each of these types of activity is possible in relation to texts in oral or written form, or both”. These language activities can be summarised as follows:

- oral and/or written reception,
- oral and/or written production,
- oral and/or written interaction,
- oral and/or written mediation.

An innovation of the CEFR is the introduction of mediation as a language activity “of paramount importance in the linguistic functioning of contemporary societies”. The role of translation in language teaching and learning has long been a subject of debate and, for a good part of the last century, there was a tendency to avoid any type of mediation in the language classroom, especially with the advent of more communicative approaches (§1.4.3). The activity of language mediation, i.e.
reformulation of an existing text in order to communicate, can be either oral (interpreting) or written (translation). Subtitling, as a form of translation, can be considered a mediation activity and can be used within a communicative perspective.

In the subtitling modules designed for this research (Chapter IV), particular attention was paid to the lexical subcomponents of linguistic competence. However, other linguistic subcomponents were also targeted since they played an important role in the comprehension of the video clip and thus in the subtitling task. Thanks to the linguistic variety of the audiovisual (AV) input, it was possible to help learners develop grammatical, semantic and phonological competence as well as orthographic and orthoepic competence (in dialogue transcript). Regarding sociolinguistic competence, through AV discourse, learners can become more sensitive to linguistic markers in social relations and politeness conventions. This is important since politeness conventions differ from culture to culture and can be responsible for a certain level of inter-ethnic misunderstanding. AV input is often rich in idioms, proverbs and other fixed formulae (folk wisdom) used by different individuals, with different dialects and accents (due to social class, regionalism, etc.) speaking in different contexts (formal, neutral, informal registers). Besides enhancing linguistic and sociolinguistic competence, subtitling requires learners to develop pragmatic competence. When translating and spotting (§1.5.2.4), learners avail themselves of discourse competence (i.e. arrange sentence in a coherent sequence) and develop functional competence (i.e. functional use of written language according to macrofunctions: description, narration, argumentation, persuasion, etc.) as well as their ability to use patterns of social interaction.

The CEFR (ibid.: 93) highlights and clarifies the importance of the text in linguistic communication, stating that the term ‘text’ includes “any piece of language, whether a spoken utterance or a piece of writing, which users/learners receive, produce or exchange. There can thus be no act of communication through language without a text”. Perhaps the most remarkable conceptual innovation in the CEFR is that the authors succeeded in ending the debate on the use of authentic or non-authentic oral/written text in language teaching, defining as equally suitable authentic texts and texts especially designed for language learners. The only difference seen between these texts is the way in which their characteristics are used in language learning and teaching.
Text authenticity was strongly supported by the functional-notional and communicative approaches in the 1970s and the 1980s as a reaction to previous and more traditional methods in language teaching. Non-authentic texts were usually associated with ‘old school’ teaching where texts were tailor-made in order to achieve grammatical rather than communicative goals. Vedovelli (2002a: 80) states that nowadays:

the authors of educational manuals, just as - and even more importantly - teachers, look for texts that are authentic: they use communicative exchanges as texts to propose in the classroom. That is to say, they look for texts in the communicative contexts that give life to the Italian language and in which [L2 learners] find themselves when they are using our language.6

However, texts used in textbooks and proposed in the classroom are very often adapted by authors and teachers. For this reason, there should not only be clear parameters for how to select a text but also for how to adapt one. The CEFR sets a number of factors to be considered when selecting a text for a learner or a group of learners, which can also be used when adapting a text:

- linguistic complexity,
- text type,
- discourse structure,
- physical presentation,
- length,
- relevance to the learner(s).

As regards linguistic complexity, complex syntax in particular, is identified as distracting. Rather than focusing on understanding the content, learners risk wasting time and energy when trying to deal with long sentences which present many subordinates. On the other hand, syntactic over-simplification of texts might also cause difficulties due to the absence of redundancy and clues to meaning. One way to evaluate linguistic complexity is to test text readability. This technique helps to identify complex sentences as well as less frequent vocabulary (§3.2.1).

Text type is also considered as a factor, since being familiar with the genre and domain of the text can help learners to predict and better understand its structure and content. Texts which are more abstract in nature tend to be more difficult to comprehend for language learners than texts with more concrete descriptions.

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6Author’s translation.
instructions or narratives. Regarding discourse structure, a coherent and clearly organized text is preferable as it makes information processing less demanding. Physical presentation - in written and spoken texts alike - greatly influences information processing. For instance, in spoken texts the information is processed in real time and many factors such as noise, interference, speakers’ accents, turn taking and speed of delivery increase difficulties in comprehension. Another factor to be considered is the length of the text: generally a long text is more demanding in terms of information processing and memory load. For this reason, it is better to select short texts, especially when dealing with younger learners or beginners who can easily get tired and distracted. A longer text might nevertheless be easier if it is not too dense and contains considerable redundancy. Importantly, the text should be relevant to the learners, as their motivation has to be kept high throughout the entire learning process (§1.5.2.1). Selecting texts related to learners’ personal interests or specialist areas of study “will help to sustain the learner’s efforts to understand (although it will not necessarily assist comprehension directly)” (ibid.: 166).

Any text is carried by a different medium - be it audiovisual or written. The nature of the medium influences the text and vice versa, where physical properties of the medium can also affect the process of production and reception of the text, as mentioned earlier. Thus, subcategories are established according to the physical properties of the medium. Films, TV, CDs and DVDs belong to the media subcategory. Broadly speaking, text types typically carried by these media position themselves in the realm of entertainment, such as TV drama and shows, along with news broadcasts, which are categorised as spoken text-types. The use of AV material such as TV series and films can foster the development of learners’ communicative language competence. The nature of AV products and their features are further discussed in §2.2.2.

1.2.2 The Six Language Proficiency Levels

A great achievement of the CEFR is that it can be used with any European language, thus avoiding misunderstanding among different countries and institutions. In order to create a common scale of reference, the CEFR defines six language proficiency levels which allow learners to measure their progress. These widely used descriptors
are one of the document’s pillars. The scale proposed by the CEFR (ibid.: 23) “adopts a ‘hypertext’ branching principle” as can be seen in Figure 1. The three types of users - basic, independent and proficient - are broken down into lower and higher levels as follows: the basic user (A) consists of Breakthrough (A1) and Waystage (A2); the independent user (B) consists of Threshold (B1) and Vantage (B2); the proficient user (C) consists of Effective Operational Proficiency (C1) and Mastery (C2).

**Figure 1. The six descriptors of language proficiency defined in the CEFR.**

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic User</strong></td>
<td><strong>Independent User</strong></td>
<td><strong>Proficient User</strong></td>
</tr>
<tr>
<td>A1 (Breakthrough)</td>
<td>B1 (Threshold)</td>
<td>C1 (Effective Operational Proficiency)</td>
</tr>
<tr>
<td>A2 (Waystage)</td>
<td>B2 (Vantage)</td>
<td>C2 (Mastery)</td>
</tr>
</tbody>
</table>

These proficiency levels are holistically presented in global scales which provide non-specialist users as well as teachers and curriculum planners with a broad description of what learners can do in the form of grids. Through the description of ‘can do statements’ the CEFR promotes an action-oriented approach where learners are seen as individuals and as social agents who develop communicative language competences in various contexts through language activities. This implies a task-based approach (§1.4.4) where language is used to perform actions or tasks. However, the CEFR is a descriptive rather than prescriptive document. The goal of the CEFR is to provide a common basis for the definition of objectives as well as contents and methods in language teaching and learning. It is designed to be a flexible tool which encourages reflection and international cooperation. It is therefore highly adaptable to different teaching and learning contexts.
1.3 Theories in SLA

Before outlining the theories which underlie the approach taken in this research, it is necessary to define the study of Second Language Acquisition as the investigation of how second languages are learned. SLA research is relatively new, as it started to gain attention approximately fifty years ago. However, the body of research available on the various aspects of SLA is growing fast. SLA is now an interdisciplinary field in its own right, influenced in different ways by three main disciplines: linguistics, psychology and sociolinguistics.7

While second language (L2) usually refers to the learning of another language after one’s native language (L1), this term can also indicate the study of a third or even fourth language. The defining condition is that an L1 has already been learned. This learning can happen in formal or informal educational settings either in the environment of the learner’s native language or in the country where the language is spoken. In contrast, the term foreign language (FL) also indicates the study of another language but it is differentiated from L2 since the learning generally takes place in a classroom context located outside the country or community where that language is spoken. In this case, the term L2 indicates non-native language learning in the country where the L2 is spoken. In any case, over the last few years, the term SLA has been more widely used to indicate the study of another language regardless of the environment in which it takes place. In the words of Ma (2009: 20) one reason for this may be that:

the foreign language has become far less foreign in the sense that it may be spoken [...] by increasingly large groups of people within a country or community who have a different L1. The term ‘second’ is more neutral and it is totally free of the negative nuances that might be associated to ‘foreign’.

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7As Gass and Selinker (2008: 159-160) point out: “[l]inguistics focuses on the products of acquisition (i.e., a description of the linguistic systems of L2 learners), psychology focuses on the process by which those system are created (e.g., a description of the process of the way in which learners create learner systems), and sociolinguistics focuses on social factors that influence the acquisition of the linguistic system and the use of that system”.
1.3.1 Krashen’s Five Hypotheses

Krashen (1977, 1981) proposes the Monitor Model which is based on five hypotheses: the Acquisition-Learning Hypothesis, the Natural Order Hypothesis, the Monitor Hypothesis, the Input Hypothesis and the Affective Filter Hypothesis. Krashen (1982) then goes on to explain that learners have two independent systems for developing their competence in a second language: language acquisition and language learning. These two systems are interconnected but acquisition is the most important (ibid.: 10):

*acquisition* [is] a process similar, if not identical, to the way children develop ability in their first language. Language acquisition is a subconscious process; language acquirers are not usually aware of the fact that they are acquiring language, but are only aware of the fact that they are using the language for communication. The result of language acquisition, acquired competence, is also subconscious. We are generally not consciously aware of the rules of the languages we have acquired. Instead, we have a “feel” for correctness. Grammatical sentences “sound” right, or “feel” right, and errors feel wrong, even if we do not consciously know what rule was violated.

*Learning*, on the other hand, is a conscious process. Language learners develop their knowledge of the second language consciously by studying, applying and being able to talk about rules. The primary claim of the Monitor Model is that conscious learning serves the learner as a monitor only, whereas subconscious acquisition is used to produce language. Other ways to refer to the acquisition process are implicit learning, informal learning and natural learning. Conversely, learning is also described as either explicit or formal learning.

A second hypothesis, the Natural Order Hypothesis, claims that the acquisition of language elements proceeds in a predictable order. Though not all learners acquire language structures in the exact same order, certain structures are proved to be acquired before others. The order of acquisition in a second language is not the same as in a first language, however it follows similar patterns.

As already mentioned, conscious learning is thought to act as a monitor and thus examines and alters, if needed, the production of the acquired system. This is known as the Monitor Hypothesis. Learners, commonly, try to check their production but the monitor cannot be activated at all times. In fact, there are three conditions which must be satisfied for the successful use of the monitor. The first is
having sufficient time: a learner should have enough time to think and select a rule. The second condition is focus on form. Even if time is available, the learner might focus on meaning (i.e. what (s)he wants to express) rather than on correctness. Thus learners need to self-correct their output. The third provision is knowledge of rules. The language learner must know a rule in order to apply it correctly. In other words, the Monitor Hypothesis is the practical application of the interrelation between the acquisition and learning systems.

If acquisition is more important than learning, then the goal of SLA is to foster acquisition. The Input Hypothesis attempts to shed light on how people can acquire a second language. According to Krashen (1982: 21), people “acquire by understanding language which contains a structure a bit beyond our current level of competence \((i+1)\). This is done with the help of context or extra-linguistic information”. Learners are defined as in stage \(i\), where \(i\) represents their current language competence. Learners can move to the next stage, and thus acquire new language, only if they are exposed to comprehensible input \(i+1\). Learners can understand the input even if \(l\) represents a level of discourse somewhat higher than what they can understand completely. This is because learners focus on the meaning rather than on form. However, as Krashen admits, being exposed to comprehensible input is not a sufficient condition for language acquisition. In fact, acquisition differs from learner to learner due to other factors such as attitude, motivation and self-confidence, which are responsible for Affective Filter activation.

The fifth and last hypothesis proposed by Krashen is the Affective Filter Hypothesis which claims that affective variables account for individual variation in second language acquisition. Krashen presumes that people are equipped with a Language Acquisition Device, as proposed by Chomsky (1965), which is the general mental ability to learn and produce a language. The Affective Filter, if activated, can prevent the input from being processed by the Language Acquisition Device and thus block language acquisition. Learners with an optimal attitude and motivated learners have a lower affective filter, therefore acquisition can take place. Teachers should encourage classroom situations where the Affective Filter is low, and this can be done by avoiding situations in which learners are likely to develop anxiety. The subtitling classroom can help to develop a low anxiety environment, thanks to the use of translation and the mother tongue (MT) (§1.4.5.1). In addition, comprehensible input is provided through the audiovisual medium where verbal and
nonverbal elements can facilitate learners’ comprehension thanks to a dual coding processing (§2.3.2). All these factors can therefore help learners to lower their Affective Filter.

1.3.1.1 Intentional vs. Incidental Learning and Explicit vs. Implicit Learning in SLA

In accordance with Krashen’s Learning-Acquisition Hypothesis, intentional learning implies a deliberate attempt to learn and thus involves awareness. On the other hand, incidental learning does not involve intentionality, however, it implies some awareness of certain features of L2. Explicit learning presupposes intentionality, as does intentional learning, and it is inevitably a conscious and deliberate process. Similar to incidental learning, implicit learning does not imply intentionality but it is not clear if it presupposes awareness or not. This is because whether any type of learning can take place without awareness is controversial (Ellis, 2009). Hulstijn (2003) notes that intentional and incidental learning are prominent in the domain of vocabulary acquisition and not at all in other fields. In fact, Loewen et al. (2009) acknowledge that surprisingly few studies have been carried out on incidental acquisition of grammar considering that L2 learners are taught to learn a second language through exposure to comprehensible input or interaction (§1.4.4). Although a conceptual distinction between the two pairs of terms is not easy to define, they can be distinguished methodologically. To this purpose, Ellis (as cited in Loewen et al., 2009) identifies prototypical tasks which can be used for investigating the four types of learning, as shown in Table 2.
Table 2. Ellis’s tasks for investigating four types of learning.

<table>
<thead>
<tr>
<th>Approach</th>
<th>Typical Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Incidental Learning</td>
<td>Either (1) learners are given a task but not told they will be tested or (2) they are given a task that focuses their attention on one aspect of the L2 and, without being prewarned, tested on some other aspect of the task (e.g. they are taught a specific grammatical feature and then tested on whether they have learned a different grammatical feature which they were exposed to but not taught).</td>
</tr>
<tr>
<td>(2) Intentional Learning</td>
<td>Learners are given a task (e.g. they are taught and they are given practice in using a specific grammatical feature), told they will be tested afterwards and then tested on the task as a set.</td>
</tr>
<tr>
<td>(3) Implicit Learning</td>
<td>Learners are simply exposed to input data, asked to process it for meaning and then tested (without warning) to see what they have learned (e.g. they are exposed to input that contains plentiful exemplars of a specific grammatical feature but do not have their attention focused on this feature).</td>
</tr>
<tr>
<td>(4) Explicit Learning</td>
<td>Learners are either given an explicit rule relating to a specific feature which they can apply to data in practice activities (deductive explicit learning) or they are asked to discover an explicit rule from an array of data provided (i.e. inductive explicit learning).</td>
</tr>
</tbody>
</table>

Methodology for investigating incidental learning can be of two types: (1) learners are asked to perform a specific task and then are tested on it. Learners are not previously told that they will be tested; (2) learners are given a task which focuses their attention on an aspect of the L2. Then, without being pre-warned, they are tested on another language aspect encountered in the task. This second methodology has been applied in this study as the goal is to investigate vocabulary acquisition in terms of incidental learning. In the main experimental study carried out for this research project (§4.3), learners were asked to perform a subtitling task where their attention was focused on conveying the oral L2 input in written L1 output. After this subtitling task, learners were tested on their acquisition of words encountered when carrying out the task. Learners did not know that they were going to be tested after the subtitling task.

1.3.2 Gass’s Model of Input-Interaction-Output

In light of previous theories of language acquisition, Gass (1997) argues that the role of input was treated variably and, most of all, it was considered independently of
learners. Gass, much like Long (1985), claims that input, as well as interaction, has an important role in language acquisition. On this basis she developed the Input-Interaction-Output (IIO) model. Centred on the premise that acquisition is dynamic and interactive, her model describes the five stages which convert input into output: apperception, comprehended input, intake, integration and output.

The first stage, apperception, is the recognition that there is a new L2 input to be learned. This process is related to past experiences since it is an internal cognitive effort which relates linguistic forms to existing knowledge or gaps in knowledge. Similarly to Schmidt’s (1990/§1.3.3) idea that noticing is crucial to acquisition, according to Gass (ibid.: 8), apperception “serves as a priming device or as a prerequisite to the intake component”. The second stage, comprehended input, moves one step beyond recognition. Gass’s comprehended input is different from Krashen’s comprehensible input (§1.3.1) in two ways. According to Gass, learners are responsible for comprehended input, contrary to Krashen’s view in which the speaker, rather than the learner, controls the comprehensibility of input. The other difference regards the nature of comprehension: while Krashen treats the term comprehension as a dichotomy (whether something is understood or not), Gass defines ‘comprehension’ as a continuum which ranges from semantic to structure analysis.

The third stage of the IIO model is intake and refers to the psycholinguistic process of assimilation of new linguistic input. After matching the new information against existing knowledge, the next stage is integration, which leads to the development of one’s L2 grammar or input storage. Integration involves the confirmation or reformulation of already formulated hypotheses and the storage of input for later use. The last stage, when acquisition is manifested, is output. Considering that input alone is not sufficient for acquisition, output plays an active and important role in acquisition as it serves for hypothesis testing. Learners test their hypotheses on language form and use in oral or written modes and may modify their hypotheses when they receive feedback. Feedback can initiate a negotiation sequence which facilitates learning since “negotiation is a means of drawing attention to linguistic forms, making it salient and thereby creating a readiness for learning” (ibid.: 131).

This five-level process is influenced by several factors: attention, awareness, salience and frequency of the input, prior knowledge as well as affective factors such
as social distance, status, motivation and attitude. Personality and affect factors which are under learners’ control are more crucial at the initial and final stages (i.e. apperception and output), while their role is less important during intake and integration, when linguistic or psycholinguistic factors are more relevant.

1.3.3 Schmidt’s Noticing Hypothesis and Laufer and Hulstijn’s Involvement Load Hypothesis

Considering that exposure to comprehensible input is not a sufficient condition for learning acquisition to take place, Schmidt (1990, 2001) formulates the Noticing Hypothesis according to which in order for input to become intake learners must notice and pay attention to it. Schmidt (2010: 725) distinguishes:

between “noticing” as a technical term limited to the conscious registration of attended specific instances of language, and “understanding,” a higher level of awareness that includes generalizations across instances. Knowledge of rules and metalinguistic awareness of all kinds belong to this higher level of awareness. [Schmidt’s] proposal is that noticing is necessary for SLA, and that understanding is facilitative but not required.

If noticing is a necessary condition for language acquisition, translation and thus subtitling can help learners to notice and pay attention to the input. Laufer and Girsai (2008: 697) point out that “[o]ne way to make a foreign language feature noticeable or salient in the input is to enhance it by providing contrastive association with the corresponding L1 item”. In this study, the subtitling task requires learners to translate a spoken L2 text - with the help of written transcription of the dialogues - into a written L1 text. Therefore, during the translation process and spotting (§1.5.2.4) learners can notice L2 words by contrastive association with their L1 equivalent.

In addition, according to Laufer (2010), the noticing hypothesis is particularly relevant for vocabulary acquisition. Some infrequent and non-salient words may risk going unnoticed by learners unless some degree of attention is given to them. This is especially true for words which are not crucial for understanding the communication. With this in mind, Laufer and Hulstijn (2001) specially designed the Involvement Load Hypothesis for vocabulary acquisition, which postulates that the most effective tasks are those with a high involvement load, that is, tasks which
combine three involvement factors - need, search and evaluation - with regard to the words being practiced. Previous research shows that incidental vocabulary acquisition, independent of the type of tasks, depends highly on the depth of processing involved. New words are retained better when the involvement load is greater.

In this study, the task of subtitling can be considered as task-induced involvement since it implies all three factors which constitute the involvement construct: need, search and evaluation. Need refers to the motivational dimension of the involvement, which is present in the task when a word is necessary for comprehension. To perform the subtitling task, learners are required to achieve a good understanding of the foreign-language text and thus they experience the need to understand unknown words. Conversely, search and evaluation represent the cognitive dimension of involvement. Search takes place when learners are looking for the meaning of a new L2 word or for the L2 form. Learners experience evaluation as a subsequent stage when choosing the appropriate meaning of a word in its context. For instance, if a word has more than one meaning, learners must select the one which best applies to the context.

1.3.4 Kolb’s Learning Styles

In 1984 Kolb published a treatise which outlined the experiential learning theory and its application in education and work. The foundations of the experiential learning theory can be found in the experienced-based learning suggestions of great intellectuals such as John Dewey, Kurt Lewin and Jean Piaget. Kolb proposes a structural model of the learning process based on experience and related to a typology of individual learning styles. He also put forward an adult developmental model which is comprised of three stages: acquisition, specialization and integration. Conscious learning increases throughout these three stages from simple registrative to increasingly interpretative consciousness. Stage one - acquisition - lasts from birth to adolescence and is characterised by the achievement of primary learning abilities and cognitive structures. Stage two - specialization - takes place during formal education and early adulthood experiences both at professional and personal levels. People develop different learning styles according to the influence of cultural,
educational and organizational socialization factors. In addition, as a result of greater individuality awareness, people acquire a specialised adaptive competence which they apply on their career path. Stage three - integration - stretches from mid-career to later life. During this phase, people face the conflict between professional and personal fulfilment. Furthermore, in this last stage, non-dominant learning styles arise at work and in personal life.

Kolb identifies four learning styles for assessment purposes: concrete experience (CE), reflective observation (RO), abstract conceptualization (AC) and active experimentation (AE). He also identifies a fourfold definition of learning styles which combines two favoured styles: diverging (CE/RO), assimilating (AC/RO), converging (AC/AE) and accommodating (CE/AE), as can be seen in Figure 2 below.

**Figure 2. Kolb’s learning styles diagram.**

![Diagram](http://www.businessballs.com/kolblearningstyles.htm)

The content has been removed due to copyright restrictions.

Independent of the factors which influence people’s learning style preference, learning style is seen as the result of two pairs of variables which are presented on

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8Kolb’s (1984: 42) diagram was adapted and designed by Chapman (2005-06) and it is freely available on http://www.businessballs.com/kolblearningstyles.htm. Last accessed 6 April 2013.
the two lines of axis in the diagram. The horizontal axis - Processing Continuum - concerns ‘how we do things’, in other words people’s practical response, and it presents Active Experimentation (doing) on the left end and Reflective Observation (watching) on the right end. The vertical axis - Perception Continuum - is related to ‘how we think about things’, that is to say people’s emotional response, and it presents Concrete Experience (feeling) on the top end and Abstract Conceptualization (thinking) on the bottom end. Thus, learning styles are shaped by the dialectically opposed orientations of ‘grasping’ (doing or watching) and ‘transforming’ experience (feeling or thinking). For this reason, depending on their learning style, at a practical level, people decide how to handle a task either by doing it straight away (active experimentation) or by watching other people do it and then reflecting on this (reflective observation). At an emotional level, while handling a task, people can think about the experience and plan it (abstract conceptualization) or they can experience it through their emotional involvement (concrete experience).

A popular instrument for determining one’s learning style is the VARK - Learning Style Questionnaire. VARK stands for Visual (V), Aural/Auditory (A), Read/Write (R) and Kinesthetic (K). The VARK system was developed by Fleming (2001) as a means of describing how people learn differently by determining their dominant learning style. The four perceptual modalities are generally used simultaneously to receive information input - the majority of people are multimodal (that is to say, they have multiple learning preferences), however, one of the four modalities can be dominant. Visual learners usually prefer to receive input through graphical representation such as pictures, charts and graphs. It is interesting to note that Fleming did not include videos in the visual definition since this type of presentation also involves kinesthetic, read/write and aural perceptual modalities. Aural/Auditory learners have a preference for oral presentation and they tend to learn more from lectures and discussions. These learners also prefer to speak. In contrast, Read/Write learners favour written presentations in the form of text. Lists, dictionaries, glossaries, definitions, handouts and notes are some of their favourite means of learning. Kinesthetic learners prefer to learn from experience and direct practice. This group therefore learns best from field trips, laboratories, lecturers who give real-life examples, hands-on approaches, previous exam papers, etc. Teachers

and learners but also managers can benefit from understanding these preferences and apply this knowledge in practical ways. On the one hand, teachers can vary their input presentation in order to please learners with different learning styles. On the other, learners can improve their acquisition process by following learning strategies which suit their preferences.

At the beginning of the subtitling modules within the framework of this study, learners were asked to complete a VARK questionnaire in paper format\textsuperscript{10} in order to identify their learning styles. Firstly, determining participants’ dominant learning styles improved course delivery by helping the teacher/researcher to select input and presentation to suit different learners and by raising the participants’ self-awareness about their own learning. Secondly, using the VARK questionnaire allowed the teacher/researcher to know students’ learning preferences and thus correlate learners’ performance to their learning styles. Recent studies (Leite, Svinicki & Shi, 2010) on the dimensionality and reliability of VARK scores applaud it as “a low-stakes diagnostic tool [and] those who wish to use the instrument as a way of helping students identify their preferences should feel comfortable in this use” (336). Finally, the VARK questionnaire allowed for a better evaluation of the instructional method according to the learners’ style (§5.2.5).

1.4 Methods and Approaches in SLA

The Twentieth century was characterized by numerous changes and frequent innovations in language teaching, not to mention many competing methods and approaches. Methods can be defined as a set of core teaching practices based on specific theories of language and language learning and teaching. Methods offer a detailed description of content, the role of the learners and the teacher, as well as teaching procedures and techniques. The role of the teacher is to follow the method and no individual interpretations are allowed. Approaches, on the other hand, are a set of principles to be used in the classroom and rely on theories of the nature of language and language learning. Approaches leave space for individual interpretations in the application of principles which can be updated as new practices

\textsuperscript{10}\textit{The VARK test is available in electronic or printable versions at http://www.vark-learn.com/. Last accessed 6 April 2013.}
emerge (Richards & Rodgers, 2001). Methods have generally been preferred over approaches because they do not depend on interpretation, skills or the expertise of teachers to be applied. Throughout the Twentieth century, there has been an intense search for more effective methods by teachers and researchers with the belief that they would find the ‘best method’ in language teaching. In their book on SLA research, Bialystok and Hakuta (1994: 209) stated that “[t]he inescapable conclusion we draw from the information presented in this book is that there is no single correct method for teaching or learning a second language and that the search for one is probably misguided”. As a reaction to established methods, teachers started to adopt an ‘eclectic’ position. This position leaves teachers to adopt according to their experience what they consider the most suitable teaching practices - pertaining to different methods - in their classrooms. This eclecticism has been criticised because it is too vague to be considered a theory in its own right and it relies excessively on individual judgement (Stern, 1992). In this context, Kumaravadivelu (1994: 29) introduced the concept of ‘postmethod condition’ which describes the growing awareness about the modern state of language teaching methods and “it signifies a search for an alternative to method rather than an alternative method”. The postmethod will be further discussed in §1.4.5. It is important, however, to consider some prominent previous methods which have greatly influenced language teaching and learning to date and which are relevant to the present study, namely the Grammar-Translation Method (§1.4.1), the Reform Movement (§1.4.2), the Communicative Language Teaching approach (§1.4.3), Task-based Language Teaching (§1.4.4) and the reintroduction of Translation in Language Teaching (§1.4.5.1) within the Postmethod era.

1.4.1 The Grammar-Translation Method

Looking back to the Sixteenth century, modern languages such as English, French and Italian started to gain importance due to political changes in Europe, and in the Eighteenth century, they finally entered into the curriculum of study in European
Latin, which had been the most studied language until then, was gradually replaced. Nevertheless, modern languages were taught in the same way as Latin: the main focus was on grammar through the study of rules and on writing practice through sample sentences and translation. This approach, based on the classical language teaching was also adopted in the Nineteenth century and it was known as the Grammar-Translation method (GTM) or traditional method.

In the GTM, the goal of language learning is to be able to read literary texts in the target language or benefit from the mental exercise of language learning. Grammar is learned deductively by presentation and memorization of grammar rules, which are taught - according to a syllabus - in a systematic order. These rules were assimilated through the translations of short passages or sentences from mainly literary texts. Hence, the focus is on reading and writing, and almost no attention is paid to listening or speaking. The basic unit of teaching and language practice is the sentence and thus focus on the sentence is a characteristic feature of the GTM. Accuracy is promoted and successful learners must achieve highly ‘correct’ translations. The language of instruction is the students’ MT which is also used for contrastive analysis. Vocabulary is functional to the reading comprehension of texts and words are presented and memorized in bilingual lists. Dictionary study is also encouraged. The teacher is the authority in the classroom, source of information, language model and judge of what is correct and what is not. According to Larsen-Freeman (2000: 18), “[m]ost of the interaction in the classroom is from the teacher to the students. There is little student initiation and little student-student interaction”.

The GTM was the dominant method in Europe for 100 years, from the 1840s to the 1940s (Richards & Rodgers, 2001), whereas, in Italy the GTM was gradually replaced or integrated by more communicative approaches in the 1970s (Balboni, 2002). Unfortunately, the GTM demotivated people from wanting to learn an L2 by perpetuating the idea that language learning merely involved memorization of grammar rules and vocabulary, ‘boring’ translation, an excessive and incorrect reliance on the MT and by not facilitating interaction with other language speakers in

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11The National University of Ireland, Galway has offered modern language courses in French, German and Italian since its foundation in 1849. However, the first Italian classes were actually activated in 1868. Interestingly, particular attention was paid to the spoken language. Conversation classes were given together with literature and grammar classes. In order to successfully pass the final exam, students had to demonstrate oral proficiency in the language. This is especially surprising considering that modern languages were taught in the same way as ‘dead languages’ in that period both in Ireland and Great Britain (Lertola, 2008).
real life. But well beyond their questionable function in the GTM, translation and the use of the MT, when employed correctly, have proved to have a positive effect in language teaching and learning as will be discussed in more detail in §1.4.5.1.

### 1.4.2 The Reform Movement

At the end of the Nineteenth century, the need to place more attention on the spoken dimension of language competence was expressed through the emergence of the reform movement led by scholars and linguists who promoted alternative approaches to language teaching. The reform movement included the Natural Method and the Direct Method.\(^{12}\) The underlying common interest of these new methods was to improve the teaching of modern foreign languages through the study of the spoken language, more focus on phonetics, an inductive approach to grammar learning and a greater use of the foreign language (Richards & Rodgers, 2001).

Wilhelm Viëtor (1850-1918), a German teacher of English, proclaimed the inadequacy of the GTM in language teaching and initiated the reform movement in Germany. In order to indicate the path for the progress of research and practical work and try to make the best of the ‘existing conditions’, the English linguist Henry Sweet (1845-1912) presented innovative methodological principles of language teaching in *The Practical Study of Languages* (1899). Sweet, one of the promoters of the International Phonetic Alphabet, suggested basing the study of all languages on phonetics and encouraged reference to spoken language rather than literary texts. However, Sweet (ibid.: viii) refused to “join [the reformers] in their condemnation of translation” and distinguished two types of translation: from L2 into L1 and from L1 into L2. According to this linguist, the great difference is that translating from the MT into the L2 implies a certain degree of proficiency in that language, whereas translating from the L2 into the MT does not necessarily presuppose the knowledge of the words or sentences to be translated and often is an easy way to explain the meaning of new vocabulary. The picture-method and giving definitions in the foreign language can also be used in vocabulary teaching but these methods can be

\(^{12}\)The Direct Method was introduced in the United States by the German linguist Maximilian Berlitz (1852-1921) in his successful Berlitz Language Schools. Thus it was then known as the Berlitz Method.
inexact and ambiguous at times, while “translation makes knowledge more exact” (ibid.: 200). This is because learners can get a better idea of the shade of meaning of a word and learn idiomatic expression by means of translation.

According to Sweet, there are three stages in the use of translation in language learning. In the first stage, translation might be used to convey information or meanings to the learners. Translation is minimised in the second stage since the meaning is extrapolated from the context or explained in the foreign language. In the last stage, contrastive analysis between L1 and L2 can be performed through free idiomatic translation. Sweet identified the fallacy of the GTM in the translation exercise from the MT into the foreign language. If sentences in L2 could be constructed by simply combining words following predetermined rules it follows that translation would only require a good knowledge of grammar and an equally good dictionary. Of course this is not the case. Instructors who applied the GTM used to give certain rules and lists of words together with (sometimes improbable) sentences to be translated from and into the foreign language to learners from beginner level onwards.

Otto Jespersen (1860-1943), a Danish scholar and friend of Sweet (with whom he collaborated in the development of the International Phonetic Alphabet) also promoted the Direct Method. Besides acknowledging that translation or skill in translation is not the aim of foreign language teaching, Jespersen (1904: 56) stated that “translation might still be a useful and indispensable means in the service of language instruction”. To this purpose, Jesperson distinguished four different ways in which translation could be used. (a) Translation into L1 in order to make learners understand the meaning of a word or a sentence, (b) translation into L1 when ensuring that the meaning of a word or a sentence is understood by asking learners to give the translation in L1, (c) translation from L1 gives learners the opportunity to practice the L2, and (d) translation from L1 gives teachers the chance to test learners in L2 oral/written production or the understanding of grammar rules. The first two (a and b) and the last two (c and d) categories are closely related to each other, however, one does not necessarily imply the other. In order to vary methods, Jespersen also suggested alternative ways to present learners with the meaning of words: the direct observation of objects, the mediation of perception through pictures, inferring the meaning from the context and definitions in the target language.
Harold E. Palmer (1877-1949), an English scholar and author of many books and articles on English as a Second Language (ESL), proposed a teaching methodology based on linguistics, psychology and pedagogy in *The Scientific Study and Teaching of Languages* (1917). His approach could not be described as a direct method and was defined as a multiple approach since it considered various theories. Palmer was one of the British applied linguists who attempted to develop a more scientific-based selection and presentation of oral language content for ESL courses. This approach is widely known as The Oral Approach or Situational Language Teaching. Beyond showing new interest in vocabulary selection, the innovation of this approach is the notion of ‘situation’. All oral language activities are presented in situations in order to provide learners with many opportunities for speaking practice. Similarly to Sweet and Jespersen, Palmer did not discard translation in language teaching. Once again translation was seen as an effective means of conveying the meaning of a given word (semanticizing) together with material association, definition and context (inferring). According to Palmer demonstration by translation consisted in associating the L2 word or sentence with its equivalent in L1. However, Palmer (ibid.: 80-81) declared that “in the face of the obvious benefits to be derived from a rational use of translation as a means of explaining the meanings of new units, a generation of reformers has been and is fighting against any form of translation”.

The strong rejection of the GTM which started at the end of the Nineteenth century was mainly a reaction against the study of grammar and vocabulary as a memorization exercise, the great focus on reading and writing which did not envisage the oral comprehension and spoken practice of the target language, and the use of literary texts rather than spoken language. However, the use of translation was not condemned by all reformers but rather seen as one of the elements of the GTM to be preserved. In fact, translation was employed as an effective way of conveying the meaning of new words and sentences as well as a way of testing learners’ comprehension. Thus, as just outlined, translation can greatly enhance comprehension and internalization of the meaning of lexical items.
1.4.3 Communicative Language Teaching

The period between 1950 and 1980 was one of the most lively in the history of approaches and methods in language teaching. The Audiolingual Method emerged as a logical development of the American Army Specialized Training Program and the Structural Approach (Fries, 1945; Lado, 1957). Based on structural linguistics and behaviourist psychology, the Audiolingual Method focused on oral language as consisting of a set of habits to be learned. According to Skinner (1957) language is verbal behaviour and does not differ from nonverbal behaviour. Thus, any learning process - including language learning - occurs when a stimulus triggers a response behaviour which is followed by reinforcement. Both teacher and audiovisual equipment have a central role in Audiolingual courses since they represent the language model. Oral input and instructions are in the target language and, in general, there must be no translation of any kind.

The Audiolingual Method was criticised on the theoretical level by the American linguist Chomsky (1959), who argued that language was not just a set of habits and preferred to acknowledge the role of abstract mental processing in learning. Thanks to this new psychological perspective in language teaching in the 1970s and 1980s, innovative but less widespread methods like the Silent Way, the Natural Approach and the Total Physical Response came about. These new movements, also known as humanistic approaches, regarded language learning as a process of learners’ self-realization.

In the same period in Great Britain, the traditional teaching method developed in the 1930s - Situational Language Teaching - was challenged by contemporary applied linguists in view of Chomsky’s critique to the structural linguistics theory. Similarly to American structuralism, in Situational Language Teaching, speech is considered the core part of language and knowledge of structure is essential for developing speaking ability. In addition, structures should be presented in meaningful situations in order to provide learners with opportunities to practice the target language. An inductive approach is adopted in grammar and vocabulary teaching. Learners are expected to induce structures and the meaning of

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13Situational Language Teaching was also known as the Oral Approach, Situational Approach or Structural-Situational Approach. According to Richards and Rodgers (2001: 38), “[the Oral Approach] was not to be confused with the Direct Method, which, although it used oral procedures, lacked a systematic basis in applied linguistic theory and practice”.

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One of the major contemporary interests of the Council of Europe was education and, within this field, promoting language teaching among European citizens. The Council of Europe thus implemented the *Major Project in Modern Languages* between 1964-1974. The project, pursued with energy by its developers, “achieved considerable progress towards its major goal, to break down the traditional barriers which fragmented the language teaching profession in Europe and to promote its coherence and effectiveness as a major force for European integration, whilst preserving linguistic and cultural diversity” (Trim, 2007: 10). In the early 1970s a group of experts was formed for the creation of a unit/credit system for adult education. Three central issues involved in the process were examined: new organization of linguistic content, evaluation within the unit/credit system and ways of implementing the new system in the teaching and learning of modern languages. One of the members of this group, the British linguist Wilkins (1972, 1976) theorized that language is made of communicative universal meanings which learners need to understand and express. He identified two types of meaning: ‘notional’ categories (time, quantity, location, etc.) and ‘communicative function’ categories (requests, denial, complaints, etc.). The notional-functional syllabus organizes teaching and learning not on basis of grammatical structures but on communicative functions: the purposes learners need to fulfil.

The Council of Europe applied Wilkins’s notional view in a new language syllabus, Threshold Level (Ek & Trim, 1990), which states language learning objectives to develop communicative proficiency. The work of the Council of Europe, and Wilkins’s contribution in particular, considerably influenced the development of Communicative Language Teaching (CLT). Although the initial influence on the development of CLT came from British applied linguists such as Austin (1962) and Searle (1969), the notion of CLT was actually founded in the 1970s, when Hymes (1972) coined the term ‘communicative competence’ to indicate the knowledge of language use in addition to the knowledge of grammar. CLT methodological guidelines were then proposed in the 1980s (Littlewood, 1981; 14Communicative Language Teaching is also referred to as the Communicative Approach, Notional-Functional Approach or Functional Approach.

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14Communicative Language Teaching is also referred to as the Communicative Approach, Notional-Functional Approach or Functional Approach.
Johnson, 1982; Brumfit, 1984). The goal of language teaching in CLT is to develop learners’ communicative competence which, in Richards’s (2006: 3) words, can be defined as “the use of the language for meaningful communication”. CLT was accepted with enthusiasm by language teachers who started to rethink their syllabi and teaching methodologies in a communicative perspective. Today the basic principles of CLT are widely accepted and they have been applied in a variety of teaching practices. Some principles are as follows: meaning is paramount, language learning is learning to communicate, effective communication and comprehensible pronunciation are sought after, any device which helps learners is accepted, attempts to communicate may be encouraged from the very beginning, judicious use of native language is accepted where feasible, translation may be used where students need or benefit from it, teachers help learners in any way which motivates them to work with language, intrinsic motivation will spring from an interest in what is being communicated (Finocchiaro & Brumfit as cited in Richards & Rodgers, 2001). These principles allow a wide range of activities and the subtitling practice can be considered as one of them. Subtitling improves learners’ communicative competence by encouraging them to communicate by making a sensible use of their L1 and translation. This practical activity motivates learners to be able to understand the meaning of what is communicated in the target language.

1.4.4 Task-based Language Teaching

In the 1990s, Task-based Language Teaching (TBLT) came forward “as a recent version of a communicative methodology and [sought] to reconcile methodology with current theories of second language acquisition” (Richards & Rodgers, 2001: 151) as confirmed by Nunan (2004) who called TBLT a concrete application of CLT for syllabus design and teaching methodology. TBLT draws on CLT principles such as communicative language use, active participation of the learner, a use of activities and language which is meaningful to the learner.

The concept of the task in language teaching has captured more and more attention over the years and various definitions of ‘task’ have been provided by
scholars and researchers (Long, 1985; Dörnyei, 2002). A ‘task’ usually indicates a piece of work to be done in everyday life and can be of any type. Nunan (2004: 4) distinguishes the real word (or target task) from the pedagogical task and defines the pedagogical task as:

a piece of classroom work that involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is focused in mobilizing their grammatical knowledge in order to express meaning, and in which the intention is to convey meaning rather than manipulate form. The task should also have a sense of completeness, being able to stand alone as a communicative act in its own right with a beginning, a middle and an end.

In the classroom, in order to perform a task and thus achieve a predetermined goal, learners are actively involved in communication and focus on meaning, rather than on the form of the communication.

Considering the important role of meaning-focused communication in SLA and language pedagogy, Ellis (2003: 3) distinguishes the terms ‘task’ and ‘exercises’ arguing that ‘tasks’ can be defined as “activities that call for primarily meaning-focused language use. In contrast, ‘exercises’ are activities that call for primarily form-focused language use”. To this end, Ellis also acknowledges the critique about the view of the learner’s role in tasks and exercises. In tasks, learners primarily act as ‘language users’, which is preferable in a communicative perspective, whereas in exercises they primarily act as ‘language learners’. However, tasks still leave opportunities to focus on what form to use, while conversely exercises can also allow learners to focus on meaning. The extent to which learners act as ‘users’ or ‘learners’ is not categorical but rather variable.

Skehan (1998: 95) proposes another definition of ‘task’ as “an activity in which: meaning is primary; there is some communication problem to solve; there is some sort of relationship to comparable real-world activities; task completion has some priority; the assessment of the task is in terms of outcome”. The focus on meaning is also highlighted and, interestingly, Skehan presents the task as a problem-solving activity where, as in real life, the completion of the task is the main concern. The learner is thus seen as a ‘language user’.

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15 See Ellis (2003: 4-5) for definitions of ‘task’ from SLA research and pedagogic literature.
Continuing with Nunan’s definition of the pedagogical task, another relevant factor is that a task should be an independent and self-contained language activity. With this aim, Willis (1996: 52) proposes a task-based learning framework in which the communicative task is central. A single task usually includes receptive (listening and reading) and productive skills (speaking and writing) and its practical application is as follows:

Learners begin with a holistic experience of language in use. They end with a closer look at some of the features naturally occurring in the language. By that point, the learners will have worked with the language and processed it for meaning. It is then that the focus turns to the surface forms that have carried out the meaning.

In particular, Willis’s task-based language framework is divided into three phases: pre-task, task cycle and language focus (see Figure 3). The pre-task phase consists in the introduction of the task’s topic and goals. This can be done, for instance, through brainstorming and pictures. The teacher can introduce vocabulary and phrases related to the theme but not new structures, learners have some time to prepare for the task or listening to/reading a text. These pre-task activities help learners to activate schematic knowledge of the communicative situation which will be presented to them and thus motivate them in undertaking the task as in real-life communication. In addition, exposure to L2 can provide learners with the opportunity to notice the language (Schmidt, 1990/§1.3.3) and set the basis for the focus on form which will take place in the last phase.

The second phase is task-cycle - the task itself - and it is further divided into three sub-phases. First, learners perform the task. This may be done when responding to oral or written input by using the language available to them. Teachers should encourage spontaneous communication in the target language. Successful completion of the task usually fosters learners’ motivation. Second, in the planning sub-phase, learners can prepare for the next stage which consists of reporting on their task performance to their peers. Reporting in oral or written form has many advantages. Learners, in pairs or groups, can focus on the structure and accuracy of their public presentation, benefit from more language exposure and practice the L2 by taking part in discussions. Once the task-cycle is concluded, it is possible to move on to the last phase: language focus. Language-focused tasks can vary but their common objective is to reflect on input (analysis) and language use (practice). This framework is based on the four key conditions for language learning which Willis
identifies: (1) exposure to a rich but comprehensible input of real language; (2) opportunities for real language use; (3) motivation to listen and read, and use the language to speak and write; (4) focus on language. Willis’s framework aims at providing these essential conditions for language learning but, at the same time, it is quite flexible and it can be adapted to different learners and contexts.

**Figure 3. Willis’s task-based learning framework.**

![Diagram of Willis's task-based learning framework]

In Willis’s view, meaning is the most important aspect, and towards the conclusion of the task, attention should be placed on the form of the language in use. This organization of the task, as well as the idea of an independent and self-contained language activity, coincides with the view of the *unità didattica* as it is envisaged in the Italian Glottodidattica (§1.5.2). Following this line of thought, the subtitling task proposed in this study was structured according to the *unità didattica* as a lesson plan. The three phases identified by Willis cover the five phases of the Italian *unità didattica* (motivation, global perception, analysis, synthesis and reflection). The pre-task corresponds to motivation, the task cycle includes global perception, analysis and synthesis while the language focus comprises reflection.

Finally, Nunan (2004) identified the empirical basis for TBLT in Krashen’s four hypotheses: the Acquisition-Learning Hypothesis, the Natural Order Hypothesis, the Monitor Hypothesis and the Input Hypothesis. The Acquisition-Learning Hypothesis in TBLT implies that opportunities should be offered in the classroom for subconscious acquisition rather than conscious learning. In particular,

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17Adapted from Willis (1996: 53).
learners should be involved in communicative meaning-focused tasks instead of form-focused drills and exercises. According to the Natural Order Hypothesis, the sequencing of language input should not be changed as it follows a natural order. Thus, when performing a task, exposure to language input and opportunities to practice the L2 can enhance language learning. The implications of the Monitor Hypothesis for TBLT are essentially the same as those for the Acquisition-Learning Hypothesis. In order to create opportunities for language acquisition, meaning-focused tasks should be carried out in the classroom but teachers should not encourage learners to monitor their production.

Since the Input Hypothesis is the most controversial, Nunan attempted to find alternative hypotheses to integrate Krashen’s Input hypothesis: Swain’s (1985) ‘comprehensible output hypothesis’ and Long’s (1985) ‘interaction hypothesis’. In fact, these two hypotheses consider comprehensible input necessary for language acquisition but not sufficient, as Krashen himself admits (§1.3.1). Swain argues that, besides being exposed to the input, learners need to have ample opportunities to produce output in the target language. Long contends that negotiation of meaning can help to make input comprehensible. It follows that if comprehensible input promotes language acquisition then negotiation of meaning triggers this process. Even though Nunan and Willis seem to disagree on the attention deserved by focus on form, it is useful to note that both agree on the fact that comprehensible input, as well as output production, is essential for language acquisition.

1.4.5 The Postmethod

The continued search for an ideal method for language teaching in the Twentieth century led to a criticism of the notion of method itself and to a progressive rejection of any method. According to Brown (2002), there are four main reasons for dismissing methods. Methods are generally too prescriptive and, sometimes, also abstract in nature, which makes their practical application rather difficult. Usually individual methods are clearly applied at the beginning of a language course but tend to be combined with others as the course progresses. Empirical testing of language teaching methods is often impracticable and it is therefore not possible to prove their effectiveness in language learning. Political or economic interests can influence the
diffusion of certain methods to the detriment of others. Richards and Rodgers (2001) added that in the traditional view of methods, the learner-centeredness concept is absent, which is a major weak point of method. Methods should be applicable in any context and under any circumstances: teachers should apply a method independently of learners’ learning styles, their progress during the teaching program and their interests and needs.

The limitations of methods encouraged the emergence of a postmethod condition which started in the 1990s and still reflects the current state of affairs of language teaching. This new view of language teaching and teacher education requires a reconsideration of pedagogy in terms of classroom strategies, curricular objectives, instructional materials and evaluation (Kumaravadivelu, 2001). Kumaravadivelu identifies three general parameters which can be followed: particularity, practicality and possibility. These parameters are intertwined and interact with each other. Particularity refers to the specific situation in which the teaching and learning takes place. This parameter asserts that pedagogy should be tailor-made to a specific context, taking into consideration teachers and learners as well as political and social settings. Practicality refers to the relationship between theory and practice and aims to overcome the issue of theorists’ theory vs. teachers’ theory. Teachers should be enabled to put theory in practice and theorize their everyday teaching practice. The last parameter, possibility, is related to factors which shape learners’ identity such as their social, economic and cultural environment. The pedagogic parameters just outlined have the potential to provide teachers with some broad guidelines which, although allowing for eclecticism, can encourage consistent reflection on individual teaching practices.

1.4.5.1 Translation in Language Teaching

Over the last decade, within the Postmethod era, there has been a renewed interest among scholars regarding Translation in Language Teaching (TILT). According to G. Cook (2010), after nearly a century of absence it is now time for a revival of TILT. This is in no way a revival of the Grammar-Translation Method but rather an application of translation in language teaching based on a communicative approach (Zojer, 2009). Although there is little empirical research on the benefits of translation
in SLA, recent studies have promoted the use of translation in the FL class
(Malmkjaer, 1998; Stoddart, 2000; Laviosa & Cleverton, 2006; Witte et al., 2009;
Incalcattera McLoughlin & Lertola, forthcoming).

The reasons for exclusion of translation from academic discourse can be
found mainly in socio-political factors and long-established teaching habits. The
arguments against the use of translation in second language teaching are still those
which were raised at the end of the Nineteenth century as an attack on the GTM
(§1.4.1). Unfortunately, these widespread misconceptions are some of the reasons
why translation has been largely ignored and often discouraged for so many years.
However, G. Cook (2007: 396) points out that:

Yet although translation has long been glibly dismissed in the inner-circle
academic literature, it has rather stubbornly refused to die elsewhere, notably
in locally written syllabus around the world, and in the teaching of languages
other than English. Most significantly, it has persisted in the spontaneous
strategies of actual language learners (as opposed to the controlled learners
studied in much SLA research) whose natural inclination, as in other areas of
human learning, is to try to apprehend the unknown by relating it to the
known.

In fact, quite commonly when performing communicative tasks, learners tend to
think of what they want to express in their L1 and then say it in their L2. Sometimes
they ask the teacher for the L2 equivalent of the lexical item or expression they do
not know but need in order to complete the sentence (Atkinson, 1987).

The use of translation and the mother tongue are considered strictly related.
However, the use of the MT does not necessarily imply translation nor does
translation always involve use of the MT. For instance, learners can use their MT in
the study of L2 grammar. Conversely, translation can be carried out between two or
more languages and none of the languages involved are necessarily the learners’ MT.

Since the rejection of the Grammar-Translation Method, the MT, together with
translation, has been a taboo among language teachers. V. Cook (2001) notes that
since 1880 most teaching methods have discouraged the use of L1 in the classroom
either by totally banning it (strongest form) or minimising it (weakest form). The
strongest form can take place in classroom situations where the teachers do not speak
learners’ L1 or when learners have different L1s. The weakest form takes place in
most classroom situations and can also be defined as a maximisation of the L2. In

According to Zojer (2009), translation has carried on a ‘shadow existence’ in the FL classroom over
the years, as language teachers’ ‘forbidden friend’.
both forms, L2 use is seen as positive while L1 use, to whatever extent, is often perceived as negative. Deller and Rinvolucri (2002) attempt to reintroduce the use of the MT in the FL classroom (multilingual or monolingual) by proposing more than 90 activities. Deller and Rinvolucri (ibid.: 3) acknowledge that the aim of their controversial book was “to free [teachers] from this guilt and to think about ways of using the mother tongue, not just for convenience but as a real and vital resource for [...] learners”. In the introduction of the book, Prodromou (as cited in Deller & Rinvolucri, 2002) proposes interesting metaphors which exemplify the role of MT in the language classroom:

1. a drug (though with therapeutic potential, it can damage your health and may become addictive);
2. a reservoir (a resource from which we draw);
3. a wall (an obstacle to teaching);
4. a window (which opens out into the world outside the classroom; if we look through it we see the students’ previous learning experience, their interests, their knowledge of the world, their culture);
5. a crutch (it can help us get by in a lesson, but it is recognition of weakness);
6. a lubricant (it keeps the wheels of a lesson moving smoothly; it thus saves time).

Based on their experience, teachers and learners might agree or disagree with these metaphors but all should be aware of the potential of using the MT as well as the danger of misusing it. Atkinson (1987: 242) suggests that there are “several general advantages of judicious use of the mother tongue. The most significant of these is presumably that translation techniques form a part of the preferred learning strategies of most learners in most places, the importance of which should not be underestimated”.

If the MT plays an essential role in learning any second language, a planned and careful use of it can greatly benefit learners and teachers (Deller & Rinvolucri, 2002). On the one hand, besides feeling ‘safe and grounded’ in the FL class, learners can progress faster, especially at the beginner level, while more advanced students can fully enjoy linguistic exercises. In general, learners can be introduced to new vocabulary in a more definite way (§1.4.1). In addition, making learners aware of their MT and how to make the most of it might even reduce their dependence on it. Teachers could also benefit from a judicious use of their students’ L1 in the classroom since comparing two languages - L1 and L2 - allows for raising awareness about the collocational, grammatical, lexical, metaphorical, phonological and
prosodic aspects of both. Finally, from an intercultural education perspective, it would be a great contradiction to teach an L2 and consequently focus on L2 culture, without making any reference to the learners’ L1 and culture.

Benefits of the use of the MT in language learning can be optimized when the MT is combined with translation. When planning and delivering a course, teachers usually take into consideration learners’ needs as well as the need to maintain their motivation throughout the entire learning process thanks to the communicative approach and TBLT. Translation seems to fit into this paradigm very well. Besides being a ‘preferred learners’ strategy’, translation could be considered as a fifth skill (Ferreira Gaspar, 2009) along with listening, speaking, reading and writing. In fact, mediation (interpreting or translating), together with reception, production and interaction, is among the communicative language activities described in the CEFR (§1.2.1). Given today’s multicultural and globalised society, translation is an especially useful language skill (G. Cook, 2007), and thus, could indeed motivate learners. However, as Dörnyei (as cited in G. Cook, 2007) points out, there are no L2 motivation studies yet available which have investigated L1 as a motivational variable in the classroom.

Translation as a teaching tool is furthermore acknowledged as having many points in its favour. When scrutinising the ‘pros and cons’ of using translation in the FL classroom, Zojer (2009) identifies a number of advantages:

1. Translation as a cognitive tool for contrastive analysis between L1 and L2 can prevent interference mistakes;
2. Translation is an integrative activity closer to real-life language use in opposition to more selective language activities which focus on single aspects of language;
3. Translation forces learners to expand their linguistic range since avoidance strategies are not allowed. A text should be translated in all its parts;
4. Translation can be used to present new vocabulary effectively. It allows for fulfilment of learners’ innate request for semantic representation in L1 thus avoiding possible misunderstandings;
5. Translation requires learners to develop reading and comprehension strategies;
6. The translation task is more straightforward in terms of instructions compared to some other tasks;
7. Translation can assess syntactical, semantic and textual comprehension;
8. Translation can improve learners’ competence in their own L1;
9. Translation enhances metalinguistic reflection;
10. Translation fosters the acquisition of transferable skills;
11. Translation as a mediation activity can be used in learners’ professional or personal lives.

All of these positive elements can also be extended to subtitling. It is necessary, nevertheless, to consider that the translation process in subtitling differs from common translation due to the polysemiotic nature of the audiovisual text (§2.2.2). In line with this, there are also other advantages, as well as limitations, to be considered (§2.4.2).

1.5 Italian Glottodidattica

The present study is contextualised in Italian Second Language research, and for this reason it also draws upon the principles of the Italian Glottodidattica. Glottodidattica is a compound word from Greek which means ‘language teaching’ and, as the name suggests, the discipline started as a confluence between linguistics and pedagogy (Freddi 1993, 1999). In the past, Glottodidattica was equated to applied linguistics and methodology of language teaching, to name a few. However, it has been recently recognised as an independent and interdisciplinary field of study which is both theoretical and practical in nature. Since its beginning in the 1960s, it has been characterized by its interdisciplinarity. The four fields which most influence it are linguistics, pedagogy, psychology and social sciences such as anthropology and sociology. Balboni (2002: 25) clearly explains that “these four major fields of knowledge become «glottodidattica» when they are integrated together, not when they are contrasted with one another”19 as visually conceptualised in Figure 4.

Figure 4. Balboni’s visual representation of the components of Glottodidattica.20

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19 Author’s translation.
20 Adapted from Balboni (2002: 23).
Based on the integration of these four fields, the aim of *Glottodidattica* is to understand the language acquisition process in order to provide solutions for language learning and teaching (Freddi in Picchiassi, 1999). Thus, the good *glottodidatta* (i.e. the practitioner of *Glottodidattica*) combines the four fields according to the context in which (s)he is operating (Balboni, 1998). Danesi (1998) also highlights the particularly active role of the teacher in *Glottodidattica*. The teacher is encouraged to apply different techniques based on scientific research and daily experience in the classroom.

### 1.5.1 Neurolinguistic Factors: Bimodality and Directionality

It is now well-established that the brain operates as a whole and that its functions are lateralized in the left and right hemispheres. The left hemisphere dominates verbal language and is responsible for the majority of speech functions. It deals with phonology, morphology, syntax and interprets language through literal meanings. For this reason it is called the “Verbal Hemisphere”, while the right side is assigned to

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21The term ‘language’ indicates L1, L2, FL, classical languages, heritage languages, etc.
22Brain lateralization is a biological process. Different functions are assigned to one of the two brain hemispheres.
23At birth the two hemispheres are equivalent, from (around) five years of age the process of lateralization starts and the left hemisphere becomes responsible for verbal communication in right-handed people and some left-handed people. The remainder of left-handed people develop the right hemisphere for communication instead. The lateralization process ends with the beginning of puberty (Danesi, 1998; Freddi, 1999).
nonverbal communication and processes language within context (Freddi, 1999). The right hemisphere can distinguish prosodic language features by interpreting vocal inflectional nuances, such as intensity and emotional tone. This ability allows for understanding of the speaker’s intentions. In addition, the right hemisphere processes the comprehension of words and sentences, especially if words are frequent and refer to concrete objects (Danesi, 1998). Sousa (2006) provides a list of brain functions for each hemispheres (see Figure 5 for a visual representation).

**Figure 5. Brain functions according to the left and right hemisphere.**

<table>
<thead>
<tr>
<th>LEFT SIDE</th>
<th>RIGHT SIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis</td>
<td>Holistic</td>
</tr>
<tr>
<td>Sequence</td>
<td>Patterns</td>
</tr>
<tr>
<td>Time</td>
<td>Spatial</td>
</tr>
<tr>
<td>Speech</td>
<td>Context of language</td>
</tr>
</tbody>
</table>

Recognises:
- words
- letters
- numbers

Processes external stimuli

Recognises:
- faces
- places
- objects

Processes internal messages

The directionality principle holds that during the learning process the two hemispheres are engaged simultaneously: they process information according to their specializations and the information moves from the right to the left hemisphere. The right hemisphere is holistic in nature and thus carries out global comprehension. Then, the left hemisphere, which is responsible for analytical comprehension, elaborates the information in a more systematic manner.

Starting from neurolinguistic assumptions, Danesi (1986) proposes the concept of *neurological bimodality* as a teaching model in *Glottodidattica*. This model attempts to make the best use of the functions of both hemispheres in language teaching and learning. Research on the application of neurological bimodality in language teaching was conducted by Danesi and Mollica (1988) with first year university students learning Italian as a foreign language. Students were

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24Adapted from Sousa (2006: 167).
divided into one experimental group called the bimodal (B) group and two control
groups called the left mode (LM) and the right mode (RM) groups. The teacher’s
role in the B group included the presentation of new linguistic elements within
realistic and relevant contexts (dialogues, games, etc.) to the students. Stimuli were
often provided in the form of audiovisual material. This holistic presentation was
meant to activate the functions of the right hemisphere. Then, in order to activate the
left hemisphere and transform the input into intake through analytical processing, the
teacher used structural techniques such as repetition, metalinguistic reflection or
critical reading. The LM group instead was exposed to language methodology which
enhanced mainly the left hemisphere. Traditional techniques like explicit grammar
teaching, translation tasks and mechanical drills were used. Conversely, the RM
group was exposed to a methodology which promoted the activation of the right
hemisphere. Stimuli were presented in context and in a synthetic way without
carrying out any metalinguistic analysis. At the end of the one-year course, the three
groups carried out linguistic and communicative tests. The B group showed
statistically significant better results compared to those of the LM and RM groups.
The results of the study confirmed the hypothesis that bimodality as brain-
compatible language instruction is highly effective in language learning.

1.5.2 Unità Didattica

As illustrated above, the underlying principle of bimodality and directionality is that
language teaching should promote a consistent and balanced use of the two
hemispheres which moves progressively from right to left. This has several
implications for classroom instructions.25 First of all, teachers should present
learners with rich and motivating input in a contextualised way. Then, after
facilitating global reception, teachers should allow learners to analyse the input
through formal teaching. In this way both hemispheres are engaged and can process
the information in an integrated and complementary manner (Danesi, 1998). A

25Danesi (1998) attributes part of the failure of previous methods to the fact that which the methods
were ‘unimodal’ or would engage the right or the left hemisphere in an unbalanced manner. For
instance, GTM would mainly activate the functions of the left hemisphere due to its focus on analysis
of the L2 form. Conversely, in order to promote autonomous L2 use, communicative approaches -
unconsciously - would engage the right hemisphere more than the left.
teaching methodology of this nature can be put into practice by applying the operational model of the *Unità Didattica* (UD). Freddi started to develop the UD, which in English can be translated approximately as ‘teaching unit’, in the 1960s. The UD is usually an independent unit of the curriculum and lasts between 4-6 hours depending on the text used and activities proposed. The UD is independent in the sense that it has a beginning and an end but it is linked to the previous and subsequent UDs (Freddi, 1994); it is based on the concept of bimodality and is described as “a harmonious exchange between the two hemispheres” (Balboni, 2002: 32).\(^{26}\) The UD is structured in five sequential phases: motivation, global perception, analysis, synthesis and reflection (Balboni, 2002).\(^{27}\) The first two phases - motivation and global perception - activate the right hemisphere. From the third phase - analysis - the left hemisphere is engaged in the language learning process.

These three phases coincide with Willis’s (1996) task-based learning framework (§1.4.4) and have also been identified within a video-based task: pre-viewing, while viewing and post-viewing (Wallace, 1991; Voller & Widdows, 1993; Sherman, 2003; Sturm, 2012).\(^{28}\) This is especially relevant in this study where the subtitling task implies the use of video material. The three phases of the video-based task correspond to the UD phases of motivation, global perception and synthesis/analysis respectively.

It should be noted that, for the *Gestalttheorie*, the three phases of global perception, synthesis and analysis correspond to the discovery activity of human nature which takes place when experiencing new situations or learning. First, people receive the input globally, then they analyse it and put it back together in a synthetic vision (Freddi, 1994). The first phase, pre-viewing, therefore serves to prepare learners for the screening of the sequence by activating their background knowledge. This can be done, by showing some still images of the video clip or presenting vocabulary related to the sequence. This technique of brainstorming information and ideas is already widely and successfully used. Learners can also develop metacognitive skills through guessing and hypothesis formulation. The second phase, while viewing, is made up of the video screening itself. When watching the

\(^{26}\)Author’s translation.

\(^{27}\)Freddi’s UD is slightly different from Balboni’s. In fact, Freddi merges global perception, analysis and synthesis in the global perception phase and his UD results in five phases: motivation, global perception, consolidation, reflection and control.

\(^{28}\)Some authors use different terminology to refer to the three phases.
video, learners can carry out different activities such as cloze, multiple choice, note-taking, true or false, etc. Skimming (the process of understanding the overall meaning of an oral/written text) and scanning (the process of quickly identifying specific information in an oral/written text) comprehension techniques are also used.

The aim of the last phase, post-watching, is to reutilize relevant elements of the AV input in order to enhance language learning. Post-watching activities can be of many types depending on different factors (skills development, general learning goals, learners’ level, time, etc.).

In this study, the subtitling modules were based on the UD as an operational model and the subtitling task was structured according to the five phases of the UD: presentation of the subtitling activity (motivation), viewing of the L2 audiovisual input (global perception), deconstruction and comprehension of the L2 input (analysis), translation and subtitling of the video (synthesis) and discussion on the subtitling activity (reflection) - see Figure 6. This teaching unit was proposed for subtitling in the FL classroom by Incalcaterra McLoughlin and Lertola (2011/§2.5.1).

Figure 6. UD phases and description of UD phases in the subtitling classroom.

Before describing each phase in more detail within the context of the subtitling modules, it is necessary to point out the factors which influence video selection. The video represents the L2 input and careful selection is therefore indispensable. When describing the central role of the text established by the CEFR in relation to the UD, Vedovelli (2002b) identifies three main functions of the text. Firstly, the text should be consistent with learners’ communicative needs. Teachers should therefore have a clear idea of learners’ preferences and goals. Secondly, the text should be a model for communicative usage. The fact that the text is a ‘controlled’ input is of particular relevance. L2 learners should be exposed to linguistic and pragmatic elements which
they already know as well as to new ones, which they will have to process in order to understand and be able to communicate. Thirdly, the text should present learners with a problem at the linguistic and, possibly, content levels. In this way problem solving strategies are activated to overcome linguistic and pragmatic difficulties.

In the subtitling modules of this study, the AV material in Italian was chosen to match learners’ profiles. The material was selected on the basis of similar age and context to that of the learners in order to meet their interests and needs. It presented familiar as well as new linguistic and pragmatic elements to the learners, who had to understand them correctly to be able to convey the meaning in their subtitles. The methodology used for video selection was to watch and evaluate a number of Italian films and TV series in order to choose video material suitable for the duration of the module. Once the AV material was identified it was adapted following the CEFR (§1.2.1) and then reduced into a three-to-five-minute long clip with a self-contained video sequence. The recommended length of a video is between 30 seconds to a maximum of 4 minutes (Tomalin, 1990; Stempleski, 1990; Swaffar & Vlatten, 1997; Wagener, 2006; Danan, 2010). This is because a short video clip should be used for teaching and learning purposes in a reasonable amount of time and should avoid cognitive overload as well as maintain attention and motivation throughout the video-based activity.

### 1.5.2.1 Motivation

As already stressed, motivation is essential for language acquisition: The first phase of the UD is actually labelled ‘motivation’. The aim of this phase is to prepare learners to start the learning activity by increasing their motivation and involvement. In order to do so within the subtitling modules of this research, the subtitling task was introduced to the learners by presenting the title, poster or images of the film/TV programme used. Learners were asked to create hypotheses on the possible development of the story or to recap what happened so far if they already knew part of the story. This pre-activity discussion proved to be well-accepted by learners as a creative exercise in which they could practise the L2. Furthermore, at the cognitive level, Swaffar and Vlatten (1997: 178) claim that:
Establishing suppositions about a sequence and its social setting helps students organize familiar and unfamiliar incoming visual information. With a cognitive focus in place, they can subsequently process pieces of linguistic information that might otherwise be largely incomprehensible. [...] Such preparation offers learners a significant cognitive advantage.

When testing the use of intralingual subtitled videos as language learning tools, Caimi (2006: 95) acknowledges that learners “confirmed that prior linguistic preparation through handouts improved their encoding process. In fact, the best way to encode incoming information into long-term memory is to associate the incoming information with something already stored in the memory in order to make it meaningful”.29 In conclusion, the pre-viewing activity does not only help to better process input and thus enhance comprehension but it also facilitates storing information in long-term memory and thus remembering it.

The video itself is a source of motivation for learners and a careful selection should be carried out in respect of their interests and needs. Stemple ski and Tomalin (1990: 3) point out that:

Children and adults feel their interest quicken when language is experienced in a lively way through television and video. This combination of moving pictures and sound can present language more comprehensively than any other medium. [...] Using a video sequence in the class is the next best thing to experiencing the sequence in real-life.

Video, more than other media, can be highly motivating because it presents real life situations. However, learners should be assisted in processing the incoming visual information. This can be done effectively by encouraging the creation of hypotheses and sharing ideas during the pre-activity discussion. Motivation does not only pertain to the initial stage of the UD and should be kept high during the following four phases. Williams and Burden (as cited in Dörnyei & Ushioda, 2011: 61) emphasise how “motivation is more than simply arousing interest. It also involves sustaining interest and investing time and energy into putting the necessary effort to achieve certain goals”. To this regard, it is very important to set clear

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29 According to Caimi (2006), subtitled-based learning activities stimulate two types of memory: iconic memory and echoic memory. Iconic memory is a sensory memory which can perceive visual information which is interpreted by the visual system. Echoic memory can be activated by aural stimuli. Information passes from sensory memory into short-term or working memory. Then stimuli are filtered, sometimes even manipulated, and only those of interest are transferred into the long-term memory. Contrary to the short-term memory, the long-term memory stores information over a long period of time.
objectives and, most of all, make students responsible for their own learning as active participants in the learning process (§1.3.4).

1.5.2.2 Global Perception

In the second phase, learners participating in the modules delivered for this study perceived the communicative situation as a whole. The AV input was presented to the learners and watched a number of times. It is good practice to listen to or watch audio or video at least twice to give the learners the opportunity to familiarise with it. Repetition is an effective strategy since “only through repeated viewing and listening can students learn how to identify some (not necessarily all) of the ideas expressed in rapidly paced, authentic foreign films and television segments” (Swaffar & Vlatten, 1997: 176).

A total of six modes of video viewing in the language classroom have been identified (Stempleski & Tomalin, 1990: 15-16): (1) sound off/vision on, (2) sound on/vision off, (3) pause/freeze frame control; (4) sound and vision on, (5) jumbling sequences and (6) split viewing.

1. Sound off/vision on (or silent viewing): the video clip is presented with no audio and learners are supposed to focus on what is happening on the screen. Learners can describe what they see and what is taking place. In addition they can also guess or predict what is being said.

2. Sound on/vision off: learners can guess or predict the settings, characters and the story by listening to the soundtrack.

3. Pause/freeze-frame control with sound on/off and vision on/off. In the case of sound on, teachers can pause at the initial point of an exchange and ask learners to predict what will be said. Immediate confirmation of the hypotheses can be made by playing the exchange. In the case of sound off, teachers can pause the video and ask learners to describe the characters’ feelings or physical appearance.

4. Sound and vision on can be used for listening and viewing comprehension. This is the most traditional technique and a number of different activities can be carried out. For instance, a list of items can be provided before viewing a sequence and learners should identify the items which appear in the video. Conversely, a list of items can be provided after viewing the sequence and learners should remember which items
were in the sequence and which were not. A more common activity for video comprehension is to give the learners some questions before viewing a sequence and ask them to answer after viewing it. Filling the gap exercises on a cloze passage of the dialogue or of a video description/summary are also frequently used.

5. Jumbling sequences: learners watch different sections of sequence presented out of order. By guessing what happened or predicting what is going to happen they are supposed to arrange the sections in the correct order.

6. Slip viewing: learners are divided in groups (sound off/vision on and sound on/vision off). Then the two groups together perform a variety of information-gap activities.

During the piloting stage of this study, the subtitling task was proven to be more effective when students watched the clip three times instead of two. In this threefold procedure, the first time the video was shown without any audio reference (sound off/vision on); the second time, the audio was available (sound on/vision on), and finally, the third time, the scene was introduced to the learners with both audio and the dialogue list (i.e. the transcription of the original L2 dialogue). In contrast, in the twofold procedure, the sequence was presented both times with the audio (sound on/vision on) but without the appropriate transcription in the first round. The threefold procedure encouraged learners to focus on the video, paying attention to extra-linguistic elements during the sound off/video on screening and thus facilitating learners’ video comprehension during the following screenings. This is also confirmed by Mariotti (2002) who, investigating the strategies for presenting AV material to EFL learners, proposes a first viewing with no audio and no subtitles (sound off/vision on), followed by two viewings with audio (sound on/vision on) and no subtitles, a fourth viewing with audio and bimodal subtitles and a last viewing with audio and interlingual subtitles. Mariotti acknowledges the effectiveness of the first sound off/vision on viewing for focusing on extra-linguistic elements such as kinesics and proxemics aspects of communication as well as for analysing the background where the sequence takes place.  

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30 Extra-linguistic competence comprises kinesics (gestual), proxemics, artifacts (material) and physical characteristics (clothing and appearance) competence. Kinesics refers to the ability to understand gestures and facial expressions. Proxemics indicates the physical distance between the speakers and is usually related to register choice. Artifacts and physical characteristics involve the ability to recognise objects and clothing which indicate the speaker’s social status (Balboni, 2002).
The threefold procedure was thus applied in the main experimental study designed for this study and was developed as follows: the first time the video was presented in sound off/vision on mode to the learners using an interactive whiteboard with a projector (see §4.3). After the first showing of the video clip, learners were asked to express their impressions and opinions and also to formulate hypotheses about what they could see (settings, characters, etc.) and on what was happening (actions and events). All hypotheses and relevant comments were written on the board by the teacher/researcher. After watching the video for the second time in sound on/vision on mode, learners were asked to add further comments. This class discussion effectively led to a better understanding of the sequence, since some learners noticed more details or grasped the meaning of more words than the others. The video was watched a third time, as a class, in sound on/vision on mode accompanied by the dialogue list (transcribed by the teacher/researcher). Learners could then follow what was being said in the video. Finally, the learners could verify whether what they had predicted was true by referring to the annotated comments on the board. All class discussions after the three video screenings were carried out mainly in L2. To this regard, Sturm (2012) notes how authentic language and unlimited stimuli are offered by audiovisual material, something which also fosters imaginative L2 practice.

1.5.2.3 Analysis

Respecting the directionality principle (§1.5.1), the UD moves from global perception to the analysis phase. In this way the left hemisphere is activated. After watching the sequence for the third time with the dialogue transcript, the learners could concentrate on the understanding of the message in L2, and thus analyse the dialogue. Learners could then watch the video as many times as they wished on their individual classroom computers equipped with headphones. Learners were called to understand different linguistic, paralinguistic, pragmatic and cultural codes. New vocabulary was presented in context and often related to physical objects or action in the video. This stimulated learners’ memory retention of new items (§2.3.2). Dialogue analysis gave the learners the opportunity to focus on linguistic structures, linguistic markers of social relations and colloquial expressions. In addition, learners
were exposed to different accents and changes in register. This dialogue analysis is crucial for the synthesis phase. However, the analysis procedure continues throughout the entire translation-subtitling process which takes place in the synthesis phase.

1.5.2.4 Synthesis

The synthesis phase implies metalinguistic considerations. In the synthesis phase, learners were required to translate and subtitle the original dialogue of the video clip into their MT. For the reformulation of the L2 message into L1, learners were asked to translate a spoken foreign language-text accompanied by dialogue transcript into a written-text in the form of subtitles. The translated text was typed into the software (§2.5.2, see also §2.4.1 for pedagogical subtitling norms followed by the learners). The L1 subtitles were then synchronized to match the video. Learners were only given the dialogue transcript and they had to do the spotting. Subtitling in language learning, generally, follows three steps: spotting, cueing and writing (Fountana, 2008). Spotting consists of selecting which parts of the dialogue should be subtitled. This can be done by highlighting the relevant parts on the dialogue transcript. The second step, cueing, requires setting the start and end times of each subtitle. The third step is writing: learners type in the text in the subtitle (the text can be either the original spotted dialogue or the translation of the spotted dialogue). Since learners are required to set in and out times of subtitles they can check, adjust or modify their translations according to time and space constraints of the subtitle. By doing so, learners can also verify the effectiveness and adequacy of the newly produced text. In particular, learners are supposed to identify the hierarchy of information in order to convey the message correctly and create appropriate subtitles. Discussion on possible text interpretations among the learners was always encouraged and “[t]his reflects the workplace environment situation of professional subtitlers where one would not expect to work in complete isolation” (Williams & Thorne, 2000: 223). This practice respects the dimension of task-based learning in which learners carry out real-world language activities and are not just learners but language users.

31The use of a written transcription of the film dialogue for the subtitling project conforms to the most common practice in subtitling employed by professional subtitlers as Aulavuori (2008) described.
1.5.2.5 Reflection

The last phase of the UD implies a reflection on language as well as on the whole learning experience. The capacity to reflect on activities is now recognised as a very important feature in the learning process. There are two types of reflection: reflection-on-action and reflection-in-action. In the content of this thesis, reflection refers to a conscious and active process in which learners recall their subtitling experience and evaluate it. This process, also known as retrospective learning, is considered reflection-on-action as the reflection refers to a previous experience. This can lead to a debate on future developments and generate prospective learning. Reflection-on-action is planned and facilitated by the teacher and aims at supporting learning from experience. It is different to reflection-in-action which takes place during the experience and often occurs spontaneously as a need to understand and respond to the practical activity. When learners face difficulties they tend to reflect-in-action and this happens during the translation and subtitling process (Beard & Wilson, 2006). The interaction among the learners was encouraged during the class hours and outside the classroom. Peer Learning was fostered in the classroom, during the translation process, when learners could share ideas and help each other both in comprehension and translation. Outside the classroom, in the piloting phase, Cooperative Learning was also promoted through the use of Wiki Tool and an online forum available on the Virtual Learning Environment (VLE) Blackboard NUI Galway. Learners were asked to publish a final version of their subtitles on Wiki Tool as the result of a cooperative writing process carried out in the on-line forum. Only the translated text (and not the subtitles merged on the image) was published on Wiki Tool. All the material of the modules, such as transcription of the film dialogue and videos, were made available on Blackboard for consultation and download.

Subtitling is an AVT mode in which the audiovisual text clearly plays an important role. Chapter II will therefore further discuss this aspect from a language learning perspective, underlining the potential of interlingual and intralingual subtitling as a pedagogical tool. To this purpose, relevant literature will be briefly reviewed and the

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subtitling software, LvS, used in the experimental studies carried out for this research will also be commented on.
2.1 Introduction

The focus of the second chapter is subtitling. It begins with a brief general overview of AVT (§2.2): a description of subtitling is then given along with a definition of interlingual and intralingual subtitling (§2.2.1). The importance of the AV text in language teaching and learning is then discussed (§2.2.2). The polysemiotic nature of audiovisual texts involves a complex mechanism for information processing. For this reason, Mayer’s (2001) Cognitive Theory of Multimedia Learning is considered together with Paivio’s (1971, 1986) Dual Coding Theory, which evaluates the implications for language learning of the simultaneous processing of information received through audio and video channels (§2.3.1 and §2.3.2 respectively).

Interlingual and intralingual subtitling which combine the use of audiovisual text as an input and subtitling as a task, is then examined as a pedagogical tool (§2.4). Subtitling norms taken from the professional world and adapted for pedagogical purposes in the subtitling modules designed for this thesis are presented (§2.4.1) along with the advantages and limitations of subtitling in language teaching and learning (§2.4.2). Even though the research on the use of subtitling in SLA is still limited, some recent studies have proven the benefits of this practice in language learning. These studies are reviewed together with recent European funded projects which promote subtitling as a pedagogical tool (§2.5.1). One of these projects in particular, LeViS, developed the LvS subtitling software - specifically designed for language learning - which was used for this study. For this reason, this chapter concludes by analysing the outcomes of the LeViS project (§2.5.2).

2.2 Audiovisual Translation

Audiovisual Translation refers to the transfer of verbal language in audiovisual media such as cinema, DVDs, TV and the internet. In general, AVT is used as an umbrella term to indicate ‘screen-translation,’ ‘multimedia translation’, ‘multimodal
translation’ or ‘film translation’ (Perego, 2005; Chiaro, 2009). The peculiarity of audiovisual media is that they carry a verbal message through audio and visual channels simultaneously (§2.2.2). Thanks to the growing interest of scholars in AVT over the last two decades, this discipline is now considered “one of the fastest growing areas in the field of Translation Studies” (Díaz Cintas, 2008a: 1). AVT modes can be divided into two main types: subtitling (written language transfer procedures) and revoicing (oral language transfer procedures). Subtitling can be interlingual or intralingual subtitling as discussed in §2.2.1; while revoicing includes dubbing, voice-over, narration, audio description, free commentary and interpreting (Pérez González, 2009).

### 2.2.1 Subtitling

Subtitling has been one of the most used AVT modes in language teaching and learning. In this section a general outline of subtitling is presented from the point of view of subtitle reception (while a more specific description of subtitling in language learning, in terms of their creation, is provided in §2.4). Subtitling, as defined by Díaz Cintas (2003: 195), “involves displaying written text, usually at the bottom of the screen, giving an account of the actors’ dialogue and other linguistic information which form part of the visual image (letters, graffiti, and captions) or of the soundtrack (songs)”.

Subtitling can result in interlingual or intralingual subtitles. Interlingual subtitles, also referred to as standard subtitles, are translations between two languages, where the oral spoken language is translated into another language (or two other languages, in which case they are called ‘bilingual subtitles’) and appears as printed text. In general, the audience of interlingual subtitles includes hearing people who want to access an FL programme and L2 language learners. There are two combinations of interlingual subtitles for language learning purposes: one is standard subtitling (original L2 spoken dialogue translated into L1 written form) and the other, less common, is reversed subtitling (L1 dialogue accompanied by L2 translation). Intralingual subtitles, on the other hand, are within the same original

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33 Example of this practice and its effects on SLA can be found in Danan (1992).
language as the AV product and appear as a condensed transcription of the spoken text. This type of subtitles are also called bimodal subtitles or same language subtitles. Intralingual subtitles are usually used by two types of audience: the deaf and hard-of-hearing, and language learners. Subtitles for the Deaf and Hard-of-Hearing (SDH), however, also contain paralinguistic information otherwise not accessible by hearing impaired people. The extensive research on the use of subtitles carried out by scholars over the last two decades has shown that interlingual subtitles are more suitable for learners at a beginner level, as they seem to rely more on their L1, while intralingual subtitles are more appropriate for advanced learners (Danan, 2004; Talaván, 2012). At a more technical level, interlingual subtitles tend to be in the film or TV programme and visible at all times. For this reason they are known as open subtitles, whilst intralingual subtitles are called closed subtitles since they are optional and thus visible only when selected by the viewer. Nowadays, DVDs as well as many digital and satellite television channels offer the option to view interlingual or intralingual subtitled versions of the programmes in several languages.

2.2.2 Audiovisual Text

Audiovisual materials to be subtitled “are part of a polysemiotic text” (Pedersen, 2005: 13). They therefore differ from the written texts used in traditional translation. In particular, Sokoli (2006: 2) identifies a number of distinctive features of the AV text in the specific case of subtitling:

- Reception through two channels: acoustic and visual
- Significant presence of nonverbal elements
- Synchronization between verbal and nonverbal elements

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34 UNESCO acknowledged the benefits of bimodal (or same language) subtitles by supporting the ‘Reading for a Billion: Same Language Subtitling on TV’ project as part of the Effective Adult Literacy and Numeracy Programmes. The project takes place in India and consists of subtitling music videos and film songs on TV in the same language as the original Hindi soundtrack (http://uil.unesco.org/fileadmin/bamako_conf_2007/UIL-Effective-Programmes/06_en.html. Last accessed 19 April 2013). Media Access Australia promoted ‘cap that!’ a national awareness campaign encouraging teachers to turn on captions (bimodal subtitles) in the classroom for enhancing learning and literacy for all students, particularly those who are Deaf or hearing impaired, speak English as an additional language or dialect and for students with learning disabilities (http://www.capthat.com.au/. Last accessed 19 April 2013).
• Appearance on screen - Reproducible material
• Predetermined succession of moving images - Recorded material

Beyond this, the four basic components of the AV text are the result of combining the acoustic and verbal channel with verbal and non-verbal elements: acoustic-verbal (dialogue, songs), acoustic-nonverbal (sounds), visual nonverbal (images) and the visual-verbal (subtitles).35 The spatio-temporal relationships among the four components are presented in Figure 7. These components are connected by solid and dashed arrows. The solid arrows symbolize the existing relationships in an AV text while the dashed arrows represent the relationships established by the subtitler.

Figure 7. Relationships between the basic components of the subtitled AV text.36

The interaction between these components takes place when people read subtitles, but also during the translation practice of subtitling. This process can be defined as ‘Multiple Mediation’ (Perego, 2005). On the one hand, in order to reconstruct the message, viewers use the two channels - audio and visual - and only by integrating them can they fully understand the AV input. On the other, due to the polysemiotic nature of the AV text, Perego (ibid.: 50) points out that “[t]he translator must have the ability to reach the right semiotic balance between physical and verbal language which should not contrast or contradict each other in any way”.37 The subtitler

36Adapted from Sokoli (2006: 3).
37Author’s translation.
AV input offers a great opportunity to focus on the linguistic and extra-linguistic features of the original dialogue. The use of AV materials such as films and TV series can foster language learners’ development of linguistic, sociolinguistic and pragmatic competence (§1.2.1). In addition, learners enjoy watching these types of AV material and this stimulates their motivation. Since the language used in films is realistic language, in a medium which is not specifically prepared for L2 learners, it has much to offer them. Language is spoken at normal conversational speed and varieties of language are used by characters of various ages, genders and socio-cultural backgrounds.

In order to uncover the potential of AV language, Pavesi (2012) carried out a corpus-based investigation of spoken English in fictional screen dialogue by comparing it to spontaneous conversation. The focus was on language features of film and TV series with the intention of verifying whether these are ‘realistic enough’ to enhance SLA. She points out that AV text should not be seen as a substitute for face-to-face conversation in language learning since it presents a different register compared to spontaneous interaction. However, there are some similarities between the two registers, thus AV texts can engage and entertain the viewers by recalling reality.

When evaluating screen dialogue for SLA, Pavesi states that two aspects should be considered. One is its degree of naturalness compared to spontaneous conversation. The three corpus-based studies taken into consideration show that screen dialogue largely reproduces the spoken language which learners are likely to hear in real life as far as morphosyntactic, lexical and discourse patterns are concerned. According to Pavesi, there is also another aspect which should be considered when evaluating the effectiveness of an AV dialogue: AV input often contains linguistic elements different from those of spontaneous speech. These are the elements which differentiate screen dialogue from spontaneous dialogue but which make AV input easier to understand for L2 learners. The most relevant
differences between fictional and spontaneous conversation are eufluency\textsuperscript{38} and reduced vagueness, increased discourse immediacy, and widespread formulaicity and predictability.

In general, screen dialogue presents fewer dysfluency features than spontaneous dialogue, which is characterised by performance phenomena such as communication overlaps, hesitations and false starts. AV discourse therefore tends to have a higher degree of eufluency (i.e. continuous speech) and allows L2 learners to better comprehend and process the input. In addition, AV discourse is usually based on a standard variety of the language and it can be better understood by learners. The reduced vagueness of screen dialogue is also due to the presence of fewer dysfluencies. Less ambiguous language (avoidance of vague references, no contractions, etc.) is used in this type of text to benefit the audience in terms of understanding and entertainment. These discourse adjustments help L2 learners to access the AV text. Screen dialogue is also characterised by a higher degree of discourse immediacy compared to spontaneous conversation. AV discourse is usually context related, references concern events and activities which are close in space and time. There is hence a tendency to use present tenses rather than past tenses and third person pronouns are rarely found. Another recognised characteristic of fictional language is the extensive use of vocatives, which contrasts with spontaneous language practice. Of course, context-bound discourse contributes to an easier decoding of input. The narration takes place in more limited space and time frames and L2 learners can also rely on what they see on the screen. An additional feature of screen dialogue which can foster SLA is represented by the occurrence of formulaicity and predictability. AV dialogue has been defined as ‘prefabricated orality’ since it is meant to appear as spontaneous and natural speech in as much as possible but is, in fact, the result of careful planning and editing before finally being pronounced by the actors (Chaume, 2001). Fictional dialogue has been acknowledged as presenting recurrent patterns and conversational formulae. This is a consequence of the frequent repetition of communicative situations and topics in AV products. Characters act in a restricted number of settings, often repeat the same actions and thus use the same language formulae.

\textsuperscript{38}Rühlemann (2008: 681-682) defined ‘eufluency’ as “uninterrupted delivery” opposed to ‘dysfluency’ which is “speech management phenomena such as pauses (filled and silent), restarts, repetition, etc.”.
This repetitiveness promotes predictability. It is therefore easy to relate formulaic AV language to specific situations.

The repetitiveness and predictability of both language and situations contribute to enhancing SLA in three ways. First, learners can better understand linguistic input thanks to the predictability of the language choices. Second, learners can benefit from exposure to the formulaic language they need in order to become proficient in an L2. Language learners are generally encouraged to acquire linguistic formulae, especially at the beginner-level. Third, repetition and variation help learners gradually become able to analyse individual linguistic elements of the formulaic structure and then use these elements in their creative production. In conclusion, Pavesi’s investigation greatly contributes to justifying the use of AV input in language learning as it shows that AV dialogue contains linguistic features - whether similar or different from spontaneous dialogue - that can promote SLA. The investigation focuses on studies based on English corpora and encourages empirical research on AV dialogue in other languages.

A number of studies carried out on the acquisition of Italian in Malta from the 1990s onwards revealed the great influence of regular exposure to Italian media, and TV programmes in particular. In his study, Caruana (2006) investigated the role of the input from TV programmes in guided and spontaneous learners of Italian (who learn Italian formally and informally respectively). The results showed that spontaneous learners could provide oral narrations similar to those of the guided learners and that all learners, guided or spontaneous, who had watched Italian TV since they started primary school were able to provide the most native-like narrations. These results confirm the great potential of regular exposure to Italian audiovisual input from television. However, the variety of Italian transmitted via television, defined as ‘italiano televisivo’ by Diadori (1994), is similar to spoken standard Italian but also features certain elements determined by the medium itself. Diadori, like Chaume (2001), acknowledges the language based on a written script and recited by actors as ‘recited speech’. Beyond exposing learners to a wealth of linguistic input, cinema and TV series, although presenting fictional situation, offer

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39Maltese and English are the official languages of the island. The Maltese island has a complex linguistic history. Italian was spoken by the educated class from 1530 until the start of British colonization when it was gradually replaced by English. However, over the last thirty years, Italian has again become widespread thanks to Italian televisions channels which are broadcast in Malta and are popular among all age groups.
the most real-like examples of face-to-face communication. The linguistic and extra-linguistic dimensions of these AV products can therefore be effectively used in language teaching and learning.

2.3 Theoretical Support

The use of AV input in language learning has been acknowledged as enhancing SLA. However, the polysemiotic nature of AV products - verbal audio and visual channels together with nonverbal audio and visual channels - requires complex information processing. In addition, the use of dialogue transcript in the subtitling task, similar to the use of subtitles as a support (§2.5), provides learners with synchronous written verbal representation of the oral text during the AV input. Given all these factors, and in order to support the subtitling practice at a theoretical level as a new language teaching and learning strategy, reference has to be made to the Cognitive Theory of Multimedia Learning (Mayer, 2001), concerning the creation of suitable learning environments, and to the Dual Coding Theory (Paivio, 1971, 1986) regarding simultaneous bi-channel information processing.

2.3.1 Mayer’s Cognitive Theory of Multimedia Learning

The basic principles for designing learning environments within Mayer’s (2001) Cognitive Theory of Multimedia Learning (CTML) are considered here. In particular, the two different channels used for managing audio and visual information, the limited amount of information the human mind can process at one time, and the active processing in which humans are engaged during language acquisition (Fletcher & Tobias, 2005). The simultaneous involvement of the acoustic and visual channels enhances learning and helps memory retention. According to the Multimedia Learning Hypothesis, people learn more deeply from words and pictures than from words alone. This is known as the Multimedia Principle and it implies that designing multimedia learning environments effectively promotes learning. In fact, multimedia learning occurs when people build mental representations from words (such as spoken text or printed text) and pictures (such as illustrations, photos,
animation or video). Multimedia refers to the presentation of words and pictures, whereas learning refers to learners’ construction of knowledge. Mayer and Moreno (2003: 43) define multimedia instruction “as presenting words and pictures that are intended to foster learning”. The subtitling task is therefore a textbook example of multimedia instruction due to the presence of picture and written text: the video and the dialogue transcript.

Furthermore, as Mayer (2001) states - in the Individual Differences Principle - the multimedia format enhances learning according to learners’ individual cognitive differences. Within the holistic approach central to the use of AVT in language learning, and to the subtitling task, learners are given the opportunity to acquire a second language, at their own pace, in an enjoyable and proactive manner which innovatively combines the ‘audio’ with the ‘visual’. Beyond the dual-channel hypothesis, which is central to Paivio’s theory (§2.3.2), the CTML draws upon the limited capacity and the active processing assumption. The audio and verbal channels can carry out a limited amount of cognitive processing at one time. This is central to Sweller’s cognitive load theory and Baddeley’s working memory theory (Mayer & Moreno, 2003). It is therefore of paramount importance to reduce cognitive overload. Finally, the active processing assumption, taken from constructivist learning theory, implies that learning occurs when learners select, organize and integrate new relevant information with previous knowledge (Mayer & Moreno, 2002).

### 2.3.2 Paivio’s Dual Coding Theory

According to Paivio’s (1971; 1986) Dual Coding Theory (DCT), people cognitively handle two classes of phenomena through two separate subsystems: imagery and verbal. The imagery subsystem deals with representation and information processing of nonverbal objects and events. The verbal subsystem is concerned with language. The two subsystems differ structurally and functionally. At the structural level, the representational units are different and so is their organization. At the functional

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Paivio (1986) defines the symbolic subsystem as ‘imagery’ because it performs the analysis of scenes and the production of mental images. Visual modality together with other sensory modalities is involved in these two functions.
level, the subsystems are independent, which means that either of them can be individually activated. However, the two subsystems are very much interconnected in the way that one can activate the other.

These basic mental structures - imagery and visual - are “associative networks of verbal and imaginal representations, and the process concerns the development and activation of those structures, including the effects of context on the spread of activation among representation” (Clark & Paivio, 1991: 151). Mental representations are linked to distinct verbal and nonverbal symbolic modes. On the one hand, the verbal mode contains articulatory, auditory, visual and other modality-specific verbal codes. Words are arbitrarily assigned codes which indicate concrete objects, events and abstract ideas. For instance, the English word ‘book’ and the French word ‘livre’ are verbal labels of the same object. Both words can be used in different sentences and, within other words, they still remain separate entities. In general, verbal representations are processed individually in a sequential manner. On the other hand, the nonverbal symbolic mode is comprised of modality-specific images for actions (e.g., drawing lines), environmental sounds (e.g., school bell), emotional body involvement (e.g., racing heart), shapes (e.g., a chemical model) and other nonverbal objects and events. These representations are more analogous or similar to the events they represent rather than being arbitrary symbols. In other words, mental images for ‘book’ have perceptual qualities similar to those suggested by the objects on which the images are based. Likewise, mental images suggested by emotionally laden words or sentences (e.g., I like my teacher) have “visceral properties” closer to those evoked when in the presence of the affective person or object. In opposition to verbal processing which is sequential, nonverbal representations are encoded simultaneously. This is to say that a single image, for example a classroom or playground scene, can contain many details which are embedded in the integrated image structure and processed accordingly as a whole (Clark & Paivio, 1991).

Verbal and nonverbal representations are connected through a complex associative network: referential connections allow people to link corresponding verbal and nonverbal codes through processing operations such as naming a picture or imagining a picture from words; associative connections allow people to join representations within the verbal and nonverbal systems. In the verbal system, words are associated to other related words. Within nonverbal systems, instead,
associations are made between images in the same or different sensory modalities. A verbal image, for instance, can be joined by auditory or olfactory images (i.e., sound or smell). Past experiences play a central role in mental representation development and interconnection. In fact, even though certain experiences tend to promote similar (mental) structures, mental representations can vary from individual to individual depending on background.

The extent to which verbal and nonverbal mechanisms contribute to learning, according to the DCT, depends on the type of task, stimulus characteristics, personal experiences and individual differences. However, the ‘dual coding’ theory defines superiority of input, which comprises the verbal and visual in learning: “the additive effect of imagery and verbal codes is better than a verbal code alone” (ibid.: 165). This is because imagery and verbal codes are processed - and thus remembered - through a dual system. The use of AV input makes dual coding processing possible, hence, it strongly enhances language learning. Learners are provided with verbal and imagery codes and can build up their mental representations by creating referential connections. These referential connections are made by joining verbal (oral L2 input) and visual elements (information on the screen).

In the subtitling modules of this study, learners had an additional representation of the verbal element through the use of dialogue transcript which presented the oral L2 input in written form, similar to intralingual subtitles (§2.2.1). With the full length dialogue transcript, synchronous representation is not automatic and condensed as in intralingual subtitles but is mediated by the learners who - while listening to verbal input - move their gaze from the transcription on paper to the visual information on the screen. Alternatively, learners can listen to the audio first and then check it in the transcription so that they can better focus on the image and the sound. The main advantage of using the dialogue transcript versus verbatim subtitles embedded in the video is that the entire verbal input is transcribed and learners can follow the entire communication.

Dialogue transcript is of particular relevance during the translation process. In fact, Incalcaterra McLoughlin (2012) points out that the more accurate the transcription the better the translation. Further research is needed from a language acquisition perspective in order to determine if learners benefit more from translating oral L2 input accompanied by edited intralingual subtitles or a verbatim transcription. Furthermore, learners do not only perceive the input aurally and
visually but they also interact with it during the translation and subtitling process. Learners are receiving the oral L2 input and reformulating the message in L1, when translating and subtitling. They thus actively synchronise their L1 translation with the oral L2. Finally, when checking their subtitles, which are embedded in the video, learners receive the verbal input accompanied by additional verbal representation in the form of interlingual subtitles. In conclusion, learners can build referential connections in three stages within the subtitling task: first, when learners are exposed to L2-L2 verbal input (intralingual subtitles or dialogue transcript) and imagery; second, when translating and synchronizing their L1 subtitles to L2 oral input and imagery; third, when exposed to the L2 (oral) and L1 (written) input as well as imagery while checking their final product.

2.4 Subtitling in Language Learning

Subtitling is a motivating task-based activity with a tangible outcome and can be carried out individually or with peers in both face-to-face and online learning contexts. Subtitling in language learning can be either interlingual or intralingual (Table 3). Interlingual subtitling can be standard (L2 into L1) or reversed (L1 into L2). The standard subtitling process implies an understanding of the L2 audiovisual input in order to be able to convey the message, in a linguistic and culturally appropriate way, in one’s written L1. This type of subtitling fosters L2 listening comprehension as well as L1 reading comprehension, whether interlingual subtitles are embedded in the video or the original dialogue is transcribed.41 In addition, learners can acquire knowledge of linguistic and cultural L2 elements which are present in the AV input thanks to both an exposure to these elements and their translation.

Conversely, reversed subtitling requires learners to provide a written L2 translation of an oral L1 text. This translation task enhances written L2 production. It is a written mediating activity in which learners must produce a coherent equivalent text in L2 which respects the linguistic dimension as well as the idiomatic and

41Learners can also be asked to transcribe the L2 dialogue before subtitling. Although this activity can serve to improve L2 listening comprehension and writing, it can prove to be time consuming and more suitable for advanced learners.
cultural nuances of the original text. Both standard and reversed subtitling can have the spoken input translated into two other languages - bilingual subtitling - and thus can be carried out in multilingual learning environments where learners of a same L2 can translate in their different L1s (standard) or in the case where learners with the same L1 can translate into different L2s (reversed).

Although intralingual subtitling does not involve translation, it may be used in the FL classroom as an exercise for developing summarizing and paraphrasing skills in any language. In professional training, for instance, before any subtitling activity, Diaz Cintas (2008b) suggests asking students to produce gist summaries. This is an exercise which helps them dismiss the idea of word by word translation since they have to look for the main ideas to be conveyed and then rephrase these ideas in a natural way. This preparatory exercise can be effectively used with language learners both in L1 and in L2. Bimodal subtitling in L2 should be carried out by advanced learners due to the complexity of reformulating a text in a second language, while the use of bimodal subtitling in L1 should not be completely excluded as an introduction to any subtitling practice.
Table 3. Interlingual and intralingual subtitling in language learning.

<table>
<thead>
<tr>
<th></th>
<th>Interlingual Subtitling</th>
<th>Intralingual Subtitling</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Condensed translation of oral text into another language in form of written text</td>
<td>Condensed transcription of the oral text into written text</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td>standard</td>
<td>reversed</td>
</tr>
<tr>
<td><strong>Characteristics</strong></td>
<td>L2 spoken text is translated into L1 written text</td>
<td>L1 spoken text is transcribed into L2 written text</td>
</tr>
<tr>
<td><strong>Function</strong></td>
<td>L2 listening comprehension; L2 reading comprehension (in case of intralingual subtitles or dialogue transcript); acquisition of L2 linguistic and cultural elements though AV exposure; benefits of translation in L1</td>
<td>L2 listening comprehension; L2 reading comprehension; acquisition of L2 linguistic and cultural elements through translation</td>
</tr>
</tbody>
</table>

2.4.1 Subtitling Norms for Pedagogical Purposes

Subtitling is a popular AVT mode and it has been investigated, both at theoretical and practical levels, by scholars and experts in the field (Gottlieb, 1992; Díaz Cintas, 2004; Díaz Cintas & Remael, 2007). Subtitling for pedagogical purposes can benefit from this wide research and its practice in the professional world. In general, before creating subtitles, learners should be given a definition of subtitling and a brief overview of the other AVT modes. Most of all, learners should be informed about some basic subtitling norms to be followed. Considering that here subtitling is targeted to language learners rather than future translators/subtitlers, professional subtitling norms listed in the ‘Code of Good Subtitling Practice’ (Ivarsson & Carroll,
1998)\textsuperscript{42} were adapted in the modules designed for this study to be used in the FL classroom, as illustrated in Figure 8.

Figure 8. Subtitling norms for language learners.\textsuperscript{43}

\textbf{Code of Good Subtitling Practice}

- Translation quality must be high with due consideration of all idiomatic and cultural nuances;

- The language register must be appropriate and correspond with the spoken text;

- Subtitle text must be distributed on a max of 2 lines in sense blocks and/or grammatical units. Ex. Never split the subject from the verb or the article from the name, etc.;

- Each subtitle must be meaningful and self-contained;

- There must be a close correlation between film dialogue and subtitle: source oral language and target written language should be synchronised as far as possible;

- When it is necessary condense the dialogue;

- Obvious repetition of names and common comprehensible phrases can be omitted. Ex. You can omit references to people or objects clearly visible on the screen (people’s names, personal pronouns, exclamation, etc.);

- Subtitles should stay on the screen for a minimum of one second to a maximum of seven seconds;

- The language should be grammatically correct and make use of punctuation;


\textsuperscript{43}Adapted from Ivarsson and Carroll (1998).
Learners should first of all be aware that subtitling requires quality translation: the target text (TT) should respect linguistic and cultural elements of the source text (ST). Language registers of the TT should also correspond to those of the oral ST. In addition, language learners, new to AVT tasks, tend to make subtitles without considering the importance of space constraints and line breaks. Therefore, it is necessary to point out that the subtitle, distributed on a maximum of two lines, should be semantically and syntactically self-contained. Each line should not normally exceed 41 characters. Any subtitle, ideally, should be a complete sentence. However, Díaz Cintas (2008b: 100) recommends that “if the message cannot be contained in one subtitle and needs to be continued over two or more subtitles, some strategies must be implemented, ensuring that lines are split to coincide with sense blocks”. Effective segmentation of the ST must be learned: distribution of the TT in sense units on two lines within a subtitle or over more than one subtitle. In both cases, the rule for segmentation is the same, the text should respect syntactic and grammatical conventions (Díaz Cintas & Remael, 2007). In order to do so, learners must identify the sentence structure and the sentence type, and whether it contains independent or dependent clauses. Identifying sense units in an L2 sentence is a challenging exercise for language learners. Some basic syntactic and semantic considerations to be made for line breaks within subtitles can therefore be presented.
to the learners before subtitling. Díaz Cintas and Remael provide the following examples: one should avoid splitting articles from nouns, adjectives from nouns or adverbs, compound verbal forms, verbs from its direct or indirect objects. One should separate a sentence made of two independent clauses or a sentence made of one independent and one dependent clause on two lines. The most common coordinating conjunctions (but, or, and, so) should usually start the sentence on the second line. Punctuation is also an easily recognizable break off point for segmentation. These practical examples may help learners to understand sentence structure and type. In addition, a checklist can be made for learners to complete before submitting their subtitles.

Subtitles need to be synchronised with the soundtrack as far as possible. They should become visible when the speaker starts talking and disappear when the speaker finishes. One of the golden rules of the professional world, which learners should be encouraged to follow, is that subtitles should stay on the screen for a minimum of one to a maximum of seven seconds. An accurate synchronisation implies that they listen to the L2 soundtrack several times, which should help them to correctly match their TT with the ST. Furthermore, extensive exposure to the original AV dialogue fosters their listening comprehension.

In order to respect space and time constraints, the dialogue often has to be reduced. Learners can do this by condensing the message (partial reduction) or omitting (total reduction) some information. Reducing the text is an excellent exercise for language learners. As for segmentation, learners should identify sense blocks and be able to recognise redundant information or elements which are not crucial for understanding the sentence or the general meaning of the message. There are several other subtitling strategies beyond reduction and omission (Gottlieb, 1992). However, students do not need to know them all. In fact, when analysing learners’ subtitles, Di Toro (2013) acknowledges that learners apply various subtitling strategies unconsciously.

Learners should also be made aware of the modality of transfers: from the oral to the written mode. The audiovisual text used for the subtitling activity differs from texts used in traditional translation tasks (§2.2.2). What is expressed monosemiotically in a written text is expressed in four channels - through dialogue, sounds, images and subtitles - in an AV text. Learners should take the interaction between these components into account when subtitling. Furthermore, subtitles can
be considered as additive since verbal information is added to the other elements (Gottlieb, 1992). Learners may take advantage of this ‘intersemiotic redundancy’ (Pedersen, 2005: 13). For instance, if something referred to in the audiovisual dialogue is clearly visible on the screen, a pronoun can be used in the subtitles to refer to it. For what concerns linguistic transfer, the language of TT should be grammatically correct and make use of punctuation. Both its digital nature and its time and space constraints make subtitling somehow similar to text messaging. It is therefore important to highlight that SMS (or textese) language (as defined by Cristal, 2008) has to be avoided in subtitles. As in any formal written text, correct punctuation is necessary.

2.4.2 Advantages and Limitations of Subtitling

Due to its nature as an AVT task, the main advantages of subtitling are those related to translation. Zojer (2009/§1.4.5.1) identified several advantages of translation in language teaching and learning. Translation is a cognitive tool for contrastive analysis between L1 and L2 which can prevent interference mistakes. It may be used effectively to present new vocabulary by allowing learners to fulfil their innate request for semantic representation in L1 and thus to prevent possible misunderstanding. Translation also forces learners to expand their linguistic range since avoidance strategies are not allowed - a text should be entirely understood to be translated. In this way, besides learning new vocabulary (Laufer & Hulstijn, 2001/§1.3.3), learners develop reading and comprehension strategies. Cultural elements also have to be identified and carefully considered when translating. In addition, translation enhances metalinguistic reflection and improves learners’ written competence in their own L1. Transferable skills are also acquired and translation, as a mediation activity, may assist learners in their personal as well as professional lives. The CEFR highlighted the importance of oral or written mediation, listing it as one of the language activities (together with production, reception and interaction) in which learners are involved when communicating.

\[\text{Other common conventions in subtitling are the use of the dash in a two-person dialogue to indicate who is speaking in a given subtitle and the use of italics when it is possible to hear a speaker who is not visible on the screen or when subtitling a song. A checklist containing this information (as in Figure 8) may be presented to the learners before subtitling.}\]
The same positive elements can also be extended to subtitling: learners are not only translating the ST into the TT but they are also watching, and listening to, L2 audiovisual input. The simultaneous involvement of acoustic and visual channels is considered to enhance language learning and help memory retention (§2.3.2).

Beyond this, a number of factors which differentiate subtitling from other types of translations can benefit language learning (Talaván, 2013). When translating for subtitling, learners must take into account the paralinguistic dimension of the AV text (images, gestures, etc.). Due to space and time constraints, literal translation is rarely possible, as word for word translation would exceed the number of characters and reading time allowed (§2.4.1). This condensation of the message then requires learners to focus on meaning and general content during the entire process. The subtitling task is therefore ‘less mechanic’ and forces learners to pay attention not only to the finished product but to the whole process. There are also other more general advantages to be considered in subtitling. It is a task with a concrete output which can be shared with teachers and peers. It is a motivating exercise which creates an atmosphere which promotes learning. Subtitling is a learner-centred task which can be carried out individually or in groups, thus potentially promoting both autonomous and cooperative learning. As a receptive and mediation activity, it fosters L2 listening comprehension and L1 or L2 writing (standard or reversed respectively). In addition, it helps develop transferable skills such as analytical ability, problem-solving and decision-making as well as digital literacy. Finally, subtitling can attract learners interested in cinema, translation and new multimedia technologies. The use of technology is central to subtitling and, in the case of captioning tools, like ClipFlair (§2.5.2), subtitling on a web platform also motivates learners who enjoy social networking.

Subtitling, much like translation, also presents some limitations. Even though previous translation experience is not required, learners should have a basic knowledge of the L2 studied to be able to perform the translation task. At the same time, even for low proficiency learners, simple subtitling exercises can be proposed with videos which contains adequate linguistic input. Alternatively, learners can be asked to subtitle only key words of the ST as well as to complete or order subtitles provided by the teacher. In the case of interlingual subtitling, on the other hand, teachers should be language professionals competent in the learners’ L1 as well as in
translation. Having said this, subtitling, as a form of AVT, can be easily learned through training.

Within a wider language learning context, it should be considered that L2 oral or written production is not automatically included in the subtitling task. Therefore teachers may want to integrate oral and written production before or after subtitling. A number of ‘micro-activities’ can be introduced into the subtitling process, such as note-taking, summarising parts of or the entire AV dialogue, extensive listening for oral or written gist and intensive listening for reporting specific details (Sokoli, 2006).

In addition, Talaván (2013) highlights the lack of ready to use materials. While projects like ClipFlair help to solve this issue for several target languages, teachers might have to prepare ‘ad hoc’ activities according to their needs, which can prove time consuming.

2.5 Subtitling and Second Language Acquisition

The integration of audiovisual material in the FL classroom beginning in the late 1980s led to a growing interest in the use of subtitles to assist learners in comprehension. The positive effects of interlingual and intralingual subtitled audiovisual material on SLA were investigated by many scholars, both in Europe and the United States, with regard to reading comprehension (Gant Guillory, 1998), listening comprehension (Danan, 2004; Caimi, 2006; Araújo, 2008, Talaván, 2010), oral production (Borrás & Lafayette, 1994; Araújo, 2008), grammar acquisition (Van Lommel, Laenen & d’Ydewalle, 2006) and vocabulary recognition and recall (Danan, 1992; Bird & Williams, 2002; Bravo, 2010). Subtitling as a pedagogical tool for language learning is a logical consequence of these studies. As Sokoli et al. (2011) highlight, “[t]he idea of asking learners to add or modify subtitles on a video emerged with the view to enlarge the range of exploitable activities” (220). Even though research on the use of subtitling is still limited, recent empirical studies have reported encouraging results on its use in the FL classroom.45 Standard interlingual

45The benefits of subtitling have also been recognised as being effective in translator training (Klerkx, 1998; Rundle, 2000; Neves, 2004; Incalcattera McLoughlin, 2009b; De Marco, 2011) but this aspect is beyond the scope of the present study.
subtitling is more widely studied while reversed subtitling has only recently started to gain scholarly attention (Talaván, 2013). A brief summary of research on subtitling in language learning can be found in Table 4 and will be further developed in §2.5.1. Finally, the potential of subtitling in language teaching and learning has also been recognised and supported by European institutions through their funding of projects as discussed in §2.5.2.

Table 4. Research on subtitling as a pedagogical tool.

<table>
<thead>
<tr>
<th>Research focus</th>
<th>Interlingual or standard subtitling (L2&gt;L1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening comprehension, vocabulary, L1 writing, punctuation skills, cultural-historical awareness and motivation</td>
<td>Williams and Thorne, 2000 (Welsh-English)</td>
</tr>
<tr>
<td>Subtitling tool</td>
<td>Hadzilacos et al., 2004; Sokoli, 2006; Sokoli et al., 2011</td>
</tr>
<tr>
<td>Idiomatic expression retention and recall</td>
<td>Bravo, 2008 (English-Portuguese)</td>
</tr>
<tr>
<td>Pragmatic awareness, vocabulary and syntax retention</td>
<td>Incalcaterra McLoughlin, 2009a (Italian-English)</td>
</tr>
<tr>
<td>Listening Comprehension</td>
<td>Talaván, 2010, 2011 (English-Spanish)</td>
</tr>
<tr>
<td>Theoretical framework, methodology-based subtitling model</td>
<td>Incalcaterra McLoughlin and Lertola, 2011 (Italian-English)</td>
</tr>
<tr>
<td>Intercultural education</td>
<td>Borghetti, 2011</td>
</tr>
</tbody>
</table>

2.5.1 Previous Research

The potential of subtitling in the FL classroom was anticipated by Díaz Cintas (1995; 1997; 2001). According to this scholar, subtitling represents a new and motivating exercise for language learners and, for this reason, it is important to encourage teachers to incorporate this task into their teaching routine. Subtitling can enhance vocabulary acquisition and cultural awareness in particular. Learners can also be involved in a critical reflection on the linguistic aspects of TV or film products and become acquainted with tools which pertain to the professional world, such as video and the PC, which they most probably will use in their future careers. Although the focus here is on language learning rather than training language professionals, this type of activity can help raise genuine interest in the AVT field among language learners. Two other researchers, Vermeulen (2003) and Wagener (2006) confirm the
potential of subtitling as a pedagogical tool. Vermeulen proposes subtitling as a motivating task for learners of Spanish as an FL thanks to the involvement of video and translation elements. While Wagener, examining the use of digital laboratories to develop independent learning skills, presents subtitling among the exploitable resources of digital video since both intralingual and interlingual subtitling can enhance learners’ writing skills.

The first empirical study on subtitling was carried out by Williams and Thorne in 2000. The longitudinal study involved university students of Welsh as a second language. The course consisted of a two-day intensive introduction in basic subtitling techniques at the beginning of the academic year, then group sessions were held weekly throughout two terms as well as one-to-one tutorial sessions and independent 3-4 hour study periods. The aim of the course was to provide learners with the overall principles of screen translation, linguistic and technical skills. The course was practical in nature and a series of 4-5 minute videos pertaining to 10 different genres of TV programmes had to be subtitled in L1 and synchronised to the L2 soundtrack. Even though learners encountered difficulties due to the wide vocabulary required to subtitle the vast range of programme genres (soap operas, drama, documentaries, plays, films, children’s programmes, satire, comedy and current affairs), they felt that their working vocabulary had noticeably increased. In addition, learners improved their listening and translation skills. Specifically, they had to interpret not only the language but also visual clues such as age, social background and paralinguistic elements. Since learners were required to convey the L2 message of different programme genres into L1, within the given space and time constraints, they had to select appropriate words and expressions which respected the style of the original while keeping with syntactical units and punctuation conventions. The subtitling exercise also benefitted learners’ L1 abilities which are often taken for granted in SLA courses. An unexpected result was that the subtitling task greatly motivated learners, who enjoyed the course and considered the activity as pleasure rather than work. Another unpredicted outcome was the more positive attitude learners started to have towards Welsh language television, some of them became aware of the variety of programmes available and expressed their intention to watch the entire programme relating to the subtitled clip, or even read the book in the case that it existed. In this way, motivation was enhanced and the Welsh
language seemed relevant to learners’ everyday life as well as to many areas of communication, rather than merely related to literature.

Within the framework of a substantial study on the use of subtitles in language learning, Bravo (2008) investigated the idiomatic expression retention and recall in EFL of 20 Portuguese undergraduate A2/B1 students through a subtitling activity. First, students were tested on their familiarity with a number of idiomatic expressions and results showed that these expressions were unknown to most of them. Second, students were exposed to the same idiomatic expressions in AV material with intralingual subtitles (L2+L2). Then, students were required to recognise these expressions in a post-viewing questionnaire with multiple choice answers. One week after the post-viewing questionnaire, students were asked to supply their own subtitles for the selected expressions using the LVS subtitling simulator (§2.5.2). Students did not have to watch the full AV segment again since the researcher had already spotted and pre-selected the idiomatic expressions as cues for the students to subtitle. Students did one practical session with LVS prior to the subtitling task using a sample activity in order to familiarise themselves with the software. However, technicalities of subtitling were reduced to a minimum since in and out times were set and students only had to subtitle the items under study. Less than a week after the subtitling activity, students filled out the same multiple choice questionnaire on the idiomatic expressions which showed their knowledge of these expressions had improved (they correctly used 9 out of 10 expressions on average). Finally, three weeks after the subtitling activity, students were provided with a list of paraphrases in Portuguese for each English idiomatic expression they had been exposed to and were required to select seven expressions of their choice from the list and produce a coherent written text in English, containing these expressions. In this way, students had the opportunity to use the newly-acquired English idioms. The production exercise had very positive results. On the level of word structure, the majority of the students (15 out of 20) managed to construct coherent and cohesive texts with a correct use of the seven idioms, while three students wrongly used one idiomatic expression and two students wrongly used two expressions. The subtitling activity thus highly promotes acquisition of idiomatic expressions. In addition, through repetition of the AV text, students were exposed to the meaning of idiomatic expressions in context and this can help fix these in their memory. An open response questionnaire on the activity showed that students felt a sense of accomplishment
which exceeded their expectations, they had become more aware of their language competence and subtitling had enhanced their motivation. In addition, students increased their awareness of cultural differences and lexical structures. Prior to the subtitling activity, students filled out the VARK learning style questionnaire (§1.3.4) which illustrated that students’ learning styles were mostly distributed over the visual, aural and kinaesthetic, with only a few reading/writing. Since the subtitling task combines aural, visual and written elements, with underlying kinaesthetic characteristics, Bravo concludes that the subtitling activity respected learners’ preferences.

A study conducted by Incalcaterra McLoughlin (2009a) investigated the development of pragmatic awareness in Irish university students of Italian as an FL. The 22 students involved had different levels of proficiency: 10 A1, 3 B1 (undergraduate) and 9 C1-C2 (postgraduate). The A1 students were equally divided into two groups, groups 1 and 2, and were given the same dialogue transcript to translate from L2 (Italian) into L1 (English). Group 1 was informed about the context of the dialogue and was required to translate the transcription without watching the video clip, whilst group 2 was introduced to LvS software and asked to watch the video and create subtitles using the transcription provided. Comparison of the two groups’ translations shows that group 2 attempted to move away from literal translation and demonstrated a certain degree of pragmatic awareness compared to group 1. Although considerably more time consuming, subtitling proved to be a motivating exercise for students thanks to “the ‘fun’ element and the goal of arriving at a meaningful, controllable output” (ibid.: 232). Three weeks later, when recording some questions for an interview, students from group 2 seemed to better recall lexical elements they had encountered in the AV dialogue and to use more correct syntax. Due to their small number, the B1 students worked as one group. After watching a scene of an Italian movie, these students were provided with the dialogue transcript and were required to translate it into English. When the translation was completed they were introduced to LvS software and asked to convert the translation into subtitles to match with the video. Incalcaterra McLoughlin highlights how the passage from translation into subtitles can help raise awareness of underlying linguistic patterns and the semantic value of paralinguistic features, and it is thus preferable to moving from listening to subtitling. At the end of the subtitling process, students commented on the differences between their two versions: translation and
subtitles. Besides avoiding literal translation, when subtitling, students seemed to become more aware of pragmatic features of the text they were translating.

Contrary to these undergraduate students who were learning the language, postgraduate students were trained as translators and interpreters and their level was C1-C2. The 7 students involved were divided into two groups of 4 and 3 respectively. Students used LvS as an introduction to subtitling and they worked with DivXLand Media Subtitler, a professional-like subtitling software. Rather than developing pragmatic awareness, the aim of the course was the development of translation skills in advanced learners. Before translating and then subtitling, students were required to analyse the dialogue transcript in order to identify potential difficulties and encourage reflection on the ST. Thanks to time and space constraints of subtitles, the students could focus on TT which they had to manipulate while correctly conveying the message. Students engaged in discussion on the extent to which sentences can be manipulated without altering or losing the original message. Subtitling can in this way enhance translation skills since it forces students to concentrate on the core semantic unit of the message rather than single sentences.

Talaván (2010; 2011) investigated the effects of subtitling as a task and subtitles as a support to listening comprehension skills in a communicative task-based learning context. The quasi-experimental study, based on two preliminary studies, availed itself of both qualitative and quantitative techniques and involved 50 Spanish adult learners of English as an FL (A2 level). Learners were randomly divided in two groups: experimental and control groups. Each group had the same number of participants. Both groups were exposed to AV material with intralingual subtitles (L2+L2), but only the experimental group carried out the subtitling activity. Two short video clips (approximately two-minute) of a popular sitcom were selected for the experiment on the basis of learners’ level and interest, self-containment of the communicative situation, visual-oral correlation and the presence of humorous elements. After a preliminary warm up, the first video clip was shown to all groups twice with bimodal subtitles. Learners were asked to take notes during the two viewings, in order to test listening comprehension and, after the second viewing, they had to write a summary of the main ideas of the sequence in their L1. The summary was assessed in terms of ‘idea units’ which learners were able to understand. Once the summary was concluded, the experimental group carried out the subtitling task related to the first video clip. Learners were required to subtitle the
video individually in their L1. One of the subtitled video clips was randomly chosen and viewed by the whole group to see the finished product. In the meantime, the control group discussed the first video clip and their comprehension of it paying attention to difficult lexical items. Then learners in the control group watched the clip without subtitles three more times while continuing their discussion. Group work was designed in this way in order to ensure that the only difference between the groups was the subtitling task performed by the experimental group. The second video clip, which was related to the first clip in terms of characters and contexts, was shown twice to both groups with intralingual subtitles. The groups repeated the same listening comprehension tests: note taking and summary in L1. After the tests, as a post-viewing activity, a discussion similar to the one previously carried out by the control group was undertaken by all groups. Finally, all learners filled out a self-completion questionnaire containing closed and open questions. Statistical analysis of the listening comprehension test results confirm the value of subtitles as a support and the subtitling task as an effective strategy for listening comprehension. In addition, the analysis of qualitative and quantitative data allows for triangulation which provides a higher degree of reliability to the conclusions of the study.

In order to carry out subtitling activities, which can be effectively employed for the development of different skills in the FL classroom, Incalcaterra McLoughlin and Lertola (2011) propose a methodology-based subtitling model and provide a practical example. After a preparatory stage for teachers (which includes selection and preparation of the AV material, transcription of the AV dialogue and familiarisation with the software), the methodology-based subtitling model is developed in five sequential phases, based on the UD model (§1.5.2): presentation of the activity (motivation), viewing of the video (global perception), analytical comprehension (analysis), translation-subtitling (synthesis) and considerations on the subtitling process and subtitled clips (reflection). The subtitling modules designed for the present research project follow this five-phase operational model (§4.2 and §4.3).

Borghetti (2011), who also articulates the subtitling process in five steps, suggests using subtitling specifically for enhancing learners’ intercultural education. Learning an FL should provide learners with the opportunity to better understand a foreign culture and develop intercultural knowledge. To this purpose, subtitling is particularly suitable since it requires learners to interpret an audiovisual FL text
which is rich at the linguistic and cultural levels. The five steps of the subtitling process, as described by Borghetti, are presentation and motivation, viewing, research, timing and translating, and editing. First learners are presented with the activity, then, they watch the sequence to be subtitled and start an exploration of the ST language and culture. In order to carry out the subtitling process, learners should be able to watch the video and the culture represented “through both internal and estranged lenses” (ibid.: 121). This new perspective can be achieved with the help of teachers and peers or by using other tools such as internet, dictionaries and other videos. Subtitling should be done cooperatively with other peers and, at the end of the process, learners should reflect on the entire educational experience. Borghetti considers interlingual subtitles the most appropriate type of subtitles for activities aimed at promoting intercultural learning, given the presence of two languages and cultures. However, reversed subtitling can also be considered: a video in the learners’ native language can be subtitled in an L2. One risk here could be the lack of estrangement since cultural elements in the video would appear neutral to the learners, who may not consider those elements carefully when translating in L2. Borghetti’s proposal is an exploratory review but has great potential for developing intercultural competence in the FL classroom.

2.5.2 Projects Funded by the European Union

In 2006 the European Commission, within the Socrates Programme, LINGUA 2 (Development of Language Tools and Materials), funded the Learning via Subtitles46 (LeViS) project aimed at promoting subtitling practice as a pedagogical tool in language learning. The LeViS project was carried out from 2006 to 2008 by a consortium of seven European universities: Research Academic Computer Technology Institute (Greece), Transilvania University of Brasov (Rumania), University of the Algarve (Portugal), Roehampton University (UK), University of Pecs (Hungary) and Universidad Autónoma de Barcelona (Spain), and coordinated by the Hellenic Open University (Greece). The LeViS project developed a range of reusable task-based activities, in different languages, which expose learners to

contextualised language input and cultural elements. These activities promote a new ‘hands-on’ approach to multimedia where multimedia represents the central aspect of an activity and not a marginal feature (Hadzilacos et al., 2004). LvS is an open-source subtitling simulator specifically designed for language learning within the LeViS project (Figure 9). LvS is employed as subtitling software in the experimental studies of the present research (§4.2 and §4.3).

Figure 9. LvS screenshot.

The subtitling activities developed with LvS require learners to create and add subtitles to audiovisual material. Learners are therefore engaged in active listening and writing tasks while developing real-life communication awareness. LvS is very flexible as it can be used in the classroom or in distance learning as well as for tutored or autonomous learning. Thanks to the software’s user-friendly interface, different activities require learners to carry out a variety of tasks such as putting a jumbled sequence of subtitles in the correct order, filling in blank subtitles or transcribing the original text and then translating it. The interface is divided into four main areas: the video player area (top left); the subtitle editor area (bottom left); the document area (top right) and the notes area (bottom right). The video player area allows learners to play, pause, stop, rewind or fast forward the video with or without subtitles by clicking on the icon provided. Below these commands, in the subtitle editor area, there are the icons to set the subtitle start and end time as well those for
adding and delete subtitles. Activities can require learners to add their own subtitles and timing or can provide learners with in and out times. The subtitles editor area presents four columns (start time, end time, duration and subtitle) to edit and manage the subtitles and two columns for communication between teachers and learners. Specific instructions for LvS communication and, in particular, for appropriate use of the available icons have been designed within the experimental courses of the present study (§4.2.3). Learners can insert the text in the first and second line of the subtitles. The maximum number of subtitles’ characters is calculated by the software using an algorithm, if learners exceed this length (according to the time constraint established by the software developer) the text of the subtitle becomes red and has to be reduced. However, the text does not appear red on the screen and it can be saved anyway. Duration time is set automatically when the subtitle is added (2 seconds).

The document area (top right) allows the tutor to provide extra documentation (text files, presentations, etc.) useful for the activity. In the notes area it is possible to leave general notes or comments which can be used by teacher and learners to exchange feedback. Comments on individual subtitles can be typed in the subtitle editor area when selecting an icon in the teacher or student’s column (Sokoli, 2006; Bravo, 2008).

Sokoli et al. (2011) present the positive outcomes of the LeViS project obtained by a final evaluation of the project through questionnaires, available in the users’ native languages, collected from the six countries (Hungary, Romania, UK, Portugal, Greece and Spain) where classroom implementation took place. Eight different languages were taught: Chinese, English, Greek, Hungarian, Italian, Portuguese, Romanian and Spanish. A total of 104 learners at university level (with the exception of a vocational school in Romania) and 12 teachers answered the questionnaires. In order to evaluate the project, the opinion of a number of experts together with teachers and learners involved in the implementation phase is considered regarding some specific issues, including the usability of the LvS software tested according to criteria such as accuracy and reliability, conformity with the FL learning approach, documentation available, ease of use, functionality and interoperability. These results exposed the usability faults to be corrected in the final version of the software. Most of the learners and all teachers claim that the software is a useful and appropriate tool for FL learning and teaching. In general the advantages mentioned of the LvS software are as follows:
• it is life-like and productive;
• it provides learners with opportunities for creative language use;
• it promotes collaborative and individual learning;
• it combines audio, video and text;
• it allows for the use of video which is suitable for the development of different skills;
• it has an interesting interface;
• it is motivating, multicultural, interdisciplinary, well-structured and entertaining;
• it is versatile as it allows for different types of activities.

However, the teachers state that there are also some disadvantages of the LvS software. Activity preparation is time-consuming, some computer skills are necessary, activities might be interrupted for different reasons since they are technology-dependent. Many suggestions for software improvements are also provided. The main suggestions are as follows: add a spell check function, improve cueing techniques, add text formatting tools, include dictionaries, make a tool available for comparison among peers’ subtitles, make possible the use of two or more video clips simultaneously, make a language submenu available in the option menu, add splitter handles and tooltips to describe drag and double-click actions, the option to resize the interface areas should be clearer, improve the ‘save as’ function, consider multilingual issues (such as the environment available in many languages) and also give the option to use the software online rather than installing it on each computer. Before the end of the project, some of the issues were addressed: LvS is now available in 6 languages, it has tooltips and some technical issues have also been solved.

Regarding users’ opinions of the activities, a very high percentages of learners consider the LvS activities very or quite interesting as well as fun and entertaining. Notably, most of the respondents express that they would like to have LvS activities in their regular FL classes. All teachers surveyed would use LvS activities in their language courses apart from one who considers this approach more suitable for individual learning. Even though all teachers would consider developing their own activities, in order to use LvS regularly an incentive could be the availability of ready-made activities and ready-made material to use for activity
creation. Some of the suggestions made for improving LvS activities are using easier dialogues for beginner levels, increasing activity difficulty for advanced learners, requiring learners to perform activities both individually and in groups, increasing listening and comprehension activities, reducing the activity duration, providing tasks which allow for independent use of the software and thus make the learners more autonomous, such as tasks where the learners have to cue the subtitles.

The LeViS approach also proves to be well-accepted by learners and teachers. According to 70% of the teachers, learners’ overall participation is higher than in other classes. In addition, learners’ IT skills are better than what teachers expected. Besides achieving their goals, the teachers acknowledge that the subtitling activity is a pleasant change and has several benefits. It helps learners distinguish between oral and written speech, focus on new and contextualised structures, develop synthesis skills and work with different media in the same learning environment. One of the most important findings of the project evaluation is that learners with different L1s, dissimilar L2 language competence and from diverse backgrounds benefit from the LeViS activity and find LvS a useful tool for language learning. Furthermore, the learners show a keen interest in the subtitling activity and, as the teachers confirm, they are highly motivated.

The European Commission also promoted a more general project, within the Leonardo da Vinci Programme, eCoLoMedia47 (2007-2009), which aims at developing shareable and customisable resources for vocational training in multimedia eContent localisation. eCoLoMedia provides trainers and teachers of professional translation as well as professional bodies and industry with the tools for training students in multimedia eContent localisation. The eCoLoMedia project is based on two previous projects, eCoLoRe and eCoLoTrain,48 which enable a large numbers of educators, including those at university level, to familiarise themselves and their students with localisation and translation tools. On the eCoLoMedia project’s website, multimedia localisation activities are offered and presented in four modules: audio (voice-over), video, Flash and games (video and computer games). The video module is further divided into four sub-modules: captioning (SDH),

subtitling, voice-over and dubbing. Every module offers a detailed description of each technique and exercises in different European languages. Training material is available in six languages: English, French, German, Polish, Romanian and Spanish. Even though the activities proposed are aimed at training professional translators, many of them can be retargeted towards language learners, and the information provided can be also used in an educational context to explain different localisation practices.

Sub2Learn is a website developed in 2010 with the support of NAIRTL (National Academy for Integrating Research, Learning and Teaching) in Ireland and offers audiovisual material and subtitling activities for FL learners of English, French and Italian. Activities are targeted to B1-C2 language learners assisted by a teacher in the classroom or in distance learning contexts. The website aims to encourage and facilitate the integration of subtitling in the FL curriculum and is designed as an open-ended collaborative project. Besides providing an extensive bibliography on the topic, the website makes useful training tutorials available in different languages and suggests a range of subtitling software.

ClipFlair is a recently funded project under the EU Lifelong Learning Programme (2011-2014). The project is based on the LeViS experience and some of the LeViS partners form part of the consortium of ten Universities: Universitat Pompeu Fabra (Spain), Computer Technology Institute (Greece), Universitat Autònoma de Barcelona (Spain), Imperial College London (UK), Universitatea ”Babeş-Bolyai” (Romania), Universidad de Deusto (Spain), Taillinn University (Estonia), University of Warsaw (Polonia), Universidade do Algarve (Portugal) and National University of Ireland, Galway (Ireland). There are also a number of institutions which are associate partners of the project. ClipFlair is an innovative project which aims at promoting language learning through interactive clip captioning (subtitling) and revoicing (audio description and dubbing). Hence,

52Gaelscoil Mhic Amhlaigh: Elementary school (Galway, Ireland), IES Esteve Terradas i Illa: Secondary School (Barcelona, Spain), IES Benaguasil: Secondary School (Valencia, Spain), Instituto Formación Profesional Juan Bosco: Vocational training institute, secondary level (Albacete, Spain), Escuela Oficial de Idiomas de Huelva: Adult education provider (Huelva, Spain), Escuela Oficial de Idiomas de Barcelona: Adult education provider (Barcelona, Spain), “Oxfordon” Language School (Bydgoszcz, Poland), Universidad Nacional de Educación a Distancia (Madrid, Spain), Università degli studi di Pavia (Pavia, Italy) and Kazimierz Wielki University (Bydgoszcz, Poland).
besides subtitling, teachers and learners have a wider range of activities at their disposal. The ClipFlair web platform consists of the ClipFlair Studio and the ClipFlair Social Network. Through the ClipFlair Studio, users can create, upload and access revoicing and captioning activities. The ClipFlair Social Network supports social-networking (blogs, forum and wikis) which enables users to find learning material, share their work, form groups, cooperate, interact and rate the activities. Users can access a library of resources containing over 300 activities for all CEFR levels in 15 languages, accompanied by corresponding lesson plans and relevant metadata. ClipFlair activities are designed to suit different learning contexts (classroom, distance or self-learning) and a wide audience (university, secondary schools and adult education teachers and learners). In addition, the ClipFlair platform is extremely versatile since, unlike LvS, it can be accessed online and there is no software to install.

Chapter III will offer an overview of research into Second Language Vocabulary Acquisition (SLVA) and its rapid evolution over the past twenty years, paying particular attention to research on vocabulary in the field of Italian as a Second Language. In order to provide a theoretical framework for this thesis, various definitions of vocabulary knowledge will be discussed together with their components, implications for language learning and teaching, as well as related instruments for vocabulary testing.
Chapter III - Vocabulary

3.1 Introduction

The chapter has a five-part structure. The first part will look at the research on SLVA, focusing on work from the early 1990s onwards (§3.2). Development in vocabulary research on ISL started as early as 2000, but before that date several corpora of native Italian speakers were created and served as a starting point for the growth of Italian learner corpora. The main corpora of native Italian speakers will be surveyed alongside Italian learner corpora, since it is generally agreed that the use of corpora can greatly contribute to SLA research and practice (§3.2.1).

The focus of interest of this research project is the depth of vocabulary knowledge (i.e. quality of word knowledge) rather than its breadth (i.e. number of words known). In the second section therefore vocabulary knowledge and its various definitions according to both the dimension and developmental approaches will be presented (§3.3). Relevant literature about what ‘knowing a word’ actually means will be reviewed to arrive at the selection of Nation’s (2001) framework as the methodological underpinning of the present study. This framework allows for the isolation of meaning as a single aspect in vocabulary knowledge (§3.3.2). An important dichotomous distinction within vocabulary knowledge - productive vs. receptive - will also be discussed as it pertains to any aspect of vocabulary knowledge (§3.3.3).

The third part will then focus on vocabulary learning (§3.4) and factors which influence vocabulary acquisition, including the role of L1 in the acquisition process (§3.4.1) and the importance of mental lexicon (§3.4.2). The fourth segment will give an overview of vocabulary teaching methodology, focusing on ISL vocabulary teaching (§3.5). Approaches teachers can adopt to select vocabulary according to different learner types and course goals will also be presented and discussed.

The final part will examine the tools available for assessing meaning vocabulary knowledge (§3.6). This review of testing tools serves to select those which are appropriate for the experimental studies carried out for this research: vocabulary depth tests, which measure knowledge of the four dimensions of word meaning (productive and receptive recall, productive and receptive recognition).
3.2 Second Language Vocabulary Acquisition

Interest in vocabulary learning and teaching has increased considerably since the 1980s when vocabulary acquisition was a neglected aspect of language learning (Meara, 1980). This is reflected in the many scholarly articles and books published in the last twenty years which focus on different aspects of vocabulary research and, more specifically, on SLVA (Nation, 2001; Bogaards & Laufer, 2004; Meara, 2009; Schmitt, 2010). To this regard, Nation (2011: 530) states that the “situation has changed strikingly, with over 30% of the research on L1 and L2 vocabulary learning in the last 120 years occurring in the last 12 years”.

Similarly, research on vocabulary in ISL has also rapidly evolved in just a few years, since in 2003 Barki et al. (60) stated that “[s]till today, the most evident fact regarding [the study of] vocabulary acquisition seems to be a lack of scholarship”. In Italy, research on vocabulary acquisition in the context of Italian L2 seems to have lagged behind international trends. As late as 2010, in his detailed review of research on applied linguistics and language teaching of Italian L2 from 2000 to 2008 as published in peer-reviewed articles, Macaro noted that since the year 2000 very limited interest has been given to the acquisition of Italian language vocabulary.

However, the organisation of four international conferences on the topic in Italy in the last decade - three of them in the same year - clearly points to an increasing interest in vocabulary acquisition on the part of Italian researchers: XIV Convegno Nazionale GISCEL - Lessico e apprendimenti was organised by the Università per Straniere di Siena in April 2006 (Barni et al. 2008); the Università degli Studi di Bergamo hosted an international conference called Competenze lessicali e discorsive nell’acquisizione di lingue seconde in June 2006 (Bernini et al. 2008); the 2006 conference Prospettive nello studio del lessico italiano (Cresti, 2008); the 2006 conference Prospettive nello studio del lessico italiano (Cresti,

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53Research on vocabulary acquisition started in the 1980s, however the most intense period of studies can be found from the 1990s onwards, hence the focus here will be on this later period. For a detailed bibliography of earlier publications see Singleton (1999).
55Author’s translation.
56Macaro’s systematic review only included papers dealing with Italian L2 written in English, Italian or French, the author specified that which he did not take account of L2 Italian teaching in Italy in general. Articles were only considered if published in major national and international journals listed in the databases he selected for his investigation. Doctoral dissertations were also examined, although Masters-level dissertations were excluded as they are rarely peer-reviewed.
organised by SILFI (Società Internazionale di Linguistica e Filologia Italiana); L’acquisizione del lessico nell’apprendimento dell’italiano L2 was held by ILSA (Insegnanti di italiano lingua seconda associati) in Florence in November 2010 (Jafrancesco, 2011). All of these conference proceedings contribute to increasing the relatively scarce literature in this area of research, while further relevant publications on the topic include a few recent books and edited volumes (Cardona, 2004; De Mauro & Chiari, 2005) as well as articles and chapters in edited books (Lo Duca 2007; Pichiassi, 2007; Villarini, 2008, 2010).

3.2.1 Italian and Learner Corpora in Vocabulary Teaching

With the first appearance of electronic corpora in the 1960s, linguists recognised their importance for language research and soon after teachers also began showing interest in corpus linguistics. Corpora, systematic computerized collections of spoken and written texts by native speakers, and, more recently, learner corpora have been a valuable resource in language teaching. Corpora are particularly useful for vocabulary teaching, as they indicate frequent and typical language according to learner levels and course objectives, and therefore help select teaching material which is more authentic and up-to-date with contemporary usage. In general, learner corpora (LC) are defined as “electronic collections of spoken or written texts produced by foreign or second language learners in a variety of language settings” (Granger et al. 2002: VII). LC can help to investigate the characteristics of learner language. LC research is fast growing and it is a field with great potential, since it can contribute to bridging the gap between SLA investigation and teaching practice.

57 The proceedings of this conference include eighty-eight contributions on the study of vocabulary. Among the twelve thematic sections one was devoted to SLVA, and produced a total of five papers. Participants’ papers are available at: http://lablita.dit.unifi.it/app/extra/index.html. Last accessed 26 April 2013.

58 Over the past twenty years, scholars within public and private institutions have conducted extensive research towards the development of ISL certificates (Vedovelli, 2002a). Three Italian Universities and one association promoting the Italian language in the world, issue four different certificates: CILS (Certificazione Italiano Lingua Straniera) by the Università per Stranieri di Siena; CELI (Certificati di Lingua Italiana) by the Università per Stranieri di Perugia; IT (Italiano) by the Università di Roma Tre; PLIDA (Progetto Lingua Italiana Dante Alighieri) by the Società Dante Alighieri. All these certificates evaluate learners in ISL according to the six levels established by the CEFR (§1.2.2) and they are all recognised by the Italian Ministry of Foreign Affairs. However, unlike similar ESL language proficiency tests, vocabulary is not tested in a separate section but rather within the listening and reading comprehension sections.
(Andorno & Rastelli, 2009; Römer, 2011). Nowadays, small and large corpora are also available for easy consultation on and off-line thanks to user-friendly software.

Research on Italian corpora started in the 1970s and the first major project was the *Lessico italiano di frequenza* (LIF) (Bortolini et al. 1972), a frequency list from texts produced by native Italian speakers based on 500,000 tokens\(^{59}\) of Italian language taken from five types of text (theatre, novels, cinema, magazines and school books) between 1947 and 1968. In 1977, another frequency list, partially based on the LIF, called the *Vocabolario fondamentale della lingua italiana*, was created (Mastidoro & Amizzoni, 1993). The LIF was also used for compiling the *Vocabolario di base* (VdB)\(^ {60}\) which is comprised of Italian core vocabulary widely used in most communicative situations. The first edition of the VdB was published in 1980 (De Mauro), but it has been revised many times in the last thirty years by its author and his collaborators, and it still is one of the most valuable resources for language teaching. The Italian VdB corpora is of particular interest here since it was employed in this research for the selection of the target words to be used in the experimental studies carried out for this study (§4.2 and §4.3). The VdB consists of about 7,000 words, and it is subdivided into three groups or frequency levels: Vocaboli fondamentali (VF), Vocaboli di alto uso (VAU) and Vocaboli di alta disponibilità (VAD).\(^{61}\)

The first group, VF, consists of the 2,000 most frequently used function and content words (prepositions, articles, conjunctions, adverbs and auxiliary verbs). This group covers 95% of any Italian written or spoken text, and 80% of specialised texts. The second group, VAU, is comprised of the approximately 3,000 word most frequently used immediately after the VF. The third group, VAD, is made up of 2,300 words generally not found in written texts and less used in spoken language. However, these terms are all well-known to most native speakers as they refer to common everyday situations such as ambulanza (ambulance) or parabrezza (windscreen), etc. (De Mauro, 1980; Lorenzetti, 2002, Corda & Marello, 2004).

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\(^{59}\)Tokens refer to the number of running words in a given text (see §3.3).


\(^{61}\)For the purpose of his study, original Italian terminology has been kept. However, in English, Vocaboli fondamentali (VF), Vocaboli di alto uso (VAU) and Vocaboli di alta disponibilità (VAD) correspond to fundamental lexicon, highly used lexicon and high availability lexicon respectively (Gallina, 2010).
Èulogos CENSOR, a computerised version of VdB, can be used for analyzing the readability of a text using the Gulpease Index and comparing the words in the text to those of the VdB. Bearing in mind that the length of words and sentences influences comprehension of a text, the readability index can reveal how easy a text is to understand. This can help teachers to select and, if necessary, modify texts in order to improve its comprehension by learners.

A few years after the VdB was published, De Mauro et al. (1993) presented the *Lessico di frequenza dell’italiano parlato* (LIP), the first corpus of Italian spoken by native speakers. This collection of spoken texts was recorded in four different cities (Milan, Florence, Rome and Naples) between 1990 and 1992 for a total of 469 texts containing approximately 490,000 words.

In the late 1990s, however, “the objective of having in use a large corpus, allowing global analyses of the complex reality of spoken Italian and, above all, representative of the variational aspects, remained unattended” (Savy & Cutugno, 2009). In order to bridge this gap, Federico Albano Leoni coordinated the CLIPS (*Corpora e Lessici di Italiano Parlato e Scritto*) project which was funded by the Italian Ministry of Education, University and Research. CLIPS was developed during the 1999-2004 period and it has been available on-line since 2007. It contains 100 hours of text spoken by (an equal number of) native male and female speakers. Data was collected in different cities throughout Italy in order to ensure diatopic variation (Bari, Bergamo, Bologna, Cagliari, Catanzaro, Florence, Genoa, Lecce, Milan, Naples, Palermo, Parma, Perugia, Rome and Venice). To ensure diaphasic variation, the spoken material was further divided into five sub-corpora: telephonic, conversational, broadcasts (radio and television), and readings by non-professional and professional readers (dubbers). All of these corpora were collected from spoken and/or written texts produced by Italian native speakers. Although a number of

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63 The Gulpease Index is a readability formula developed for the Italian language.
64 The corpus is available for consultation on Banca Dati dell’Italiano Parlato: http://badip.unigrat.at/. Last accessed 26 April 2013.
66 Other spoken language corpora include: Archivio del Parlato Italiano (API), Corpus di Italiano Trasmesso (CIT), Laboratorio Linguistico del Dipartimento di Italianistica dell’Università di Firenze - Corpus di italiano parlato (LABLITA), Lessico di frequenza dell’italiano radiofonico (LIR). While written language corpora are the following: Corpus di italiano scritto contemporaneo (CORIS/CODIS), Corpus e lessico di frequenza dell’italiano scritto (COLFIS) and La Repubblica Corpus.
Italian learner corpora is available (Table 5), further investigation and creation of learner corpora is still needed.

Table 5. Summary of Italian learner corpora.

<table>
<thead>
<tr>
<th>Name</th>
<th>Data type</th>
<th>Publications</th>
<th>Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banca Dati di italiano L2. Progetto di Pavia.</td>
<td>spoken</td>
<td>Andorno, 2001</td>
<td>Università di Pavia in collaboration with eight Italian Universities</td>
</tr>
<tr>
<td>Italiano scritto da americani (ISA)</td>
<td>written</td>
<td>Rastelli, 2006; Rosi, 2009</td>
<td>Università di Pavia</td>
</tr>
<tr>
<td>Varietà di Apprendimento della Lingua Italiana: Corpus Online (VALICO)</td>
<td>writing</td>
<td>Corino and Marello, 2009</td>
<td>Università di Torino</td>
</tr>
<tr>
<td>Corpus Parlato di Italiano L2</td>
<td>spoken</td>
<td>Atzori et al., 2009</td>
<td>Università per Stranieri di Perugia</td>
</tr>
<tr>
<td>Lessico italiano parlato da stranieri (LIPS)</td>
<td>spoken</td>
<td>Barni and Gallina 2008, 2009; Gallina, 2010</td>
<td>Università per Stranieri di Siena</td>
</tr>
<tr>
<td>Archivio Digitale di Italiano L2 (ADIL2)</td>
<td>spoken and written</td>
<td>Palermo, 2009</td>
<td>Università per Stranieri di Siena</td>
</tr>
<tr>
<td>Corpus della Certificazione IT (Co.Cer.It)</td>
<td>spoken</td>
<td>Ambrosio and Bonvino, 2009</td>
<td>Università di Roma Tre</td>
</tr>
</tbody>
</table>

One of the first ISL corpora created was Banca Dati di italiano L2. Progetto di Pavia (Andorno, 2001). This large-scale project was coordinated by the Università di Pavia in collaboration with eight other Italian universities. The corpus contains 120 hours of spoken data, elicited by means of interviews with immigrants living in Italy between 1985 and 2000. Italiano scritto da americani (ISA) is a corpus of short Italian essays written by three hundred American university students during their study abroad period in Milan between 2000 and 2003 (Rastelli, 2006). The type of annotation used allows to distinguish between what learners are expected to know in the target language and what they can actually produce. Thus, non-target forms are not considered as errors but rather as “internal structures of the interlanguage system” (Rosi, 2009: 65).

The Varietà di Apprendimento della Lingua Italiana: Corpus Online (VALICO)\(^67\) was created in 2003 by a research group from the Università di Torino with the intention of collecting written material from Italian L2 learners of different languages.

ages and L1s studying in various contexts. The entire collection consists of 3,000 L2 learners’ written texts sent in by teachers from all over the world, and the main corpus was named the GRANVALICO. After arriving at an equivalent number of written texts from different languages the sub-corpus (balancing), VALICO contained 10,000 tokens collected from French, English, Spanish, Japanese, Chinese and Arabic ISL students, and 5,000 tokens from ISL learners who were native speakers of Serbo-Croatian, Hungarian, Romanian and Portuguese. All data was elicited through the same task and text typology (Corino & Marello, 2009).

Corpus Parlato di Italiano L2\(^{68}\) contains the transcription of spoken data collected by the Osservatorio sull’italiano di stranieri e sull’italiano all’estero of the Università per Stranieri di Perugia; the data was elicited through interactive descriptive and narrative tasks which were carried out by 50 English, German and Japanese native speakers (Atzori et al., 2009).

The corpus Lessico italiano parlato da stranieri (LIPS) was drawn from the oral proficiency tests carried out for CILS certificate of the Università per Stranieri di Siena and is similar to the corpora created from IELTS and ESOL proficiency tests for ESL. The LIPS corpus is the largest ISL learner corpora of the Italian spoken language to date. It consists of 1500 oral production exams carried out by non-native speakers studying Italian in Italy and abroad who completed CILS exams levels A1-C2 between 1993 and 2006, for a total of 100 hours of spoken data and 700,000 tokens (Vedovelli 2006; Barni & Gallina 2008, 2009; Gallina, 2010).

It is highly useful from a theoretical perspective to compare the LIPS corpus with the LIP and the VdB, in order to find quantitative and qualitative differences and similarities between standard use of the spoken language by native speakers and the language spoken by ISL learners. In addition, ISL acquisition models can be compared to the real lexical usage of L2 learners in order to track the lexical acquisition process. One of the practical aims of the LIPS corpus is to contribute to the ongoing project of an Italian Language Dictionary for Foreigners (Dizionario di italiano per stranieri). The LIPS corpus can also serve as a useful instrument for ISL teachers when designing syllabi, selecting textbooks, creating and validating tests (Barni & Gallina, 2009).

When analyzing a sub-corpus of the LIPS, Gallina (2010: 16) observes very similar results to those she obtains from the entire corpus, and indicates some general trends in the development of vocabulary knowledge:

The lexical use of non-native speakers reflects the lexical habits and the lexical tendencies of native speakers. The vocabulary of non-native speakers is quite close to the lexicon of native speakers, especially when observing the most frequently used words. The most frequently used words in the native input are the words learned earlier, at the beginner levels.

Interestingly, Gallina finds slight differences between learners who study Italian in Italy and those who study it outside the country. Being exposed to input from native speakers, candidates who study Italian in Italy demonstrate a wider lexical variety compared to their counterparts abroad. In addition, learners studying Italian outside of Italy tend to deviate more from standard Italian as they use foreign words and interlanguage expressions. Regarding lexical density, she analyzes the distribution of content and function words in each proficiency level in the two learning contexts (inside and outside of Italy) and finds analogous results. Lexical density appears to be greater and consistently increasing for ISL learners in Italy, as far as content and function words, for levels A1 to B2. However, it decreases for the more advanced C1 and C2 levels. Gallina points out that the drop in the progress of acquisition of content words for higher proficiency levels might indicate that these learners can use function words more appropriately. Hence, the qualitative aspect of word knowledge should be more carefully considered at more advanced levels, but this also implies that vocabulary size measurement is not adequate for distinguishing beginner and intermediate learners from proficient learners.

Of course language learning input greatly influences the sequence of acquisition of function and content words. Function words are usually presented at the beginning of the learning process and they occur frequently in the language input, thus students tend to learn them in a quite stable way. Function words also belong to a closed word class, i.e. they do not change. On the other hand, content words are large in number and belong to an open class, and they are encountered throughout the learning process. Similar to native speakers who never stop learning new words in their own language, L2 learners can always come across new L2 content words.

Gallina measures lexical richness, and her analysis reveals that both in the sub-corpus and in the LIPS there are more nouns than verbs. Perhaps this is because,
in general, L2 learners tend to learn nouns first and then verbs, as happens in the L1 acquisition process. When comparing the LIPS with the LIP, Gallina (ibid.: 14) finds that the top words in the frequency lists have a lot in common: “the presence of high frequency nouns and verbs with very general meaning, which are part of the Italian core vocabulary, many words and expressions typical of the spoken language such as interjections and other words like *sì* (yes), no (*no*)”. This is particularly interesting because it shows that the lexical richness of ISL learners in terms of high frequency words is not very different from that of native speakers.

Gallina then compares each proficiency level and learning context of the LIPS with the VdB. In general, learners studying Italian in Italy use more words included in the VdB compared to those studying outside Italy, and these words are used frequently at beginner levels (A1-A2). The use of these words decreases at intermediate levels (B1-B2) and increases again at advanced levels (C1-C2). When considering the three sub-groups of the VdB (VF, VAU and VAD) the largest number of words belongs to VF followed by VAU and VAD. The results concerning learning contexts and word frequency shows very few differences, but quite an irregular distribution among levels of proficiency is found.

Learners studying Italian in Italy have a better input in terms of quality and quantity, as confirmed in Gallina’s study. In order to reduce the disadvantage of learners studying Italian outside of the Italian context, it is advisable to expose them to language input similar to that which they would be exposed to in Italy. Audiovisual material can effectively serve this purpose since AV dialogues contain linguistic features similar to those of spontaneous conversation (§2.2.2).

The Università per Stranieri di Siena also produced a LC called the *Archivio Digitale di Italiano L2* (ADIL2), a collection of spoken and written data collected from 1126 informants of different proficiency levels, L1s and ages, who studied Italian at that university between 1997 and 2004 (Palermo, 2009). The project was funded by the Italian Ministry of Education, University and Research. The entire corpus contains 423,000 tokens, including 1168 written and 117 oral texts for a total of 37 hours of recorded material.

Another LC drawn from the proficiency tests of an ISL certificate is the Co.Cer.It (*Corpus della Certificazione IT*), based on IT certificate spoken data

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collected from Università di Roma Tre candidates of B1 (ele.IT) and C2 (IT) levels, who took the exam (both in Italy and abroad) between 2005 and 2007 (Ambroso & Bonvino, 2009). This small corpus is still a work in progress.

Although the importance of vocabulary acquisition in foreign language learning has been recognised by scholars and great achievements have been made, work is still needed regarding the integration of vocabulary research into teaching and, in particular, the use of native corpora as well as learner corpora.

### 3.3 Vocabulary Knowledge

Two approaches are dominant when defining vocabulary knowledge: the dimension approach (§3.3.1) and the developmental approach (§3.3.2). However, before concentrating on these two approaches, it is necessary to recall the well-known distinction between the two dimensions of vocabulary knowledge - breadth and depth - first made by Anderson and Freebody (198: 92-93):

The first may be called “breadth” of knowledge, by which we mean the number of words for which the person knows at least some of the significant aspects of the meaning. [...] [There] is a second dimension of vocabulary knowledge, namely the quality or “depth” of understanding.

Therefore, the breadth of vocabulary knowledge, the quantitative aspect, refers to the size of the L2 mental lexicon of a language learner; while its depth refers to the qualitative aspect of word knowledge.

The first dimension, then, concerns the number of words a learner knows in L2. In order to gauge that number, it is necessary to answer the fundamental question of what should be counted as a ‘word’. For reasons of convenience, the general term ‘word’ is commonly employed but more specialized terms can be used in order to set the unit of measurement, for example tokens, types, lemma and word families. The term “lexeme” (“lexical unit” or “lexical item”) has been employed in the case of multiwords to indicate an item which is utilized as a single unit, but which contains more than one word (Schmitt, 2000).

Two useful terms widely applied in corpus research are tokens and types. Tokens refer to the number of running words in a given text; types refer to the number of different words in that text. Usually types are more relevant when
measuring learners’ vocabulary knowledge as what is produced by repetition is of less interest (Milton, 2009). A “base” (also “root” or “stem”) is the basic form of a word to which an inflectional or derivational affix can be attached. In the case of grammatical change, the affix is inflectional (e.g. if the base word is ‘garden’, singular noun, by adding the affix -s the result is the plural noun ‘gardens’). The affix is a derivative if it changes the word class of a base word, and thus its meaning (e.g. adding the affix -er to the base word ‘garden’ produces the word ‘gardener’). Word families usually include the base word and its inflectional and derivational forms, whereas lemmas include only the base of a word and its grammatical inflections (Schmitt, 2000; Schmitt, 2010).

Selecting the best unit of measurement for quantifying one’s vocabulary size depends on the resources available and on the specific requirements of each research project in general, however the issue of standardization still remains. To this end, Schmitt (2010) suggests that while it is useful to apply different units according to the type of research, a standardized unit of counting would render vocabulary research much more comparable.

Once the term ‘word’ has been defined, and the unit of measurement has been decided upon, the concept of breadth may appear quite straightforward: counting the number of words an L2 learner knows. However, there is still another key question: What does ‘knowing a word’ mean? According to Anderson and Freebody’s (ibid.: 92-93) definition, a word can be counted as known only if “the person knows at least some of the significant aspects of the meaning”. Hence the meaning aspect of word knowledge is the only one considered in estimating vocabulary size. Once again the meaning-form relationship is regarded as the core aspect of word knowledge.

The second dimension, depth of vocabulary knowledge, may appear more vague. Schmitt (2010) claims that it could be conceptualized in two ways following either the dimension or the developmental approach of word knowledge. Researchers who opt for the dimension approach provide a detailed description of all aspects of lexical knowledge (Richards, 1976; Ringbom, 1987; Nation, 1990, 2001) or a global definition including two (Cronbach, 1942) or three dimensions (Chapelle, 1994) of lexical knowledge. The dimension approach thus separates the various aspects of word knowledge. Researchers following the developmental approach, on the other hand, identify levels of word knowledge. This progress, from one stage to another, is
expressed through scales (Dale as cited in Read 1997; Wesche & Paribakht, 1996; Henriksen, 1999), theorizing vocabulary knowledge along a continuum.

3.3.1 The Dimension Approach

In an early article on L1 vocabulary testing, Cronbach (1942) acknowledges that the main reason for confusion in vocabulary research is the lack of agreement on what knowing a word means. Cronbach therefore proposes a definition of vocabulary knowledge containing five aspects: generalization, breadth of meaning, precision of meaning, availability and application. Hence, his focus is mainly on meaning and less on use. Clearly, the weakness of Cronbach’s criteria is the lack of other aspects of word knowledge such as pronunciation, spelling and morpho-syntactic properties (Qian, 2002).

Evaluating how theoretical research could contribute to language teaching, Richards (1976) proposes eight assumptions of lexical knowledge: growth of vocabulary size, frequency, register, syntax, derivation, association, semantics, and polysemy. While Richards’s list is more comprehensive than Cronbach’s description, it is still not exhaustive, as aspects such as collocation, pronunciation and spelling are missing. Richards’s (ibid.: 78-82) eight assumptions of word knowledge are as follows:

**ASSUMPTION 1** The native speaker of a language continues to expand his vocabulary in adulthood, whereas there is comparatively little development of syntax in adult life.

**ASSUMPTION 2** Knowing a word means knowing the degree of probability of encountering that word in speech or print. For many words we also “know” the sort of words most likely to be found associated with the word.

**ASSUMPTION 3** Knowing a word implies knowing the limitations imposed on the use of the word according to variations of function and situation.

**ASSUMPTION 4** Knowing a word means knowing the syntactic behaviour associated with that word.

**ASSUMPTION 5** Knowing a word entails knowledge of the underlying form of a word and the derivations that can be made from it.
ASSUMPTION 6 Knowing a word entails knowledge of the network of associations between that word and other words in language.

ASSUMPTION 7 Knowing a word means knowing the semantic value of a word.

ASSUMPTION 8 Knowing a word means knowing many of the different meanings associated with the word.

As Meara (1996) points out, Richards’s assumptions are based on a broad range of research findings from the 1960s and 1970s, from studies on L1 vocabulary acquisition - Chomsky’s in particular – to scholarship in cognitive psychology. Even though it is not Richards’s intention to provide a framework of word knowledge, but rather to make, “an honest attempt to give an account of contemporary linguistic research with inferences and applications to teaching where appropriate” (Meara, 1996: 2), his assumptions greatly influenced further research as many scholars were inspired by his work.

Another attempt to define word knowledge is made by Ringbom (1987). Considering that even highly educated native speakers might not have completely mastered the receptive (R) and productive (P) knowledge of many words, he claims that the notion of lexical knowledge comprises a range of continua which vary from no knowledge to full theoretical knowledge. He (ibid.: 36) identifies six continua: accessibility, morphophonology, syntax, semantics, collocation and association; and he is one of the first researchers to show that all components of the lexical knowledge system can serve for both comprehension and production, indicating that “[t]he main difference between comprehension and production is that comprehension refers to the learner’s ability to process incoming data, relating to previous knowledge structures, whereas production means ability to activate knowledge structures without a direct linguistic stimulus from outside”.

Nation (1990) proposes a taxonomy of word knowledge components, in the form of questions one should be able to answer. In this famous work, he establishes the key distinction which has become widely employed: productive vs. receptive knowledge. Nation states that knowing a word according to the description shown in Table 6 probably only applies to a very small number of the words a native speaker knows. His detailed description is hence “an idealised account, rather than a realistic description of what native speakers know about most of the words in their
repertoire” (Read, 2000: 27). Consequently, assessing all these types of knowledge can prove quite difficult unless only very few items are tested. Some attempts to develop a test to this regard reveal significant difficulties concerning measurement and evidence of learners’ knowledge.

### Table 6. Nation’s (1990) components of vocabulary knowledge.

<table>
<thead>
<tr>
<th>Form</th>
<th>Spoken form</th>
<th>R</th>
<th>P</th>
<th>What does the word sound like?</th>
<th>How is the word pronounced?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written form</td>
<td>R</td>
<td>P</td>
<td></td>
<td>What does the word look like?</td>
<td>How is the word written and spelled?</td>
</tr>
<tr>
<td>Position</td>
<td>Grammatical patterns</td>
<td>R</td>
<td>P</td>
<td>In what patterns does the word occur?</td>
<td>In what patterns must we use the word?</td>
</tr>
<tr>
<td></td>
<td>Collocations</td>
<td>R</td>
<td>P</td>
<td>What words or types of words can be expected before or after the word?</td>
<td>What words or types of words must we use with this word?</td>
</tr>
<tr>
<td>Function</td>
<td>Frequency</td>
<td>R</td>
<td>P</td>
<td>How common is the word?</td>
<td>How often should the word be used?</td>
</tr>
<tr>
<td></td>
<td>Appropriateness</td>
<td>R</td>
<td>P</td>
<td>Where would we expect to meet this word?</td>
<td>Where can this word be used?</td>
</tr>
<tr>
<td>Meaning</td>
<td>Concept</td>
<td>R</td>
<td>P</td>
<td>What does the word mean?</td>
<td>What word should be used to express this meaning?</td>
</tr>
<tr>
<td></td>
<td>Associations</td>
<td>R</td>
<td>P</td>
<td>What other words does this word make us think of?</td>
<td>What other words could we use instead of this one?</td>
</tr>
</tbody>
</table>

Chapelle (1994) attempts to define vocabulary ability for testing purposes, according to Bachman and Palmer’s (1996) construct of communicative language ability, which includes both language knowledge and the ability to use language in context. Chapelle (1994: 164) identifies “three components: (1) the context of language use; (2) vocabulary knowledge and processes; and (3) the metacognitive strategies required for vocabulary use in context”.

The first component takes into account the considerable influence context has on the interpretation of words. In his review of Chapelle’s 1994 article, Read (2000) adds that context can have an effect on lexical meaning due to diaphasic (formal vs. informal register), diastratic (sociolects like teenagers’ and professional jargon) and diatopic (geographical language variety) dimensions.

The second component, vocabulary knowledge and processes, is comprised of four sub-components: vocabulary size, knowledge of word characteristics, lexicon organization and fundamental vocabulary processes. Vocabulary size has been amply debated by many scholars with regard to how many words a native speaker knows.
and how many L2 learners should know (§3.5.1). Chapelle argues that vocabulary size should be measured in relation to a particular context of use, rather than in an absolute sense. Knowledge of word characteristics implies knowledge of the features of these words: phonemic, graphemic, syntactic, semantic, pragmatic and collocational. The last two sub-components refer to the organization of mental lexicon, and to the fundamental vocabulary processes of L2 learners. It is interesting to note that Chapelle highlights how both sub-components are closely related to the context of use.

The very last component of Chapelle’s vocabulary ability illustrates the metacognitive strategies required for contextualized vocabulary use. She refers to the model of language ability proposed by Bachman and to ‘strategic competence’ which is a set of metacognitive strategies L2 learners usually apply when planning and producing language. These strategies seem to be employed particularly in relation to vocabulary knowledge, especially by learners who have a limited vocabulary. Blum-Kulka and Levenston (as cited in Chapelle, 1994) describe some common strategies applied by L2 learners are circumlocution, paraphrase, language switch, appeal to authority, change of topic and semantic avoidance. As a learner becomes more proficient and the number of words (s)he can access increases, such compensation tactics become less important.

Nation (2001) proposes a slightly revised taxonomy, containing all the aspects involved in knowing a word from the points of view of both receptive and productive knowledge and use. According to his framework - considered the best available to date (Schmitt, 2010) - knowing a word means knowing its form (spoken, written and word parts), its meaning (form and meaning, concept and referents, and associations), and its use (grammatical functions, collocations and constraints on use). This new taxonomy is better divided into three main categories (form, meaning and use) than the 1990 list - which consists of four (form, position, function and meaning) - but maintains the original question format, as shown in Table 7.
Table 7. Nation’s (2001) components of vocabulary knowledge.

<table>
<thead>
<tr>
<th>Form</th>
<th>spoken form</th>
<th>R</th>
<th>What does the word sound like?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>P</td>
<td>How is the word pronounced?</td>
</tr>
<tr>
<td>written form</td>
<td>R</td>
<td>P</td>
<td>What does the word look like?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P</td>
<td>How is the word written and spelled?</td>
</tr>
<tr>
<td>word parts</td>
<td>R</td>
<td>P</td>
<td>What parts are recognisable in this word?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P</td>
<td>What word parts are needed to express the meaning?</td>
</tr>
<tr>
<td>Meaning</td>
<td>form and meaning</td>
<td>R</td>
<td>What meaning does this word form signal?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P</td>
<td>What word form can be used to express this meaning?</td>
</tr>
<tr>
<td>concept and</td>
<td></td>
<td>R</td>
<td>What it is included in the concept?</td>
</tr>
<tr>
<td>referents</td>
<td></td>
<td>P</td>
<td>What items can the concept refer to?</td>
</tr>
<tr>
<td>associations</td>
<td>R</td>
<td>P</td>
<td>What other words does this make us think of?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P</td>
<td>What other words could we use instead of this one?</td>
</tr>
<tr>
<td>Use</td>
<td>grammatical functions</td>
<td>R</td>
<td>In what patterns does the word occur?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P</td>
<td>In what patterns must we use the word?</td>
</tr>
<tr>
<td>collocations</td>
<td>R</td>
<td>P</td>
<td>What words or types of words occur with this one?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P</td>
<td>What words or types of words must we use with this one?</td>
</tr>
<tr>
<td>constraints on use (register, frequency, ...)</td>
<td>R</td>
<td>Where, when, and how often would we expect to meet this word?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>P</td>
<td>Where, when, and how often can we use this word?</td>
</tr>
</tbody>
</table>

As just outlined, Chapelle’s comprehensive definition is primarily based on the context of language use and its application could be somehow more complex than Nation’s taxonomy, which separates the single units of word knowledge. Nation’s classification is more practical for research purposes, as also noted by Schmitt (2000: 22), who also warns that “this [model] is an expedient for discussion only; the different kinds of word knowledge are interrelated and affect each other in fundamental ways. In the mind’s psycholinguistic reality, it is unlikely that they could be separated so easily”. Schmitt (ibid.: 5) also points out that the different types of word knowledge described by Nation are learned gradually and that vocabulary acquisition is incremental since “it is clearly impossible to gain immediate mastery of all these word knowledges simultaneously”.

Nation’s 2001 taxonomy has been selected as a framework for the working definition of vocabulary knowledge in this thesis, since the main focus of this study is the acquisition of word meaning and Nation’s classification allows researchers to isolate this component of word knowledge. Chapelle’s definition, in contrast, is strictly related to vocabulary in context and therefore less appropriate for this study where, although always presented within a context (the dialogue of a video clip), vocabulary is tested both in context and in isolation according to the learners’ proficiency levels (§3.6.1).
3.3.2 The Developmental Approach

The developmental approach makes use of scales to describe the stages of word acquisition. Dale (as cited in Read, 1997) proposes a four-stage model of word knowledge:

Stage 1: I never saw it before
Stage 2: I’ve heard of it, but I don’t know what it means
Stage 3: I recognise it in context – it has something to do with…
Stage 4: I know it

Dale also mentions that a fifth stage would involve the ability to distinguish the given word from others which are closely related to it in terms of form or meaning. This shows that, in his view, the meaning-form dimension is essential for word knowledge.

More recently, Wesche and Paribakht (1996) propose a five-point scale which ranges from no knowledge to the ability to use the word in a sentence which is both grammatically and semantically correct. This is called the Vocabulary Knowledge Scale and it seems to elaborate on Dale’s scale, making clear the importance of the meaning aspect of word knowledge as well. In this case, there is an attempt “to assess something more than a superficial knowledge of word meaning and enable a picture to be drawn of the stages in the learners’ developing word knowledge” (Milton, 2009: 159).

The scale used in the Vocabulary Knowledge Scale is as follows:

Stage 1: The word is not familiar at all.
Stage 2: The word is familiar but the meaning is not known.
Stage 3: A correct synonym or translation is given.
Stage 4: The word is used with semantic appropriateness in a sentence.
Stage 5: The word is used with semantic appropriateness and grammatical accuracy in a sentence.

One of the most recent attempts to define a more precise and standard model of vocabulary development is Henriksen’s (1999) three dimensions of what she calls “lexical competence”. Contrary to the above-mentioned researchers, in her framework Henriksen distinguishes vocabulary use from vocabulary knowledge, proposing three separate (although related) vocabulary dimensions along a three-point scale: partial-precise knowledge, depth of knowledge, and receptive-productive
knowledge. The first two dimensions refer to declarative word knowledge, which develops from partial to precise, and they involve the semantization process or acquisition of word meaning and lexical organization. The third dimension is related to the ability to access or use this knowledge. Henriksen’s proposal of three vocabulary dimensions would seem a reasonable approach overall, but empirical research for its validation is still needed.

Schmitt (1998), however, cautions that although scales have the main advantage of promoting an incremental notion of vocabulary acquisition, they aim to measure stages of vocabulary knowledge, but stages as well as their boundaries on a continuum are not easily defined. Uneven intervals can be found between different stages. In addition, attention paid to productive and receptive knowledge within a scale may be unbalanced since the tendency is to focus on reception at the beginning and production at the end of the scale (§3.3.3).

3.3.3 Receptive vs. Productive Knowledge

An important dichotomy in vocabulary knowledge is that between receptive and productive knowledge. As previously outlined (§3.3.1), Ringbom (1987) first and Nation later (1990) (though considering different aspects) argue that vocabulary knowledge is always both receptive and productive. In his recent work, Schmitt (2010) names the relationship between receptive and productive mastery of vocabulary among the present gaps in the field of vocabulary studies. This dichotomy has been widely accepted by researchers and teachers over the years but is still subject to investigation because, “[a]lthough we know that receptive mastery usually precedes productive mastery, it is unclear how the process proceeds, or exactly what input/practice is required to initiate it” (Schmitt, 2010: 36).

In a famous article, Melka (1997) rejects the commonly accepted idea that words are necessarily learned first receptively and then productively. She (ibid.: 100) suggests that one should visualize “the distance between R and P as a line, a ‘continuum knowledge’. The line would not necessarily be precisely marked, because of the overlapping of the two notions R and P, but it would stretch gradually.

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70 According to Melka (1997), there are several expressions used to refer to reception and production: passive/active, comprehension/production, understanding/speaking.
from less familiar to most familiar”. Starting from the common assumption that receptive vocabulary is larger than productive vocabulary, Melka examines how receptive and productive vocabularies are estimated and claims that the difference between the two is not as large as is generally thought. This discrepancy is in fact created by the way vocabulary tests are constructed: the type of words selected, the scoring system, the presence or absence of context, possible words vs. actual words, the notion of avoidance in learners, and the role of learners’ L1 and cognates. In this regard, Nation (2001: 30) states that:

To truly compare the relative difficulty of receptive and productive learning, it is necessary to use test item types that are equivalent in all significant features affecting difficulty except the receptive/productive distinction. [...] When comparing receptive and productive learning, the two test items (one to measure receptive learning and one to measure productive learning) should be both recognition items or both recall items. Some studies use a recognition item for measuring receptive knowledge,

Kaki

a. book
b. leg
c. face
d. fruit

and a recall item for measuring productive knowledge, e.g.

Translate this word into Indonesian (the second language):

leg __________

It is then impossible to tell how much the difference in scores is a result of the productive/receptive distinction or the recognition/recall distinction. Other confounding differences in test items may be the presence and absence of sentence context, oral and written presentation, and integration in and separation from a communicative task. Some studies however have avoided this problem of confounding variables.

From this it is evident that in order to measure receptive and productive knowledge the same type of test has to be chosen: either recall or recognition, oral or written, contextualized or decontextualized. In particular, the presence or absence of context has been widely discussed among scholars, and Davies (2008) states that when measuring lexical knowledge words should be in context. However, he notes that there is a great paradox: words rely heavily on the context but at the same time the more the words are contextualized in a text the less the focus is on lexical competence. This is because the context, to some extent, can help infer words. On the other hand, it has also been proven that lexical knowledge is correlated to language proficiency (Laufer & Goldstein, 2004), thus, the ability to infer a word in a text is also related to the learner’s proficiency level. Appropriate tools for testing
both receptive and productive knowledge, with regard to meaning, are discussed in §3.6.1.

3.4 Vocabulary Learning

There are various aspects to consider in vocabulary learning. Acquisition of a new L2 word is generally related to two main factors: the number of encounters with that word and how words are processed by each individual (Laufer & Roitblat-Rozovski, 2011). Schmitt (2010: 28) identifies a range of recurrent factors related to exposure and word processing which positively influence vocabulary acquisition:

- increased frequency of exposure
- increased attention focused on lexical item
- increased noticing of lexical item
- increased intention to learn lexical item
- a requirement to learn lexical item (by teacher test syllabus)
- a need to learn/use lexical item and its properties
- increased amount of time spent engaging with lexical item
- amount of interaction spent on lexical item

It is also important to keep in mind the ‘default hypothesis’ of vocabulary acquisition, which was originally applied to learner’s native language, and states that people learn more words from repeated exposure to language input, in particular from written input, rather than from instructed learning. This is due to the fact that “the number of words that people know is too vast to be accounted for by direct teaching” (Laufer, 2005: 311-312). Nation (1990; 2001) argues that students need to have repeated encounters with a given word, in various contexts, in order to remember it and develop an understanding of the range of its usage. Findings in memory research suggest that spaced repetition which takes place over a long period of time is definitely more effective than massed repetition, and should be placed at increasing larger intervals of time where possible.

A great deal of research focusing on reading has attempted to determine how many encounters are necessary to acquire new words. In the study also known as the Clockwork Orange study, Saragi, Nation, and Meister (1978) found a correlation
between word frequency in a text and incidental vocabulary learning. In particular, words encountered six or more times were learned by most students. Interestingly, Zahar et al. (2001) who study the effects of frequency and contextual richness on lexical knowledge with school-aged ESL learners in Quebec, suggest that the influence of word frequency on vocabulary acquisition may depend on their level of proficiency, since weaker learners are more dependent on frequency than advanced learners. Another attempt to determine the number of encounters necessary to learn a word was made by Waring and Takaki (2003) who found that it is quite difficult to pinpoint a definite number of repetitions as it can vary considerably. They tested immediate and delayed recognition of form, recognition of meaning among four options and recall of meaning by providing the L1 meaning of the target words. Their findings illustrate that if learners encounter a word at least eight times there is a 50% chance they recognise its form when the word is prompted after three months. However, even after learners encountered the same word 18 times or more, there was only a 10-15% chance they recalled its meaning (i.e. unprompted word recall). In general, Waring and Takaki conclude that incidental learning took place but only a very small number of target words was learned. They also note that more frequent words were the most learned in the long-term.

A case study of one French learner conducted by Pigada and Schmitt (2006) investigate the vocabulary development of 133 target words through extensive reading in terms of three types of word knowledge: spelling, meaning and grammatical characteristics. Regarding frequency, the participant learned the correct spelling easily after only a few exposures, whereas meaning seemed to require more than 10 exposures to be acquired and single encounters were less likely to produce any learning at all. Grammar accuracy was the only aspect in which the participant showed consistent improvement. The researchers came to the conclusion that it is highly probable for all three facets to be enhanced only when words are encountered at least 20 times.

Pellicer-Sánchez and Schmitt (2010) carried out a study on incidental vocabulary acquisition through reading a novel with 20 advanced learners of English as a foreign language. The English novel contained 34 words from a dialect of the Nigerian language Ibo, carefully selected for the study. The use of words from a foreign language unknown by learners ensured that any vocabulary gain was due to text reading. Similar to these previous research, the study demonstrates that “even
one exposure lead to considerable learning of word form and meaning recognition, although it made little impact on recall of word class or meaning. However, the real increase in learning began with 5-8 occurrences, and accelerated with 10-17 exposures” (44). The authors conclude that 10 or more exposures are generally required for substantial vocabulary learning to take place.

The other main factor which influences vocabulary acquisition is the way learners process words according to the type of task. Laufer and Rozovski-Roitblat (2011) point out that there is no agreement on the type of task which best induces word processing. For this reason, they investigate incidental acquisition of new words as a function of two variables: type of task - either Focus on Form (FonF, i.e. drawing attention to words during communicative activities) or Focus on Forms (FonFs, i.e. decontextualized practice of vocabulary in non-communicative situations)\(^{71}\) - and number of word occurrences in the input. Learners, without being pre-warned, were tested on their long-term retention of new words through passive recall and passive recognition tests. The results of the study suggest that the effect of task type is superior to that of frequency of word occurrence, at least in the recall test. FonFs seem to be more effective for the recall of new words, hence non-communicative and partly decontextualized activities can help to improve learners’ future performance in authentic language tasks. The authors acknowledge the importance of passive recognition but also admit the prevalence of recall, considering that in real-life learners will be required to recall meaning of words rather than recognise their meanings among a range of options to choose from.

Importantly, however, a definite numeric range of encounters related to the different types of learning has yet to be objectively defined. In order to shed more light on this current issue, one of the core elements of the present study was the repetition of video clips for subtitling (experimental group) and other writing activities (control group) which allowed the students in both groups to encounter words many times. In addition, some of the target words were repeated in the video clips from one up to four times. This sort of repetition was measured in order to track

\(^{71}\)In the literature, Focus on Form instruction (FFI) can be broken down into two major types: Focus on Form (FonF) and Focus on Forms (FonFs). FonF indicates drawing learners’ attention to linguistic elements which arise incidentally in a lesson when the overall aim is communication. The term ‘form’ refers to the function which a form performs. FonFs indicates intentional teaching of discrete linguistic structures. The notion of FFI was originally developed in grammar learning but it was also extended to vocabulary learning. Research confirms that which FFI, both on the form FonF and FonFs, benefits vocabulary learning (Laufer & Roitblat-Rozovski, 2011).
any possible difference in vocabulary acquisition related to word repetition frequency. Considering that it was not possible to control the exact number of times students individually watched the video and to reduce the numeric exposure variable as much as possible, the control group was asked to perform activities which required watching the video over and over again. This was to ensure that the input was as similar as possible for both experimental and control groups while the activity of subtitling accounted for the only significant difference. The courses carried out for this study give a clear example of FonF, since words (new vocabulary) are used to perform a language task (the subtitling task) but they are not the object of study.

3.4.1 Influence of the L1 on L2 Vocabulary Acquisition

At the beginning of the learning process, learners relate L1 lexical units to corresponding L2 lexical units. Bogaards (1994) proves that learners can recall an L2 equivalent of an L1 word more rapidly than the L2 word for a concept presented with an image. Thus, at early language learning stages, primary association is made between L1 and L2 words rather than L2 words and concepts.

Many researchers agree that the L1 has great influence on the L2 learning process. Corda and Marello (2004) point out that learners usually try to find L2 equivalents of L1 words and then tend to transfer the different L1 meanings into the L2. However, this can cause problems in the case of L1 words which have two L2 equivalents. One example the authors provide is the use of the Italian verbs sapere and conoscere by English native speakers, who often make mistakes as both verbs are rendered in English with the verb “to know”. Corda and Marello thus advise teachers to highlight similarities and differences between L1 and L2 whenever possible.

Nation’s (2001: 24) concept of “learning burden”, the effort required of someone learning a new word, states that “[d]ifferent words have different learning burdens for learners with different language backgrounds and each of the aspects of what it means to know a word can contribute to its learning burden” . The more a word has patterns which learners are familiar with the lighter the burden. These patterns can come from the L1 or from knowledge of other languages. Generally, if learners’ L1 is related to the L2 studied, learning new words can be easier. Teachers
can reduce the learning burden by drawing learners’ attention to systematic patterns of the L2 and by highlighting analogies with the L1.

The influence of L1 on L2 learning is increased by the presence of cognates, words in L1 and L2 with orthographical and phonological similarities. Granger (as cited in Schmitt 2010) warns teachers about the use of cognates stating that: “[c]ognates are both an aid and a barrier to successful L2 vocabulary development. Teachers should find a happy medium between over-reliance on cognates and near-pathological mistrust them, two attitudes which are equally detrimental to learners’ vocabulary development”. On the other hand, when discussing the use of cognates in teaching Italian to English speakers, Mollica (2001)\textsuperscript{72} points out that learners can acquire vocabulary if they are made aware of the relationship between Italian and English words. Some endings of English words can be changed into Italian endings, he therefore provides a list of English endings and their equivalent in Italian, offering a few examples for each ending (for example, the English ending -tion could be replaced by the Italian equivalent -zione, thus the English word ‘situation’ will be situazione in Italian). However, Mollica also recommends bringing the existence of deceptive cognates (falsi amici) - words which look and/or sound similar, yet have different meanings\textsuperscript{73} - to learners’ attention. Both cognates and deceptive cognates could be presented to learners from an early stage. Mollica suggests introducing some cognates to teach pronunciation even in the first class. This can give students “a feeling of ‘power’ since they think that they ‘know’ some Italian” (ibid.: 468). In light of this evidence, both cognates and deceptive cognates were excluded from the pool of target words in this study so that informants could not infer the meaning of L2 words from similarities with L1.\textsuperscript{74} Target words were thus chosen keeping in mind that participants were native speakers of English.

\textsuperscript{72}In his article, Mollica presents a wide range of vocabulary strategies and exercises which could be very useful to both teachers and students to teach or learn new vocabulary.

\textsuperscript{73}This is the case of the Italian word caldo: it resembles the English word cold but its meaning is actually hot, which is the exact opposite of what students might think.

\textsuperscript{74}In one study Pigada and Schmitt (2009: 20) found “that most of the wrong interpretations of the word meanings were caused by cross-linguistic influence [...] [I]t is even more striking that some of these wrong guesses were sustained even after the exposure to the words”.

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3.4.2 Mental Lexicon

The term “mental lexicon” was defined by Aitchison (1994) as the human word store, that is to say, all the words which a person knows. A word in the mental lexicon can be retrieved rapidly when needed. Vocabulary is thought to be acquired and then stored in the mental lexicon in four ways: labelling, which occurs in the early stage of life; packaging; classification of objects; and network building, which is a process which takes place throughout life.

Singleton (1999) contends that mental lexicon is in a constant state of change, as new words are learned and new meanings of known words are acquired. He (ibid.: 269-270) acknowledges that there is a difference between L2 and L1 development because L2 lacks “a pre-speech dimension and [...] takes place against the background of an already acquired lexicon”. Singleton examines two important issues which are essentially connected to the relationship between the L1 and L2 mental lexicon: the role of form and meaning in the L2 mental lexicon, and the question of whether the two lexicons acquire, organize and process lexical knowledge together or separately.

With regard to the first issue, Singleton’s research review cites evidence which supports the idea that, both in L1 and L2, formal processing plays an important role in the early stages of learning a new word and that acquisition of meaning rather than form requires a greater effort. In particular, Singleton’s enquiry is driven by the general view that L2 mental lexicon differs qualitatively from L1 lexicon as, supposedly, L2 lexicon is phonologically rather than semantically organized. In other words, L1 mental lexicon is strongly tied to meaning whereas L2 lexicon is mainly connected to phonological factors.

Concerning whether the two lexicons are connected or not, after a review of research which examined the integrated or separated nature of L1 and L2 mental lexicons, Singleton come to the conclusion that L1 and L2 lexis are stored separately but the two systems communicate with each other. This communication takes place through the common conceptual store or direct connections between L1 and L2 nodes (or both). Research carried out at the time he was writing also suggests that the relationship between a given L2 and L1 word can vary from individual to individual. This variation depends on how words are acquired and how well they are known, and also on the degree to which formal and/or semantic similarities between the L2
word and the L1 word in question are perceived. The latter is related to the fact that L1 influences the acquisition of L2. As also pointed out by Nation (§3.4.1), if languages are in some ways similar, acquisition is more likely to be easier and faster, whereas if the two languages are very different acquisition is probably slower and possibly more difficult.

3.5 Vocabulary Teaching

Records of vocabulary teaching go back to the second century B.C. At that time Roman children studied Greek starting from the alphabet, then master words and connected discourse. Texts given to learners also featured lexical help, vocabulary was listed alphabetically or organized by topic, which led to the assumption that the lexical aspect was believed to be relevant in language learning (Schmitt, 2000). During the medieval period, the study of Latin focused on grammar. However, in lexical studies, the main tendency was to split the words into parts, and then trace the etymology of the fragments. Even though the study of grammar was still predominant in the Renaissance, teachers gave definitions of known words to their students who could focus their attention on the new items contained in the definition (López-Mezquita Molina, 2007). Later, innovative proposals were made to promote vocabulary in language teaching. In 1611 Williams of Bath created a book on acquisition of Latin vocabulary in context; while John Amos Comenius (1592-1670) tried to implement the idea of limited vocabulary, proposing eight thousand common Latin words. This early idea of creating a group of common words was retrieved and further developed at the beginning of the Twentieth century by the “Vocabulary Control Movement”. Furthermore, moving away from grammar focussed instruction and promoting translation as an effective way to use the target language, Bath and Comenius highlighted the importance of vocabulary in teaching and learning (Schmitt, 2000).

The Grammar-Translation Method (§1.4.1), introduced at the end of the Eighteenth century, mainly used classical written texts for L2 comprehension. The focus in the GTM was essentially on grammar with translation-type exercises from L1 to L2 and vice versa. In order to perform translation exercises, learners were provided with bilingual lists of vocabulary to be memorized. The classical texts used
for these exercises often contained obsolete vocabulary far from that of everyday language in use. In fact, vocabulary was selected for illustrating grammatical rules.

At the end of the Nineteenth century, the Reform Movement (§1.4.2) rejected the GTM emphasizing the importance of the spoken aspect of language learning. According to the reformers, vocabulary was secondary to overall text comprehension and had to be associated with reality rather than with other words, thus it was selected according to its usefulness. The Direct Method, developed in the same period, owes its name to the ‘direct’ relation between meaning and the target language without the use of translation. The target language was used both for interaction and instruction. The classroom topic had to be interesting to learners and the vocabulary taught was usually simple and related to images or demonstrations. In the case of more abstract vocabulary, word association was used. In the 1970s the Audiolingual Method (§1.4.3) was centred on pronunciation and oral drilling of basic sentences and proved to be helpful for memorizing grammatical patterns. Once again, vocabulary was relatively simple and familiar (Zimmerman, 1997).

Things began to change with the advent of communicative approaches (CLT/§1.4.3), whose aim was the achievement of communicative competence. The underlying principle of these new approaches was to promote fluency over accuracy and the role of vocabulary was re-evaluated considering its vital importance to communication. The communicative approaches known as the Natural Approach, developed by Krashen and Terrell in 1983, was based on Krashen’s Monitor Model (§1.3.1) and particularly emphasised the role of comprehensible input in communication. Vocabulary was therefore considered of paramount importance in the acquisition process. Especially for learners at beginner levels the most important component of the target language when trying to communicate with native speakers is its lexicon (Terrell, 1986).

Lexicographical research started in the 1980s and represented a major shift in the way vocabulary was considered in language teaching. One of the most important works is that of Sinclair (1987) who was editor in chief of The Collins Birmingham University International Database (COBUILD) project. The aim of COBUILD was to build an electronic corpus of the English language in order to produce a monolingual learners’ dictionary. The COBUILD project revolutionized

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75COBUILD was a joint project between the University of Birmingham (Department of English) and Collins Publishers, who founded the project.
lexicography and inspired a new generation of corpus-driven dictionaries (Moon, 2009). In this period, fast-growing research on corpus analysis and computational linguistics revealed the importance of ‘chunks’ of language. Nattinger and DeCarrico (1992: 1) saw their potential for language learning and defined these chunks as “lexical phrases”. Lexical phrases can be of various lengths and have an idiomatically determined meaning (e.g. as it were, on the other hand, etc.) but differ from other conventionalised forms such as idioms because they perform certain functions. Lexical phrases are seen as ideal units which can be used in language teaching since they are important both for learning and communicating, because lexical phrases - language chunks - are easily stored in one’s memory and later retrieved, as opposed to single words. In addition, these lexical chunks are lexical-grammatical units which can be analysed according to grammatical rules. Thus, it is learners’ ability to use lexical phrases which determines language performance.

A few years later, Lewis (1993) proposed a new approach in language teaching - the Lexical Approach - that shifts priority to vocabulary over grammar. This approach has been applied in EFL/ESL in particular. According to the author (ibid.: 89), “[l]anguage consists of grammaticalised lexis, not lexicalised grammar”. Similarly to Nattinger and DeCarrico, Lewis sees language as made of language chunks which he terms “lexical items.” Lexical items can be combined to produce coherent texts and can be of four basic types: word, collocations, fixed expressions and semi-fixed expressions. The word type consists of single words, the “old-fashioned vocabulary”, while the other three categories are made of multi-words items and represent the novelty of the Lexical Approach. Collocation indicates words which co-occur frequently in a text and ranges from fully fixed (e.g. a broken home, to catch a cold) to novel collocation. According to Lewis, it is beneficial to notice and learn collocations for two reasons: first, words are not normally used alone and it is advisable to learn them within a frequent pattern of use; second, it has been proven that it is more efficient to learn the whole and then break it into parts rather than to learn individual parts and then build up the whole.

Fixed expressions and semi-fixed expressions are the two remaining types of lexical items. Fixed expressions have commonly been recognised in language teaching and featured in textbooks. Among the most common there are social greetings (e.g. good morning, Happy New Year), politeness phrases (e.g. No thank you, I am fine), ‘phrase book’ language (e.g. Can you tell me the way to ..., I’d like a
twin room for ...) and idioms (e.g. put the cart before the horse, make a mountain out of a molehill). Semi-fixed expressions are of a great number and occur in spoken and written language. Some of the most important are almost fixed expressions which allow for minimal variation (e.g. it’s/that’s not my fault), spoken sentences with a simple slot (e.g. Could you pass me ..., please?) and more extended frames such as those of formal letters or academic papers (e.g. in this paper I wish to suggest...).

Both fixed and semi-fixed expressions usually range between two and seven words.

A large number of fixed and semi-fixed prefabricated items should thus be learned in order to be fluent in an L2. This view implies several changes in content and teaching methodology. Grammar should serve to combine lexical items in creative ways and can be used efficiently only when one has a sufficiently large mental lexicon to which grammar can be applied. Listening should be promoted at lower levels and reading at more advanced levels. Dictionaries should be used at every level as a support for active learning. Furthermore, activities based on the comparison of L1 and L2 as well as translation should be encouraged. Translation seems to be an instinctive way to approach language learning and, Lewis believes that translation is “inevitable” (Lewis, 1997: 60). Even though CLT generally refuses translation and interference, these might be quite useful in lexical learning. In fact, when learners cannot express themselves in L2 they tend to think in their own language and search for a translation from their L1. In addition, learners might become aware of the fact that communication is not only made up of ‘new ways’ to say something but also by expressions which they need to learn and thus remember.

It follows that a central ability of the Lexical Approach is to be able to identify expressions or chunks in a text. Once this ability is acquired it can help translation greatly. In fact, instead of translating word-for-word, learners can be trained to translate chunk-for-chunk. Of course, translating chunk-for-chunk on its own is not sufficient to produce a correct translation, and learners need to use their grammar knowledge as well. Lewis (1997: 64) therefore suggests a general strategy for translation of referential language into L1 or L2: “find and translate the key noun, search for an appropriate collocating verbs and/or adjectives, search for adverbial

76 Lewis (1997) claims that powerful forces have worked against translation from the 1960s in view of financial interests rather than for pedagogical reasons. In new American and British methods native speaker teachers were considered linguistically reliable and were supported by financial interests. Publishers encouraged use of global teaching material instead of country-specific textbooks. Furthermore, native speaker teachers often worked in polyglot classrooms where translation was hardly applicable.
phrases which collocate with any adjective or verb. [...] Once these lexical items are found, they must be correctly grammaticalised”. This process might appear quite simplistic, however, it can be used as a starting point for learners who have no translation experience and it can help focus on vocabulary. From a lexical view of language teaching, translation is valuable for many reasons. Language learners use their L1 as a resource and can benefit from knowing the equivalent in their L1 of L2 chunks (§1.4.5.1). These equivalents can be looked for and then discussed in the classroom environment with teachers’ help. This procedure of consciously searching for equivalents effectively helps raise language awareness, which is a fundamental technique of the Lexical Approach.

Since its publication in 2001, the Common European Framework of Reference for Languages has become the most important guideline for FL teachers all over Europe. The CEFR highlights the importance of vocabulary teaching and learning (§1.2.1) as a part of communicative language competence. In order to select appropriate vocabulary for language teaching and assessment of language proficiency, the Framework suggests considering the size (how many words), range (in which domain) and control of vocabulary which learners need. Even though curriculum and syllabus designers are not obliged to choose which exact words to include, the CEFR may offer some guiding principles. Users of the Framework can select key words and phrases in thematic areas relevant to learners, follow lexico-statistical principles selecting highest frequency words in general or thematic word-counts, select spoken and written texts and teach the words contained, decide not to pre-plan vocabulary development and allow for free development according to learners’ needs during the communicative tasks. Although these guidelines are very general, as recognised by the authors, they remain highly applicable in many different contexts and languages.

3.5.1 Teaching ISL Vocabulary

Vocabulary plays an essential role in communication, and the vocabulary required to accomplish different communication goals can be quite vast. The distinction between high frequency and low frequency words should be carefully considered by teachers when planning a lesson or language course as these should be treated in very
different ways. If a learner wishes to ‘survive’ in a foreign country during a short
vacation, a good phrasebook and a basic list for everyday activities should be
sufficient according to Schmitt (2000). However, he estimates that a vocabulary of
about 2,000 words is needed for students who have higher aspirations. By
convention, the first 2,000 words listed in corpora are high frequency words (§3.2.1).
This small group of basic and very useful words is employed in most communicative
situations in any language. Nation (2001) suggests that teachers and learners should
devote considerable time to high frequency words due to their relevance in
communication. Attention can be placed on these words through intentional teaching
and learning or incidental learning. Low frequency words consist of thousands of
words which do not occur frequently. They generally belong to particular subjects,
and thus teachers should not give them particular attention (Nation, 2011).77

Most Italian dictionaries range from 200,000 to 250,000 entries including the
infinitive for tenses, masculine form of nouns and adjectives, etc. (Lorenzetti, 2002).
Generally, an educated native speaker can receptively know between 60%-80% of
the entries in a language usage dictionary with approximately 100,000 entries.
Usually native speakers productively and receptively know most of the Vocabolario
comune,78 which comprises between 30,000 and 50,000 words. Of course, learners
do not need to achieve a native-like vocabulary size.79

At this point the two main issues arise: what specific vocabulary should be
taught and how it should be selected. Corda and Marello (2004) propose that a way
to determine the choice of vocabulary is to ascertain the reason why the students
intend to learn a given language and select the appropriate vocabulary accordingly. If
the students’ aim is to acquire a general competence of the foreign language (that is,
being able to understand written and oral texts and to communicate orally and in
writing) they should learn high frequency words i.e. VF and VAU, along with a few
VAD words. The number of low frequency words to be learned increases according
to the language proficiency of the learners.

77For ESL The Vocabulary Level Test, containing words from the 2,000-3,000-5,000 levels; measures
whether high-frequency and low-frequency words have been learned the test exists in two versions:
productive and receptive (Nation, 2001).
78Vocabolario comune and Vocabolario di base together form the Vocabolario corrente, which
comprises the words which are generally known by most Italian native speakers, and they not have
any geographical, slangy or stylistic connotation.
79As research on the number of words needed by learners of Italian as a second language is still
scarce, the figures available for ESL are considered here as a reference (Corda & Marello, 2004: 29).
Lo Duca (2007) presents three separate but complementary approaches teachers can apply for choosing appropriate vocabulary: lexicographic or statistical, experiential and morphological. Following the first approach, selection should be made using the following Italian corpora: LIF, LIP (§3.2.1), VELI (*Vocabolario Elettronico della Lingua Italiana*), and LE (*Lessico Elementare*). Lo Duca states that the best results are obtained when the corpora reflect a more complete range of language usage. LIF corpus is based on written texts from theatre, novels, cinema, magazines and school books; LIP on spoken language; VELI on written texts from newspapers and magazines; and LE on texts written by and for elementary school children. For the selection of high frequency words from these corpora, Lo Duca invites teachers to consider not only the frequency of words but also their degree of dispersion in order to ascertain their overall distribution among the texts. This is because one word can be frequently repeated in the same text but not appear in the other texts of the corpus. Consequently the chances that this word is frequently used in the language may be lower than initially expected. However, selection based on corpora is not sufficient since words commonly known but less used by native speakers can be left out. These words are referred to as *Vocaboli di alta disponibilità* (VAD) contained in De Mauro’s VdB. Hence Lo Duca recommends integrating the words obtained from the corpora with this group of words. It should also be considered that the selection of VdB words was originally made for Italian native speakers rather than L2 learners. However, the VdB and other corpora such as the LIF, LIP and VELI can still be effectively applied in ISL contexts as they reflect the core Italian vocabulary which L2 learners should know.

The second approach for selecting the vocabulary index is experiential, based on the communicative needs of particular groups of learners. In this case, the starting point for the selection of words to include in the syllabus is not a frequency list but rather the experiential fields which are specific to those learners. With experiential

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80De Mauro (1980) emphasizes the importance of word dispersion in addition to simple word frequency, citing the case of word frequency, in specialized texts which may not reflect the frequency of a word used in reality. He suggests a formula for quantifying word use as multiplying the number of times the word is used in a text by the number of texts in the sample in which the word is used. If the word is used in only one text it has minimum dispersion, while if a word is used in all texts in a sample it has maximum dispersion.

81Regarding the integration of useful corpora information in the development of textbooks for ISL learners, Mollica (2001: 465) points out that although textbooks should include high frequency words, this is often not the case. Corpora are “rarely mentioned or virtually ignored as a useful foundation in the writing of language textbooks”.

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fields Lo Duca refers to communicative situations shared by an L2 community. For instance, the need to travel by train implies the purchase of a ticket, therefore learners should be presented with a variety of associated vocabulary, such as ticket types (one way or return), seats, etc. In this way learners will increase the range of vocabulary relevant to them. The disadvantage of this approach is that learners may also encounter low frequency words. This can happen when using the word association technique, which implies presenting words which are semantically related or with a common based form. Although these two approaches seem to be divergent, they could be complementary in the syllabus design. Lo Duca reports that a small research project she and her team carried out on the selection of core vocabulary for university exchange students in Italy yielded encouraging results. Nearly all the selected words in the study were contained in the VdB, with very few exceptions, as in the case of pronominal verbs (laurearsi, etc.) and specialized vocabulary (rettorato, triennale, etc.).

The third approach proposed by Lo Duca is morphological: here the lexical index is made up of selected word families or words associated by their form. This approach greatly relies on lexical morphology and SLA studies. Thanks to the former field of research, it is generally accepted that the lexicon of a language is made up of simple and complex words. A simple word consists of a single morpheme, thus the word cannot be analyzed into smaller units of meaning (for example giorno). A complex word consists of a root and at least one or more affixes, so it can be divided into smaller units of meaning (as in the case with giornata, giornale, giornalista, mezzogiorno). The rules of word formation can help learners in memorising words. Paradoxically, complex words could be more easily remembered than simple ones for the reason that complex words follow certain rules. If a learner knows a root word and one affix, (s)he should be able to form another word easily (from gioco to giocatore). On the other hand, simple words must be learned from scratch. SLA, in its own right, demonstrates that during the vocabulary acquisition process learners gradually discover word formation rules, most of the time unconsciously. However, in a language such as Italian where word formation does not always follow readily predictable patterns, learners could make mistakes in the derivation process, especially in their own L2 production.

In brief, these three approaches - lexicographic, experiential and morphological - can be combined to exploit the best aspects of each according to
course goals and group of learners. This represents a good compromise for syllabus design theorists and language teachers. In line with Lo Duca’s experiential approach, Nation (2011) also advises teachers to consider needs analysis as the first step in vocabulary course planning. The second step he envisages is to determine learners’ vocabulary size or their knowledge of high frequency words, using available measures of vocabulary knowledge. Finally, once a well-supported idea of what learners know is arrived at, Nation recommends choosing the most appropriate vocabulary for that group of learners.

3.6 Testing Vocabulary Knowledge

The definition of vocabulary knowledge is of paramount importance for its assessment. In order to assure test validity teachers and researchers should define the construct they intend to measure (Read, 2000). Bachman and Palmer (1996) state that there are two approaches to construct definition, syllabus-based and theory-based. The syllabus-based definition is generally applied to vocabulary assessment within a course; while the theory-based construct definition is commonly seen as more appropriate for research and proficiency testing. In this study, the theory-based definition has been applied.

Although interest in vocabulary has increased noticeably in the last forty years, a comprehensive and generally recognised conceptual framework for L2 vocabulary is still not available (§3.3). Nation’s (2001) well-known and detailed definition of vocabulary knowledge has been selected as it allows for the isolation of individual aspects to be measured. Nation’s framework can be used as a check-list for researchers and teachers to decide which aspect of vocabulary knowledge they wish to focus on. The focus of the present research is on the meaning sub-knowledge. Thus, the tools for testing this sub-knowledge, both receptively and productively, will be further analysed in the following section.
3.6.1 Testing Receptive and Productive Knowledge

In order to measure receptive and productive knowledge, as suggested by Nation (2001/§3.3.3), equivalent test types should be administered: recall or recognition, oral or written, contextualized or decontextualized. Considering recall and recognition, and in relation to the meaning sub-knowledge, Laufer et al. (2004) as well as Laufer and Goldstein (2004) identify four degrees of knowledge of meaning: productive recall, productive recognition, receptive recall and receptive recognition. These degrees of knowledge are tested in monolingual or bilingual versions respectively. Researchers have found that there is a hierarchy of these four degrees of word knowledge. The results of the monolingual tests show that productive recognition (choosing the L2 target word from four options) and receptive recognition (choosing the meaning of the target word from four options) are equally the easiest (Laufer et al., 2004). These are followed first by receptive recall (demonstrating the understanding of the L2 target word by providing another L2 word where more than one word is considered correct) and finally by productive recall of meaning (supplying the L2 target word). Productive recall is the hardest task as it is the final ability to be acquired.

Results from the bilingual version of the tests confirm the validity of the hierarchy (Laufer & Goldstein, 2004). However, in contrast to the monolingual version where there is no significant difference between the two recognition modalities, productive recognition proves to be more difficult than receptive recognition in the bilingual version. The researchers state that a possible explanation can be that passive recognition in the bilingual version is easier since it requires learners to choose the correct L1 translation of the L2 target word, rather than the correct definition in L2 as it does in the monolingual version. It follows that since all the items of the recognition tests in the monolingual version were in L2, both passive and active recognition had the same level of difficulty.

The general conclusion Laufer and Goldstein draw from both studies is that the ability to recognise words - either productively or receptively - is acquired before the ability to recall them, and that recall of word meaning is easier than recall of word form. Thus, the meaning sub-knowledge can be tested according to these two dimensions (receptive-productive and recall-recognition) in monolingual or bilingual
versions. Table 8 gives examples of how each degree of knowledge can be elicited for the same target word, in this case for the target word “spiaggia” (beach).

Table 8. Degrees of vocabulary knowledge.\(^{82}\)

<table>
<thead>
<tr>
<th></th>
<th>Recall</th>
<th>Recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Receptive</strong></td>
<td><strong>Bilingual</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spiaggia - b______</td>
<td>Spiaggia</td>
</tr>
<tr>
<td></td>
<td>(2B)</td>
<td>a. friend b. light c. beach d. word (4B)</td>
</tr>
<tr>
<td></td>
<td><strong>Monolingual</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Se sono in spiaggia</td>
<td>Spiaggia</td>
</tr>
<tr>
<td></td>
<td>______________.</td>
<td>a. è per strada b. è in collina c. è al mare d. è in montagna</td>
</tr>
<tr>
<td></td>
<td>(2M)</td>
<td></td>
</tr>
<tr>
<td><strong>Productive</strong></td>
<td><strong>Bilingual</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S______ - beach</td>
<td>Beach</td>
</tr>
<tr>
<td></td>
<td>(1B)</td>
<td>a. amico b. luce c. spiaggia d. parola (3B)</td>
</tr>
<tr>
<td></td>
<td><strong>Monolingual</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vado in s______ per</td>
<td>È vicino al mare:</td>
</tr>
<tr>
<td></td>
<td>abbronzarmi.</td>
<td>a. montagna b. colpa c. spiaggia d. marzo (3M)</td>
</tr>
<tr>
<td></td>
<td>(1M)</td>
<td></td>
</tr>
</tbody>
</table>

The table shows the degrees of knowledge in both monolingual (M) and bilingual (B) versions. The degrees of knowledge in the monolingual version in the order they should be presented to test takers are as follows:

(1M) Productive recall: the learner should provide the L2 target word. The first letter is given in order to avoid non-target words;

(2M) Receptive recall: the form of the target word is given, the learner should demonstrate understanding the meaning by completing the sentence with a suitable word;

(3M) Productive recognition: The learner should choose the target word among the four options provided;

(4M) Receptive recognition: the target word is provided and the learners should demonstrate understanding of the meaning by choosing the correct option.

The degrees of knowledge in the bilingual version in the order they should be presented to test takers are as follows:

(1B) Productive recall: provide the L2 word;

\(^{82}\) Adapted from Laufer et al. (2004: 206) and Laufer and Goldstein (2004: 407).
(2B) receptive recall: provide the L1 word;
(3B) productive recognition: choose the L2 word;
(4B) receptive recognition: choose the L1 word.

Distracters should be from the same frequency levels of the target word. In the example in Table 8, the VdB is used and the frequency level of the target word and the distracter is VF.

In view of Laufer et al. (2004) and Laufer and Goldstein’s (2004) studies, the monolingual version of the test could prove more difficult than the bilingual version. From this, one can surmise that the monolingual version can be used with more advanced learners, whereas the bilingual version could be more appropriate with beginner levels. Considering this assumption, the bilingual version was used with A1-A2 learners (§4.3) and the monolingual version with A2-B1 learners (§4.2.5).

The next chapter focuses in detail on the experimental studies carried out for this doctoral research, which seek to apply the notions discussed in this chapter within the framework of subtitling. The preliminary and pilot studies which led to this project’s main experimental study, along with the scientific method followed, are thus surveyed and discussed.
Chapter IV - Preliminary Studies and Main Study

4.1 Introduction

The review of relevant literature presented in §2.5.1 draws attention to the few empirical studies on the effects of subtitling in SLA. These previous studies investigate how subtitling can affect listening comprehension, writing, as well as idiomatic expression retention, and they all focus on the acquisition of English as a Foreign Language. Therefore, many aspects are still in need of research in English and investigation of other languages is widely lacking. The current study aims to contribute to filling this gap by examining the effects of subtitling on incidental vocabulary acquisition of IFL learners. This Chapter discusses the three preliminary studies (PSs) and the pilot study (§4.2.1; §4.2.2; §4.2.3; §4.2.4 respectively) which led to the main experimental study of this doctoral research (§4.3). Findings from the preliminary and pilot studies are presented here, as they shaped the research design and materials used in the central study. In particular, the pilot study of the main experiment is described in greater detail. Another complementary study, of longitudinal nature, which was planned to enrich the main study is also briefly presented (§4.2.5). The complementary study aimed to test the effect of subtitling on incidental vocabulary acquisition with participants of a higher level of proficiency (A2-B1) compared to the participants of main study, whose level was A1-A2. For these reasons, the monolingual version of vocabulary post-tests, both immediate and delayed, was used in contrast to the bilingual version administered for the main study, which employed immediate post-tests only (§3.6.1). However, due to the small number of participants, data analysis was not performed and the study is thus presented as an example to be developed in future research.

The present research applied the scientific method which enables to investigate a phenomenon objectively by gathering data (Kumar, 2002; Boccia, 2007; Cohen et al. 2007). The specific steps followed in the research process were:

- observation;
- statement of a problem;
- literature review;
• formulation of a hypothesis;
• identification and labelling of the variables (independent and dependent);\textsuperscript{83}
• construction of a research design (i.e. specifications of operations for testing a hypothesis under a set of conditions);
• identification and construction of devices for the observation and measurement of selected variables;
• piloting of the experimental procedure and the instruments;
• identification of participants;
• data collection;
• analysis and interpretation of data;
• confirmation or rejection of the hypothesis;
• interpretation of final results.

Observation took place during the first PS in 2008 and the problem was identified: a lack of study on the effects of subtitling on second language acquisition with particular regard to vocabulary acquisition. After conducting a systematic literary review, hypotheses were formulated. The subtitling task was identified as the independent variable and incidental vocabulary acquisition as the dependent variable. Then a mixed research design - combining qualitative and quantitative data collection and analysis - was selected for testing the formulated hypotheses. In view of the preliminary and the pilot studies carried out with Bachelor Degree of Arts (BA) and Bachelor Degree of Commerce (BC) students, enrolled in Italian Studies at the National University of Ireland, Galway (NUI Galway), first-year BA students at NUI Galway were identified as participants in the main experiment. The main study can be defined as quasi-experimental since it availed of two groups - experimental group and control group - of non randomised participants (i.e. not randomly assigned). A quasi-experimental design usually combines analysis of qualitative and quantitative data, and is often employed in education research where “the random selection or random assignment of schools and classroom is quite impracticable” (Cohen et al., 2007: 282). For this study a pre-test/post-test non-equivalent group

\textsuperscript{83}Ary, Cheser Jacobs, and Sorensen (2009: 26) state that “[e]xperimental research involves a study of the effect of the systematic manipulation of one variable(s) on another variable. The manipulated variable is called the experimental treatment or the independent variable. The observed and measured variable is called the dependent variable”.

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A mixed-method research design for data collection was followed in the investigation and developed in two phases: fixed and flexible. A mixed-method research avails of quantitative and qualitative approaches in the same study and the outcome “is findings that may [...] provide a more complete explanation of the research problem than either method alone could provide” (Ary et al., 2009: 23). In fact, quantitative research includes data collection procedures which provide principally numerical data which is analysed by statistical methods, while qualitative research entails data collection procedures which result mainly in open-ended, non-numerical data which is analysed by non-statistical methods (Dörnyei, 2007). Education research made use of a quantitative approach mainly until the end of the 20th century, when scholars started to take into account participants’ experiences and perspectives. Thereafter, the qualitative and quantitative approaches became complementary. Robson (2002) informs us that, fixed and flexible are two additional aspects of research design. Fixed designs rely on quantitative data and statistical generalization. They also require a high degree of control by the researcher and a considerable amount of pre-specification: a developed conceptual framework in order to know exactly what to look for and how, as well as extensive piloting to verify what is feasible before reaching the central stage of the research study. While flexible designs make ample use of qualitative data, generally words, and do not require as much pre-specification since they are flexible and the design evolves while the research takes place. However, flexible design also includes quantitative data, in the form of numbers.

In the fixed phase of the main study, after extensive piloting, quantitative data was collected through vocabulary pre- as well as immediate post-tests from all participants. A pre-test of the target words and two post-tests (bilingual productive and receptive recall word meaning knowledge) were selected (§4.3.3.2). Test results of the main study were then statistically analysed (§5.2.4). In addition, participants’ background information as well as their audiovisual habits and preferences expressed

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84 Groups are defined as non equivalent because they are not randomised.
in the initial questionnaire were collected in order to provide a detailed description of the groups taking part in the study (§5.2.1). Participants’ feedback was gathered through the final questionnaires (§5.2.2). Participants’ learning preferences were identified through the VARK learning style questionnaire and correlated to participants’ performance in the post-tests (§5.2.5). In the flexible phase, qualitative data was collected through classroom audio/video recordings and classroom observations, which can offer a valuable insight of the experimental study and allow for better interpretation of the final results (§5.3).

The study triangulated data collection by including participants’ initial and final questionnaires, VARK learning style questionnaires, audio/video-recorded classroom lessons, classroom observations, a pre-test and two immediate vocabulary post-tests. Triangulation is considered “a valuable and widely used strategy [which] involves the use of multiple sources to enhance the rigour of the research” (Robson, 2002: 174). Data triangulation (the use of more than one method of data collection) is one of four types of triangulation (Denzin as cited in Robson, 2002) together with observer triangulation (the presence of more than one observer in the study), methodological triangulation (the combination of quantitative and qualitative approaches) and theory triangulation (the use of multiple theories). All four types of triangulation were employed in the main study. Observer triangulation was made possible through classroom video recordings and examination of the research design by a number of SLA experts before the study took place. While the methodological triangulation used has been just outlined, theory triangulation applied can be reviewed in Chapter I, II and III. The final stages of data collection, analysis and interpretation will be further described and presented in the next Chapter.

4.2 Preliminary Studies

The subtitling module has been a regular part of the first and second semester of the Italian language course for second year Bachelor Degree of Arts (2BA) and Bachelor Degree of Commerce (2BC) students in Italian Studies at NUI Galway since 2008. Preliminary studies which led to the main experiment took place between 2008 and 2012 throughout the entire academic year (from September to March) and are specified in more detail in Table 9.
Table 9. Preliminary and pilot studies overview.

<table>
<thead>
<tr>
<th>Study</th>
<th>Participants</th>
<th>AV Input</th>
<th>Experimental Design</th>
<th>Instruments for Data Collection</th>
<th>Vocabulary Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS1 (2008/09)</td>
<td>five 2BC students</td>
<td>Italian movie <em>Manuale d'amore</em> (2005)</td>
<td>Exploratory</td>
<td>Class Observations; Students’ Essays.</td>
<td>N/A</td>
</tr>
<tr>
<td>PS2 (2009/10)</td>
<td>three 2BC students + 17 2BA students</td>
<td>Italian TV series <em>I liceali</em> (2008)</td>
<td>Non-experimental</td>
<td>Class Observations; One End of Semester Questionnaire; Vocabulary Delayed Post-Tests.</td>
<td>No Pre-Test; Delayed Post-Test: <em>bilingual receptive recall</em> and <em>receptive recognition.</em></td>
</tr>
<tr>
<td>PS3 (2010/11)</td>
<td>16 2BA students</td>
<td>I Semester - Italian movie <em>Manuale D'amore</em> (2008)</td>
<td>Quasi-experimental</td>
<td>I Semester - Class Observations; Level Test; Initial and Final Questionnaires; Vocabulary Pre-Test; Vocabulary Immediate Post-Test. II Semester - Class Observations; VARK Questionnaire; Vocabulary Pre-Test; Vocabulary Immediate and Delayed Post-Test.</td>
<td>I Semester - Pre-test; Immediate and Delayed Post-Test: <em>monolingual productive recall.</em> II Semester - Pre-test; Immediate and Delayed Post-Test: <em>bilingual receptive recall.</em></td>
</tr>
<tr>
<td>Pilot Study (2011)</td>
<td>10 2BA students</td>
<td>Italian movie <em>Viaggio in Italia</em> (2007)</td>
<td>Quasi-experimental</td>
<td>Class Observations; Level Test; VARK, Initial and Final Questionnaires; NUI Galway Student Questionnaire on Teaching; Vocabulary Pre-Test; Vocabulary Immediate and Delayed Post-Test.</td>
<td>Pre-test; Immediate and Delayed Post-Test: <em>bilingual productive</em> and <em>receptive recall.</em></td>
</tr>
</tbody>
</table>
4.2.1 Preliminary Study 1

During the 2008/2009 academic year, prior to the onset of this doctoral research, a subtitling module was conducted as part of the language course for five 2BC students. The B1 level students, four female and one male, were all Irish aged 19-21. The course run from September 2008 to March 2009, one hour per week for a total of 24 hours (12 hours per semester). The aim of the course was to enhance language learning through the active creation of subtitles and not to train students to be future subtitlers. Students were evaluated through continuous assessment: class discussion, use of Forum and Wikis, subtitles and a reflective essay. The final outcome was the selection and production of a subtitled scene for an Italian featured film to show at one meeting of the NUI Galway Italian Society. The course was also the topic of my MA dissertation (Lertola, 2010). Furthermore, the course was shortlisted for The Jennifer Burke Award for Innovation in Teaching and Learning in May 2009, and it was among the winners of the European Award for Languages - The Language Label in July 2009.

The AV material chosen was a 2005 Italian romantic comedy, *Manuale d’Amore*, directed by Giovanni Veronesi. The movie is suitable for teaching purposes as it is made up of four independent episodes and this allows the instructor to present short but complete stories. The episode selected for the course, called *Innamoramento* (falling in love), is 29 minutes long and tells the story of two young people, Giulia and Tommaso, who meet and, after a series of funny circumstances, fall in love. In order to meet students’ interests and needs, the audiovisual material was chosen to match their profiles: the main characters and students are the same age which enhances their motivation and creates an emphatic process (Balboni, 2002). In addition, the movie is set in Rome which provides a social and cultural context useful for discussion, and it also stimulates intercultural comparison. The episode was further divided into short video clips of a maximum length of six minutes. Each video corresponded to a different scene. The scenes were of different length in order to maintain the sense of the story and to have a similar amount of dialogue. Each scene required four weeks of work and, by the end of the course, five scenes were

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85 The final reflective essays were due at the end of the first semester in November 2008.
86 NUI Galway Italian Society is a society entirely run by students which aims to promote Italian language and culture through various activities and events: http://www.socs.nuigalway.ie/society_profiles/view/53. Last accessed 13 May 2013.
subtitled by the students. During the four weeks, the UD structure (§1.5.2) was followed for each scene to be subtitled: introduction of the activity; viewing of the video clip, first without and then with the dialogue transcript; comprehension of the transcript; and finally subtitling of the video.

As already pointed out, the aim of the course was to enhance language learning and not to provide subtitling training. Therefore, the subtitling software had to be as user-friendly as possible and for this reason no professional subtitling software was used. Subtitling software has many implications for course preparation as well as on course delivery. In this course, DivXLAnd Media Subtitler87 was tested (Figure 10). DivXLAnd is a freeware application which allows for creation and editing of subtitles (for how to use DivXLAnd see Incalcaterra McLoughlin & Lertola, 2011).

Figure 10. DivXLAnd Media Subtitler with one student’s subtitles.

DivXLAnd was user-friendly thanks to the subtitling application button but, on the other hand, it was time consuming for students when opening the software to get ready to subtitling and for the teacher when evaluating. After synchronizing the subtitles with the video clip it was not possible for the students to embed their subtitles in the video clip but they could only save their subtitle files separately. They could not see their final product since they could only watch their subtitled video clip through DivXLAnd player. Furthermore, having students’ subtitles as a

Separate file resulted in a greater amount of time spent by the teacher in the collection and evaluation of students’ subtitled videos.

Students demonstrated a keen interest in the course during the entire academic year through their attendance and dedication - students also voluntarily worked extra hours to prepare the material to show to other fellow students of Italian at the Society meeting. They also expressed their enthusiasm in their end of semester essays. In addition to class observations, students’ essays provided a useful insight when analysing the course for future improvement. Although interesting and motivating for the students, the AV material contained many colloquialisms which students found hard to understand. Listening comprehension of the different speakers was also difficult. As can be seen in the Table 10, in one reflective essay, a student (#2) pointed out that “one of the main challenges was in comprehending Tommaso’s strong Roma accent and the colloquial language he would use, most of which unfortunately could not be found in a dictionary”. Moreover, all the students seemed to agree on the fact that the dialogue transcript was essential for them to fully comprehend the video. Students’ comments regarding the use of the dialogue transcript are fully reported in Table 10:

Table 10. Students’ opinions on the use of the dialogue transcript expressed in the reflective essay.

<table>
<thead>
<tr>
<th>Student #1</th>
<th>Opinions on Dialogue transcript</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jennifer</td>
<td>[Jennifer] usually had a handout with the dialogue on it as well, which made it much easier to break it down, and take the scene one line at a time.</td>
</tr>
<tr>
<td>Student #2</td>
<td>We began by watching the scenes and then Jennifer would provide us with a direct transcript which we would then begin to translate.</td>
</tr>
<tr>
<td>Student #3</td>
<td>Jennifer’s handouts of the scripts which were spoken were very useful and allowed me to go through the scenes piece by piece so I understood the clips fully.</td>
</tr>
<tr>
<td>Student #4</td>
<td>We watched a clip of a modern Italian film and tried our best to understand it, first without the script and then with it. Then as a group we tried our best to figure out words or sentences we didn’t know. I found this extremely helpful for remembering and learning new verbs and vocabulary.</td>
</tr>
<tr>
<td>Student #5</td>
<td>Our study has given us a greater understanding into Italian culture, we had to analyse the movie clips and scripts in great detail in order for us to fully comprehend what exactly was happening in the movie and through doing this it really helped us grasp and understanding of how different cultural meanings can effect a person’s understanding of a culture.</td>
</tr>
</tbody>
</table>

Students also expressed their opinion on translation and subtitling in their reflective essays (Table 11). The students had never experienced translation before
and they enjoyed translating and subtitling the film dialogue. They learned the basics of translation as they realised that is not sufficient to have a correct word by word translation to properly convey the meaning of a message. They encountered new words and idiomatic expressions and, even though it was challenging to maintain the same type of humour in English, they enjoyed subtitling. In addition, the subtitling process was stimulating because watching authentic Italian material gave the students a glimpse of real spoken language. As another student (#1) wrote translating Italian scenes “brings the language to life, and makes it more interesting”. According to student #2, “[i]t was very refreshing to see and hear Italian in action”.

Table 11. Students’ opinions on translation and subtitling expressed in the reflective essay.

<table>
<thead>
<tr>
<th>Opinions on Translation/ Subtitling</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student #1</strong></td>
</tr>
<tr>
<td><strong>Student #2</strong></td>
</tr>
<tr>
<td><strong>Student #3</strong></td>
</tr>
<tr>
<td><strong>Student #4</strong></td>
</tr>
<tr>
<td><strong>Student #5</strong></td>
</tr>
</tbody>
</table>

AV materials “usually expose students to a larger amount of authentic oral language input, which in the long run should improve listening comprehension in
face-to-face interaction with native speakers” (Danan, 2004: 68). When expressing their opinions on the activity (Table 12), two students (#2 and #3) had the same impression as they felt that they had improved their level of Italian by learning new linguistic and cultural elements. They thought that this would help them during their upcoming Erasmus year when facing real life interaction with native speakers. In general, regarding the subtitling activity, students felt they learned while enjoying the course. They also agreed on the fact that they felt they learned things that they wouldn’t have learned otherwise and that the classes were different from any other lectures they had experienced before. For all these reasons, students considered the course enjoyable and challenging but at the same time useful and worthwhile.

<table>
<thead>
<tr>
<th>Opinions on the Subtitling Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student #1</strong></td>
</tr>
<tr>
<td><strong>Student #2</strong></td>
</tr>
<tr>
<td><strong>Student #3</strong></td>
</tr>
<tr>
<td><strong>Student #4</strong></td>
</tr>
</tbody>
</table>
were saying, making the subtitles was a lot of fun. I felt kind of like a film maker.

| Student #5 | Jennifer created a fun learning environment while still maintaining a learning experience for all of us and I felt that this really helped us to embrace the situation and grasp a better understanding of the Italian culture and language. I found the subtitling classes to be extremely beneficial and really enjoyed the experience. |

Class organization based on the UD structure proved to work efficiently even though some issues had to be further refined. The AV material, although motivating, seemed to be too challenging for listening comprehension as well as for translating. The dialogue transcript played an essential role in comprehension and in the subtitling process. For these reasons some changes were made to the following subtitling study (§4.2.2) which was specifically designed to investigate whether the creation of subtitles can facilitate language acquisition, focusing on vocabulary retention. One of the major changes was the choice of a different AV input which contained words and idiomatic expressions which could be used for testing vocabulary acquisition.

### 4.2.2 Preliminary Study 2

In light of the positive outcomes of the 2008-2009 module and in view of this doctoral research, another subtitling module was offered during academic year 2009-2010 as part of the Italian language course for three 2BC and 17 2BA students (for a total of 20 students). The two 12-week semester course lasted for a total of 24 hours (one contact hour per week). The group was comprised of students of different nationalities: 16 Irish, one Canadian, one Italian, one Spanish and one Portuguese.\(^8^8\) The Italian student was not considered in the study for obvious reasons. The Canadian student was not included in the data collection since he was a visiting student for the first semester only. This resulted in 18 students involved in this non-experimental study. This study can be defined as non-experimental since it was not possible to have both experimental and control groups. However, a mixed-method research design was applied as both qualitative and quantitative data was collected.

\(^8^8\) Students who participated in the preliminary, pilot and main studies were informed that they were going to take part in an experimental study on the use of technology in language learning.
The PS2 differed from the PS1 since it was intended to be an investigation of the effects of subtitling on language acquisition with regards to vocabulary. While the PS1 made use of classroom observations and students’ essays, the PS2 was planned to collect data through classroom observations, vocabulary receptive recall and recognition post-test and one final questionnaire.

Considering the findings from the PS1, students attending the course were asked to create subtitles for four short video clips from a new AV input, a 2008 Italian TV series called *I liceali*, which focuses on high school students and their new teacher. Once again, the AV material was chosen to match students’ profiles, it was selected on the basis of similar age and context to the learners. Two video clips were subtitled in the first semester (September to November 2009) and another two in the second (January to March 2010). The work on each video clip was done during four one-hour classes and followed the UD structure as in the PS1. In contrast to the previous study, at the end of the subtitling process for each video clip students were also asked to fill in a form where they had to justify their translation decisions regarding some selected points. This form was created for each video and concerned the most difficult translation passages, both at linguistic and cultural levels, for which students had to provide their translation and express the reasoning behind it. This proved to be a useful exercise for stimulating post-activity discussion. However, it was not feasible in terms of time, given the few hours allocated to the course. Thus, the form was used in the PS2 only.

Since the research focus of the PS2 was on vocabulary acquisition, in January 2010, at the beginning of the second semester and seven weeks after the end of the first part of the module, students were required to fill in an anonymous vocabulary receptive recall and recognition post-test on the linguistic content which had been encountered in the dialogue transcript of the two subtitled videos. A pool of 19 target words and verbs together with one idiomatic expression was selected for the tests. Students were asked to perform two exercises in the post-test: one in receptive recall and one in receptive recognition. The first exercise required students to translate 10 nouns from Italian into English and the second to indicate the correct meaning of nine Italian nouns and verbs, and one idiomatic expression among three options in English, for a total of 10 multiple choice questions. Following the four degrees of

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89The TV series *I liceali* by Lucio Pellegrini was broadcast in Italy from 2008 to 2011 on Mediaset. Specifically, this research project made use of short video clips from episodes 1 and 2 of season 1.
knowledge of vocabulary meaning based on the two dichotomous distinctions production-reception and recall-recognition (§3.6.1), both exercises were in the bilingual version. The first exercise tested receptive recall of meaning (that is to say provide the L1 word) and the second exercise tested receptive recognition of meaning (that is to say choose the L1 word). Only 15 students took the vocabulary recall and recognition post-test. The highest scores in vocabulary recall were accorded to English cognates such as *applauso* (applause - 100%) and *trasferimento* (transfer - 93%). These were followed by a word, *mascalzone* (rascal - 80%), which refers to a character; and by words which were specifically related to the story or context (i.e. the school system) such as *maturità* (high school diploma - 67%), *parolacce* and *pensiero* (which mean ‘swear words’ and ‘thought’ respectively - both 60%). The remaining words were equally remembered by 40% of the students. Regarding the vocabulary recognition, students could remember an average of 88% of the items. The most remarkable result is that 73% of students could remember the correct meaning of the expression *vai tranquillo* (don’t worry) which was unknown to the majority of the students at the beginning of the course, as was clear from class observations.

In the second semester another two scenes were subtitled but no testing of vocabulary acquisition was performed due to lack of time. From classroom observations and the results of the final questionnaire, which nine students filled out, it was clear that by the end of the module students felt more competent in translation, with specific skills in AVT, and that they had improved their competence in L1 and in L2. The oral and written feedback of PS1 students (§4.2.1) portrayed subtitling practice as a more enjoyable way to learn the language and this was confirmed by the PS2 students. The final questionnaire’s open-ended questions revealed that students considered the creation of subtitles as extremely motivating because of the use of AV material, the language labs and the individual project work. This type of individual project work highly motivated students because they saw themselves as responsible for their own translation decisions during the subtitling process. In addition, students considered the creation of subtitles as an innovative way to learn the language as well as a new way to approach translation. In fact, PS2 students started to fully understand that it was not a traditional translation task only

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90Besides general information on the participant, the anonymous questionnaire contained seven Likert scale items (Very much; Much; Fair; A little; Almost nothing) and three open-ended questions.
by the end of the first semester and they made a pointed effort to prepare subtitles for
the video clip rather than create a simple translation. The results of the closed-ended
questions also gave an interesting insight into students’ perception of the course: all
the students felt they had learned in terms of language (45% very much, 55% much).
In particular, they felt they had improved their fluency in Italian (10% very much,
20% much and 70% fair), their ability to recognise and understand Italian idioms
(22% very much, 40% much, 22% fair and 11% a little) and their ability to recognise
and use different registers appropriately (44% very much and 56% much). Finally,
the majority of students (66%) admitted they had positively changed their attitude
towards translation by the end of the module.

In light of the module and the results of the vocabulary recall and recognition
test, some major changes to the experimental design for the next subtitling study
were planned: it was decided not to include English cognates in the pool of target
words, which in turn implies that participants should be native English speakers
only, and it was also decided to add a pre-test to ensure that the target words are
unknown before this experimental method of instruction is carried out. In addition,
there would be two post-tests: one to measure each dimension of word meaning
knowledge for each target word. These post-tests should not be anonymous in order
to compare participants’ performance in their pre- and post-tests. The course also
served in the selection of the appropriate AV material to be used. Although
motivating to the students, the Italian series proved difficult to understand due to the
following factors: strong accent of some of the characters, use of colloquial
expressions mainly from teenage slang and fast-pace speech. However, at the
research level, the TV series allowed for selecting short and self-contained sequences
rich in cultural elements to use in the entire module and thus offered a consistent
story to be subtitled. At the same time, it was not easy to select a substantial number
of unknown words to use in the vocabulary test. The subtitling software used was
DivXLand as in the PS1 and it was well accepted by the students. Notwithstanding
the limitations outlined above, overall DivXLand proved to be an appropriate
software programme for this preliminary study.
4.2.3 Preliminary Study 3

The third preliminary study took place during the academic year 2010/2011 and involved 16 Irish 2BA students. At the beginning of the module, the students sat a Level Test provided by the Università per Stranieri di Siena, Italy. The level test scores indicated that students were Level A2. The Level Test is made up of three written sections and one oral section. The oral section was not administered due to time constraints. The written sections consisted of three parts each (grammar, reading comprehension and writing). The first section was designed for A1-A2 learners and the second section for B1-B2 learners. The third section, designed for C1-C2 level, was not presented as it was not suitable for the participants’ level. Students were asked to complete the first section and then do the second section in the time allowed (one hour).

Students enrolled in the module were divided into two groups - experimental and control - of eight students each according to their class schedule. A mixed-method research approach was applied and it can be defined as quasi-experimental (§4.1), due to the presence of non-randomised participants in the experimental group and control group. One experiment was conducted during the first semester (September to November 2010) and another in the second (January to March 2011). During the first semester, an initial questionnaire was distributed to find out students’ backgrounds and their television viewing habits, in terms of subtitled or dubbed materials viewed, as well as their previous learning experience. The questionnaire contained simply worded items and closed-ended questions. Thus except for the last two questions, students did not have to produce any free writing. At the end of the semester, students also had to fill in a final questionnaire on the module (§4.2.4).

The experiment conducted in the first semester aimed at testing a pre-test/post-test design and verify the suitability of testing instruments. The AV input used was a video clip of Manuale d'Amore from which a pool of English non-cognate target words was selected. A vocabulary pre-test was administered two weeks prior to the experimental module to ensure that the target words were unfamiliar to all students. Students received a list of 50 Italian lexical items

91Many thanks to the Università per Stranieri di Siena for allowing the use of their Level Test in this doctoral research.
including 20 target words and 30 distracters. Students were asked to supply English (L1) equivalents of the Italian (L2) word list. The pre-test results showed that only eight out of 20 target words were unknown to all of the students, who did not know they would be tested again. Two weeks after the pre-test, students were exposed to the AV input following the UD lesson plan. The experimental group did the subtitling task while the control group carried out listening comprehension tasks. At the end of the experiment, all students took a monolingual productive recall test, defined as controlled productive vocabulary test by Laufer (1998). The controlled productive vocabulary test consisted of short sentences in Italian where the first letters of the target words were given in order to avoid non-target words. The test scoring system proposed by Laufer was also applied: correct answer scores one and incorrect or blank answer scores zero. As Laufer (ibid.: 260) points out an answer is considered correct when:

it is semantically correct i.e. the appropriate word is used to express the intended meaning. If used in the wrong grammatical form, for example, stem instead of past tense, it is not marked as incorrect. A word with a spelling error which does not distort the word (e.g. *recieve instead of receive) is not marked as incorrect either. Most of the incorrect answers would include non-words.

The controlled productive vocabulary test included sentences for all the target words plus all distracters. Eight weeks later, students did the delayed post-test which was identical to the immediate post-tests but the words were presented in a different order. Students reported that sentence difficulty had negatively influenced their performance in vocabulary recall. In the previous preliminary courses, a bilingual version of receptive recall and recognition tests had been used and words had been presented in isolation. Therefore, a bilingual version of the vocabulary post-tests was chosen for use in the following experiment. In addition, too many words were included in the test, having both target words and distracters was not beneficial. Keeping only the target words would allow students to focus on them and give enough time to complete the test.

In light of the results of the first semester module, another experiment was carried out with the same students in the second semester. The students belonging to the experimental and the control groups in the previous course were inverted in the
new experiment. The aim of the experiment was to verify the testing tool (bilingual receptive recall), the VARK learning style questionnaire and the new AV input, an Italian movie called *Viaggio in Italia*. This 2007 movie by Paolo Genovese and Luca Miniero was broadcast on TV after a popular political talk show, *Ballarò*, in 21 episodes of 4 minutes. It was defined as a “film in bite-sizes” and contains many brief self-contained sequences where Italy and the Italian culture are seen ironically through the eyes of a separated husband and wife with totally different political views (La Gazzetta del Mezzogiorno, 2007). Like *Manuale d’Amore, Viaggio in Italia* was highly appropriate for teaching purposes as it is made up of several episodes. The movie tells the story of a separated couple who receive a very peculiar wedding request from their daughter: they are supposed to travel all over Italy on their way to the wedding to collect the presents. The movie was considered suitable for the learners as they could identify themselves with the daughter who was the same age. In addition, it is set in different places (Milan, Florence, Siena, Naples, etc.) and gives a general idea of many well-known cities and their cultural attractions. Two videos were prepared by splicing together relevant situations to present to the students. The first one showed the very beginning of the trip and explained the reasons behind it. It also showed the first stop in Florence where the parents had to find an old blind painter and tell him that their daughter was going to get married. The second video narrates the end of the trip when the parents finally arrive at their destination, the island of Stromboli, and they find out that the daughter is not getting married but she is going to live with her boyfriend. The trip as a wedding present was simply an excuse to see her parents and give them the chance to spend some time together remembering old times. Only the first video was used in the experiment while the second one was shown to present the students the end of the movie and also in view of possible future trials.

The AV input was well accepted by the students and suited the experimental needs of this research. A pool of 15 target words was identified and students were pre-tested two weeks before being exposed to the AV input. The bilingual receptive recall pre-test, contained the target words and the same number of distracters. All the target words were unknown to the students. Immediate and delayed post-tests,

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92 This was also done for academic reasons, in this way all the students enrolled in the 2BA Italian language course experienced subtitling.
93 Author’s translation.
identical to the pre-test (except for the word order), were administered. The statistical analysis of the post-tests results illustrated that the experimental group performed better than the control group in both the immediate and the delayed post-tests (Lertola, 2012). A statistically significant difference between the groups was found at the post-delayed time point only. Due to the small sample and also because the distribution was not always normal, non-parametric tests were used.

These preliminary studies support previous research on the benefit of subtitling tasks (§2.5.1) and encourage further investigation of the effects of the subtitling practice on incidental vocabulary acquisition. To this purpose, a pilot course was planned before conducting the main experimental study (§4.2.4). Considering these two last experiments, the testing instruments were identified in the bilingual version of productive and receptive recall of meaning. In addition, the movie Viaggio in Italia proved to be a suitable AV input for the final experiment.

While the AV input for the experiment was kept, the subtitling software, DviXLand, was substituted by LvS (§2.5.2) which was specifically designed for pedagogical purposes in language learning. The aim of the pilot was to evaluate the use of LvS as subtitling software for the main experiment. In fact, the software allows the instructor to attach word and power point files and, in this way, relevant documents for the subtitling task such as the dialogue transcript and subtitling guidelines can be available to the students during the task. Students can easily learn how to subtitle, save their work and submit it for evaluation. Furthermore, the software allows students to make comments on the activity and receive on-line feedback from the instructor. A power point presentation on LvS communication tools was specifically prepared for the course. However, LvS communication feature was tested only in the pilot course but was not employed in the main experiment.

### 4.2.4 Pilot Study

Before the main study, experimental procedures as well as the instruments should be piloted in order to identify possible problems in connection with any aspect of the investigation (Cohen et al., 2007).

As Mackey and Gass (2005: 43) point out:
A pilot is generally considered to be a small-scale trial of the proposed procedures, materials, and methods, and sometimes also includes coding sheets and analytic choices. The point of carrying out a pilot study is to test - often to revise - and then finalize the materials and the methods. Pilot testing is carried out to uncover any problems, and to address them before the main study is carried out. A pilot study is an important mean of assessing the feasibility and usefulness of the data collection methods and making any necessary revisions before they are used with the research participants.

Piloting should be carried out with a sample of participants similar to the participants the study has been designed for. For this reason, 10 2BA native English speakers in Italian Studies at NUI Galway were selected as the sample. The pilot took place between September and November 2011 within the Italian language course as with the previous preliminary modules. Participants were divided into experimental and control groups of five participants each according to their class schedule, and were informed that they could not change group. Experimental group participants were asked to perform a subtitling task, while control group participants were required to carry out listening and writing tasks. All participants sat a pre-test two weeks before the experiment to ensure that the target words were unknown to all of them. A pool of 15 target words was selected along with 15 distracters of the same frequency levels. One week after the pre-test, they filled out an initial questionnaire (§4.3.3.1), the VARK learning style questionnaire and also sat the Level Test from the Università per Stranieri di Siena (§4.2.3). Results of the test revealed that participants were at CEFR Level A2.

Both groups attended a one-hour class once a week for a total of four hours. The lesson plan was based on the UD phases (§1.5.2): presentation of the activity (motivation), viewing of the AV input with no audio first and then with L2 audio (global perception), comprehension of the L2 input (analysis), subtitling of the video for the experimental group and task-based oral and writing activities for the control group (synthesis), and a final discussion on the activity (reflection). After the discussion, all participants sat two immediate post-tests containing only the 15 target words. Then they filled in a final questionnaire. The final questionnaire was identical for both groups apart from some questions specifically related to the subtitling activity available to the Experimental group only. Three weeks after taking the immediate post-tests, participants took two delayed post-tests which contained the same target words but in a scrambled order (pre-,post immediate and delayed post-
tests can be found in the Online Appendix M). Finally, participants were also asked to fill in a final questionnaire and a compulsory ‘Student Questionnaire on Teaching’ (Appendix A) as required by NUI Galway regulations for any course taught. Besides twenty-three Likert scale questions (on the course, the lecture, facilities and students’ effort), the questionnaire contained six open-ended questions.

The AV input was the same video clip from the Italian movie *Viaggio in Italia* used in the previous preliminary study (§4.2.3). Most of the target words were also the same. According to the pre-test results, only 10 target words out of 15 were unknown to all the participants. The two immediate post-tests were a bilingual productive recall test and a bilingual receptive recall. In the bilingual productive recall the participants prompted by the L1 word had to provide the L2 target word (the first letter was given). While in the bilingual receptive recall the L2 target words were provided and they had to give the correspondent L1 words. Both post-tests contained the target words only. The bilingual receptive recall, was identical to the pre-test, but target words were in a different order. The delayed post-tests were identical to the immediate ones but, again, the order of the target words was different. Since the sample in the pilot was quite small and, what is more, some of the participants were excluded from the study because they had missed some of the experimental sessions (for more about participant mortality see §4.3.2), no statistical analysis of data collected in the vocabulary tests or in the questionnaire was performed. However, the pilot served to revise and finalize materials and methods. The AV input was found to be challenging enough in terms of language but the time allocated was not sufficient for some to complete the task. For that reason, the length of the video clip was reduced in view of the final experiment, consequently parts of the dialogue containing some target words were also eliminated. In addition, considering that the participants to the main experiments were going to attend the same modules as those in the pilot study, it was deemed necessary to eliminate words known to the pilot group from the pool of target words of the final experiment. The instruments for vocabulary testing - bilingual productive and receptive recall - were judged suitable for measuring vocabulary acquisition and the time allowed for taking the post-test sufficient. In addition, for qualitative data collection, class audio recordings were also made using an mp3 recorder, as were
screen video recordings of the class computers through the Sanako Smart Board. Unfortunately, due to technical problems the video recordings of the last class of the both groups were not possible. Photos were also taken of the board during the class discussion. Audio and video recordings together with the research log (i.e. course diary) proved to be extremely helpful to collect qualitative data and for revising the research design in view of the main experiment. In particular, the timing of the lesson plan was finalised (as further explained in §4.3.4) as well as some technical matters in data collection.

Piloting is especially recommended for questionnaires as items can be redefined. In particular, “technical matters: clarity, layout and appearance, timing, length, threat, ease/difficulty, intrusiveness; questions: validity, elimination of ambiguities, types of questions (e.g. multiple choice, open- and closed-ended), response categories, identifying redundancies” (Cohen et al., 2007: 79). In addition, according to Dörnyei (2010), it is good practice to pilot the questionnaire at various stages during its development. These trial runs provide useful feedback about the instrument and allow for possible improvement. The initial questionnaire and the final questionnaire were created and administered in the previous preliminary study (§4.2.3). That first piloting of the questionnaires highlighted ambiguous wording items, and some improvements were made in order to process the scoring better. In addition, some questions were added to the final questionnaire regarding the subtitling software, LvS.

A major change to the questionnaires was made by converting it from paper to on-line format before administering it in this pilot. Therefore, the new on-line questionnaires went through the two stages of what Dörnyei (2010: 54-55) defined as ‘initial and final piloting of the item pool’. The initial piloting was carried out according to the following steps:

- four people among friends and colleagues, specialists in the field as well as non-specialists, were asked to complete and submit the on-line questionnaires;

95Stavroula Sokoli kindly provided “LeViS Students questionnaire” and some questions were taken and adapted for the present final questionnaire.
• the questionnaires were completed on-line and submitted from different locations. The selected people had to answer a number of questions via e-mail about the questionnaires (item’s clarity and sequence, length, etc.);

• besides answering the questions, general comments were also provided which initiated a brainstorming session.

Ultimately, the final version of the two questionnaires was revised by a native speaker and the research supervisor. In view of the main study, the final piloting (or “dress rehearsal”) of the questionnaires took place during this pilot course, since one way to ensure that a questionnaire works in practice is “by administering the questionnaire to a group of respondents who are in every way similar to the target population the instruments was designed for” (Dörnyei, 2010: 56). As was the case for the post-test results, no analysis was carried out on the responses to the questionnaire. However, some comments given to three open-ended questions in the ‘Student Questionnaire on Teaching’ revealed interesting information on experimental and control group participants’ perception of the course and were also considered for future improvements.

From experimental group participants’ comments to the first question, it seems that the majority of them would like to do more translation/subtitling, as shown in Table 13. This apparently contradicts the fact that during the experimental sessions they mentioned the lack of time for completing the subtitling task. However, their wish for more subtitling activities refers to the second semester of the course. As illustrated by the answers of participant #5 to the second and the third question, translation and thus subtitling was new to them and was different from what they had experienced in previous language laboratories classes during their first year. The answers to the second question showed that their general expectation of improving their level of Italian had been fulfilled. All of them would have recommended the course to a friend and they described it as fun, challenging and stimulating. Participant #1 pointed out in the third question that “by engagement you learn more.” This suggests that the course, and the use of Italian AV material succeeded in engaging the participant in the language learning process.
Table 13. Experimental group participants’ answers to open-ended questions in the ‘Student Questionnaire on Teaching’.

<table>
<thead>
<tr>
<th>Participant</th>
<th>1. In your opinion, how could the relevance and usefulness of this course be improved?</th>
<th>2. What were your expectations for this course? Were they fulfilled?</th>
<th>3. Would you recommend this subject or course to a new student? How would you describe it to him/her?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>More subtitling, more speaking in Italian.</td>
<td>To improve my Italian. They were fulfilled.</td>
<td>I would, because it was the first time I came across Italian in movies. By engagement you learn more.</td>
</tr>
<tr>
<td>2</td>
<td>The use of more English translation/subtitles.</td>
<td>I expected to understand the Italian language more. It was somewhat fulfilled as I found the Italian used difficult at first.</td>
<td>Yes. A challenge but good fun.</td>
</tr>
<tr>
<td>4</td>
<td>I think it’s excellent already.</td>
<td>To put my Italian into practice.</td>
<td>Of course, a fun way to learn Italian.</td>
</tr>
<tr>
<td>5</td>
<td>I don’t think there’s any need for improvement, the course was excellently organised.</td>
<td>I expected only listening exercises to be done in the Lab, so I was pleasantly surprised by the translation element.</td>
<td>Yes, very stimulating. Translating the movie was something we have never done before and it was great for learning new vocabulary.</td>
</tr>
</tbody>
</table>

The responses given by the participants of the control group also showed general satisfaction with the course and the appropriateness of the AV input both in terms of language and content (Table 14). However, they had precise requests such as better instructions, more focus on grammar and less writing tasks. As concerns the instructions, they were revised again by an advanced learner of Italian and an English native speaker and were slightly modified to improve clarity. The listening and writing tasks were changed in line with the shorter video clip prepared for the main experiment. It should also be noticed that two of the five control group participants left the open-ended questions blank. However, they completed the twenty-three Likert scale questions. One possible explanation is that they simply did not bother to fill in the open-ended questions. Another explanation can be that control group participants did not have as many comments to provide about the course as the participants of the experimental group did.
Table 14. Control group participants’ answers to open-ended questions in the ‘Student Questionnaire on Teaching’.

<table>
<thead>
<tr>
<th>Participant</th>
<th>1. In your opinion, how could the relevance and usefulness of this course be improved?</th>
<th>2. What were your expectations for this course? Were they fulfilled?</th>
<th>3. Would you recommend this subject or course to a new student? How would you describe it to him/her?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>More instructions on what to do.</td>
<td>To learn more Italian through listening. Yes, they were fulfilled.</td>
<td>Yes, I would.</td>
</tr>
<tr>
<td>2</td>
<td>I really was very satisfied with it. Maybe a bit more emphasis on learning grammar?</td>
<td>I expected to gain a greater insight into Italian film etc. and through “Viaggio in Italia.” I did that.</td>
<td>Yes, I would say it is actually fun rather than boring.</td>
</tr>
<tr>
<td>3</td>
<td>Less emphasis on compositions, more on factual exercises.</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Finally, a major change compared to the previous preliminary study was the use of LvS subtitling software instead of DivXLand. Participants found LvS user-friendly when subtitling but time-consuming when unpacking the LvS activity for the first time.\(^\text{96}\) However, once the activity was unpacked, it was easy and quick to open and start subtitling. In addition, participants appreciated having the dialogue transcript available in the text area and some of them would also use the ‘Student notes’ area to type in their translation before typing it in the subtitle editor area. For these reasons, LvS was considered suitable subtitling software for use in the main experiment.

\(^{96}\)LvS activities are folders which contain several files and should be compressed to be sent to other users. When an activity is compressed it is called ‘packed activity’. When a user imports a packed activity in the LvS environment, LvS unpacks it in a folder of the user’s choice. The activity is then ready to be used. The LvS activity for the pilot course contained the video clip to be subtitled and two additional documents. One was a Word file with the dialogue transcript and the other was a PowerPoint presentation with guidelines for best practice in subtitling (§4.3.4).
4.2.5 Complementary Study

Participants from the pilot study (§4.2.4) attended another module in the second semester from January to March 2012. Information on the participants had already been collected from the initial questionnaire, the level test and the VARK learning style questionnaire during the pilot course. After the pilot course, participants were divided into two groups. Participants who belonged to the experimental group in the pilot were assigned to the control group and vice versa. In this way participants from the experimental group had no previous subtitling experience which could have affected their performance. This new quasi-experimental study aimed at testing the same hypotheses made for the main experimental study (§4.3.1) and, considering the more advanced level of the participants, the monolingual version of the productive and receptive recall tests was used instead of the bilingual version. This quasi-experimental study was designed to complement the main experimental study since the two studies were run in the same period of time. Unfortunately, due to time constraints, it was not possible to run a pilot and test the materials and the methods. However, the AV input, the second video clip from Viaggio in Italia, had already been used in a previous course (§4.2.3) and a pool of target words had also been selected at the time, even though testing had not been performed. The monolingual tests were tested by an advanced learner of Italian and an Italian native speaker. Some changes were made before administering the tests to the participants. Similar to the pilot procedures, all participants sat a pre-test three weeks before the experiment to ensure that the target words were completely new. The experiment was then carried out for four hours (one per week) over four weeks. The experimental group performed a subtitling task while the control group did some listening and writing tasks on the same video clip. Immediately after the experiment, all participants took the two post-tests and filled in a final questionnaire. After four weeks, students also took two post-delayed tests, identical to the immediate post-tests, which contained the target words in a scrambled order. No statistical analysis was performed since a number of participants did not attend all the classroom sessions and their numbers were rather reduced. However, the experiment is described and can be replicated in order to test the research question and hypotheses with a greater number of participants. This experience confirmed that in order to
reduce participant mortality especially when the number are already quite small, it is
tbetter to run the experimental study in a shorter period of time as it was done in the
main experimental study (§4.3).

4.3 Main Study

The investigation conducted in the previous preliminary studies contributed to the
formulation of the research question and hypotheses (§4.3.1) as well as the
completion of the experimental design of the main study. On the one hand, the PS1
(§4.2.1) showed the potential of subtitling in language learning. On the other, the
PS2 and PS3 (§4.2.2, §4.2.3) as well as the pilot (§4.2.4) made it possible to verify
the instruments for measuring vocabulary acquisition as well as collection methods
for quantitative and qualitative data. In the preliminary studies, diverse AV input was
also examined in order to find suitable material for this study. The selection of AV
material was extremely challenging and time-consuming since besides satisfying the
criteria of text selection (§1.2.1) - it had to contain several target words for testing
purposes. In addition, finding an appropriate subtitling software for language
learning played an essential role in the success of the module and therefore of the
experiment. Software selection was also challenging and some technical problems
could not be avoided. However, LvS software was used effectively in the pilot and
then employed in the main study.

4.3.1 Research Question and Hypotheses

Thanks to the findings and observation of the preliminary studies and the pilot, the
following research question and hypotheses were formulated.

RQ: Does subtitling of L2 audiovisual dialogue into L1 affect incidental acquisition
of meaning of L2 new words?

HYPOTHESIS (1):
Both subtitling condition and non-subtitling condition result in incidental acquisition
of the meaning of L2 new words compared to the pre-task performance.
HYPOTHESIS (2):
The *subtitling condition* leads to a more significant incidental vocabulary acquisition of meaning of L2 new words compared to the *non-subtitling condition* in productive and receptive recall.

4.3.2 Participants

In all the previous studies participants were students enrolled in 2BA and 2BC but their number was usually quite small and generally reached no more than 20 students. It was therefore considered more appropriate to have a greater number of participants in the main experiment in order to gather quantitative data and thus be able to run a statistical analysis of the data collected. Italian Studies at NUI Galway tends to have a large number of students in the first year of the Bachelor Degree of Arts (1BA). For this reason 1BA students were identified as participants of the main experimental study. The proficiency level of 1BA students is generally lower compared to 2BA students. However, 1BA students started their Italian classes in September 2011 and they were supposed to reach an A2 level according to the CEFR by the end of the course which was in March 2012. The main experiment was planned to take place in February 2012 and was thus closer to the end of the course. The pilot course was run with 2BA students from September to November 2011, and considering that they had the same amount of instruction in their first year and they did not attend any other Italian class in College from March to September there was not such a big gap between the proficiency level of 1BA and 2BA students. In addition the level of 2BA students was verified through the level test as being A2 (§4.2.4). Due to the limited amount of time available for carrying out the experimental sessions, it was not possible to perform the level test with 1BA students but their level ranged between A1-A2.

At the beginning of the module, there were 40 1BA students participating. When designing and organizing the experiment great effort was made in order to avoid participant mortality. Nevertheless “in many classroom research settings, it is inevitable that not all participants will be present at all times” (Mackey & Gass, 2005: 111). Participants missing from one of the two treatment sessions and those who did not take the pre-test or the immediate post-test had to be eliminated from the
study. In addition, since the experiment was targeted for English native speakers and target words were English non-cognates, data from two Polish students and one French student were not included. Therefore, a total of 25 Irish students was considered. Unlike to the previous subtitling modules lasting the entire academic year (§4.2), ‘Culture through Language’ was offered as a four-hour module within the ‘Introduction to Italian Culture, History and Society’ annual course. Participants had to attend two classes of two hours each for two consecutive weeks in February 2012. For practical reasons, class sessions were scheduled from 6-8pm on Monday (6th - 13th of February), Tuesday (7th - 14th of February) and Wednesday (8th - 15th of February). Hence, the two two-hour classes were repeated three times. When the module was presented four weeks before the starting date, participants were asked to confirm their attendance at two class sessions on the same weekday (either on Mondays, Tuesdays or Wednesdays) according to their availability and class schedule. They were also informed that they could not change class session once the course had started. Finally, the participants were divided into the three groups. Following a quasi-experimental design (§4.1), participants in Monday and Wednesday sessions formed part of the Experimental Group (EG) and participants in Tuesday sessions were part of the Control Group (CG) resulting in 15 participants in the EG and 10 participants in the CG. The participants represented a convenience or opportunity sampling which is “[t]he most common non-probability sampling type in L2 research [...] where an important criterion of sample selection is the convenience for the researcher [...] Captive audiences such as students in the researcher’s own institutions are prime example of convenience samples” (Dörnyei, 2010: 61). Convenience samples belong to the category of non-probability samples and the extent of generalizability of the data gathered is minor. Nevertheless, it is important to point out that “the majority of empirical research in the social sciences is not based on random samples” (Dörnyei, 2007: 99). This is because researchers face practical sampling issues such as accessibility, expenses and time restraints which do not always allow them to collect information from a probability sample. It is therefore important to highlight the characteristics which the selected non-probability sample shares with the target population. A further description of the sample is provided in §4.3.3.1.
4.3.3 Materials

Several instruments were used to collect data in the main experimental study and previously piloted: the VARK learning style questionnaire, ‘Student Questionnaire on Teaching’, initial and final questionnaires, and vocabulary pre-test and post-tests (§4.2.4).

4.3.3.1 Initial and Final Questionnaires

Questionnaires are structured instruments for data collection which elicit specific information (Dörnyei, 2010). Questionnaires can elicit three types of data: factual, behavioral and attitudinal. The initial (or background) questionnaire was designed to elicit factual data such as gender, age, nationality, languages spoken; behavioral data regarding viewing habits in terms of dubbed and subtitled audiovisual material as well as previous language learning experience; and attitudinal data, in particular, opinions on the effects of subtitles, translation, audiovisual material and subtitling on language learning (Appendix B). The final questionnaire was designed to elicit only attitudinal data: participants’ opinions on the subtitling activity for the EG and on the listening and writing task for the CG. The second part of the final questionnaire was slightly different for the two groups, according to the type of task each group was required to perform. The EG and CG’s questionnaires can be found in Appendix C and D respectively.

In general, questions can be closed-ended or open-ended. Closed-ended questions are followed by a list of possible responses while open-ended questions require the respondent to write an answer. No open-ended questions were included in the initial and the final questionnaires. The only exception was general personal information (last and first name, ID, age and nationality) and participants’ native language in the initial questionnaire. Closed-ended questions are particularly suited for quantitative data collection and therefore for statistical analysis. Although there is a variety of types of pre-designed answers for closed-ended questions, only three types were included in the questionnaire: dichotomous (yes/no); multiple choice, in which all of the possible responses which are expected from that question are listed; and rating scale, also including Likert scale items, where participants are required to “make an evaluative judgement of the target by marking one of a series of categories
organized into a scale” (Dörnyei, 2010: 26). In Likert scales participants are asked to indicate to what extent they agree or disagree with a number of statements and therefore tick one of the responses ranging from “strongly disagree” to “strongly agree”, on a horizontal line. A neutral option “Neither agree nor disagree” is also available. The other rating scale is a variation on a Likert scale where the standard set of responses is replaced by a 5-point scale ranging from “Not at all” to “Very much” including “So-so” as an average option. There is a different Likert-type scale which ranges from ‘Very weak’ to ‘Very good’ (questions 3), in the initial questionnaire only. Verbal labels were given to all the five points of Likert and Likert-type scales, because, as Dörnyei (2010: 32) points out:

The main principle underlying scale construction is to give respondents a way of marking their answers with the least possible cognitive effort and distraction involved so that the transformation process from their internal rating/response to the marked option in the questionnaire does not cause, or is not subject to, any systematic interference. Semantic differential scales offer a very effective visual marking option, but in order for this method to work it requires two powerful anchors at the two ends of the scale. In my opinion, the “strongly agree” - “strongly disagree” contrast is not quite robust enough to hang an item on, which is why proper Likert scales list all the responses options.

Thus, the five-point scales were used according to the type of question and all the marking options were listed. In addition, rating scales were presented in a consistent order, with negative/low category on the left hand side, positive/high on the right hand side and average or neutral responses (fair/neither agree nor disagree) in the middle.

The structure of the initial questionnaire was as follows: at the beginning of the questionnaire, the title and some general information such as aim of the study and promise of confidentiality were provided. Then, for identification purposes, participants were asked to provide their last name, first name and student ID number. In order to gather descriptive statistics of the participants, information such as gender, age, nationality, native language (question 1) and foreign language(s) spoken (question 5) were required. Information about their Italian as an FL was also asked: length of study, level of fluency, use outside the FL classroom and contexts of use (questions 2-3-4). Participants were surveyed about their viewing habits in terms of dubbed or subtitled material (question 6) and to express their opinion on a series of statements regarding subtitles (question 7). After that, participants were asked if they
had experienced translation and audiovisual material in the FL class before, and if so what their opinion was about it (questions 8-9). Finally, the last question asked participants if they had ever subtitled a video before, and if so what their opinion was about the efficacy in FL learning (question 10).

The final questionnaire mainly contained rating scales and a few dichotomous (yes/no) type of questions. As already pointed out, the first part of the questionnaire was identical for the two groups. The final questionnaire had the same structure as the initial questionnaire. The first section (AV material) contained three questions which were the same in both versions of the questionnaire (question 1-2-3). Question 1 required informants to express their opinion on the video material, question 2 regarded the aspects which helped learners understand the content of the video and question 3 asked if they would like to watch more AV material in their regular FL class, while the second part was different for the two groups. The EG questionnaire contained a second (Subtitling Activity) and a third section (Subtitling Software - LvS). The second section contained three rating scales and two dichotomous types of questions. Question 4 required informants to express their opinion - after performing the subtitling activity - on the same statements they had already encountered in the initial questionnaire (sub-questions 8a-9a-10a). This was done to compare their responses before and after doing the subtitling activity. Question 5 required informants to rate how much they felt they had improved some abilities (listening comprehension, learning new vocabulary, grammar and translation). In question 6 they had to rate how they found the subtitling activity interesting, entertaining, difficult, challenging and a pleasant change. The two yes/no dichotomous questions asked informants if they would like to have more subtitling activities in their regular FL class (question 7) and if they would like to have more computer-based activities as well (question 8). Finally, the third section on the subtitling software contained one rating scale (question 9) and a yes or no query (question 10). The rating scale required the participants to indicate agreement or disagreement on four statements. These statements were taken from the “Levis Students Questionnaire” (§4.2.4) and were specific to LvS software. Question 10 was also taken from the same questionnaire and asked if they had encountered any technical difficulties.

The CG version of the questionnaire contained only a second section (Video-based activity). Questions 4, 5 and 6 were identical to the EG’s questions 4, 5 and 8
respectively, with two differences: question 4 only contained the second statement about the use of AV material in the FL class and question 5 listed writing as ability rather than translating. Likert scales and Likert-type scales were used in both version of the final questionnaire following the same criteria mentioned above.

Google spreadsheet was selected as a means for delivering the questionnaires due to its versatility. Questionnaires could be sent by e-mail and completed on-line by the participants. Submitted questionnaires and all data are stored on-line and can be downloaded for data analysis. Furthermore, completion of questions can be set as obligatory or optional and making questions obligatory to avoid missing data. Hence, only sub-questions (4a; 5a; 6a; 8a; 9a; 10a) were not required fields. On-line questionnaires proved to be a rapid, “well organized” and eco-friendly way of collecting data. They also suited the digital nature of the course.

4.3.3.2 Vocabulary Pre-test and Post-tests

In order to address the research questions of this study data was collected through a vocabulary pre-test and two post-tests. The pre-test (Pretest) was a bilingual receptive recall since the L2 target words were provided and participants were required to give the L1 correspondent of the words (Appendix E). The Pretest was administered four weeks before the module started and included a total of 22 words: 11 target words and 11 distracters. The AV material used in the main experiment was a shorter video of Viaggio in Italia (4:36 minutes) compared to the one used in the pilot study (7:04 minutes) and contained four less target words (Online Appendix H). The reduced length of the video and thus of the dialogue transcript (Appendix F) seemed to be more suitable for the time available for the experimental sessions as it gave enough time to complete the task and take the post-tests. Of course, a smaller number of target words also reduced the length of the post-tests, which was appropriate considering the time constraints. The target words were selected on the basis of a previous preliminary study (§4.2.3) and the pilot study (§4.2.4). In addition, target words and distracters were checked by the participants’ two native language teachers and also piloted with a C1 language learner and another native speaker who had not been involved in the item-development process. The target words belong to the three frequency levels - VF, VAU and VAD - of the VdB
(§3.2.1). Six VF words (sposarsi, cieco, dipingere, tagliare, regalo and gridare), four VAU words (nozze, fermata, tappa and sordo) and one VAD word (favola), as can be seen in the Table 15. Four words (sposarsi, cieco, regalo and nozze) are repeated up to six times in the dialogue transcript. Even though the exact number of encounters resulting in vocabulary learning has not been identified yet, research suggests than several encounters are needed for a word to be remembered in terms of recall or recognition (§3.4). The statistical analysis of the post-test results can illustrate whether repeated words in the dialogue are learned better than those mentioned only once as well as their numbers of repetitions (§5.2.4.3.2).

Table 15. Target words selected according to frequency level and number of repetitions in the AV dialogue.

<table>
<thead>
<tr>
<th>Target Word</th>
<th>Frequency Level</th>
<th>Number of repetition in the dialogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sposarsi</td>
<td>VF</td>
<td>2 times</td>
</tr>
<tr>
<td>2. Cieco</td>
<td>VF</td>
<td>4 times</td>
</tr>
<tr>
<td>3. Dipingere</td>
<td>VF</td>
<td>1 time</td>
</tr>
<tr>
<td>4. Tagliare</td>
<td>VF</td>
<td>1 time</td>
</tr>
<tr>
<td>5. Regalo</td>
<td>VF</td>
<td>6 times</td>
</tr>
<tr>
<td>6. Gridare</td>
<td>VF</td>
<td>1 time</td>
</tr>
<tr>
<td>7. Nozze</td>
<td>VAU</td>
<td>4 times</td>
</tr>
<tr>
<td>8. Fermata</td>
<td>VAU</td>
<td>1 time</td>
</tr>
<tr>
<td>9. Tappa</td>
<td>VAU</td>
<td>1 time</td>
</tr>
<tr>
<td>10. Sordo</td>
<td>VAU</td>
<td>1 time</td>
</tr>
<tr>
<td>11. Favola</td>
<td>VAD</td>
<td>1 time</td>
</tr>
</tbody>
</table>

Beyond the 11 target words, an equivalent number of distracters for each frequency level was also selected (Table 16). Six VF words (scrivere, ponte, fiume, gelato, uscire and parlare), four VAU words (aereo, insegnante, martedi and ombrello) and one VAD word (grazie). The two native language teachers confirmed that the participants were already familiar with some of the distracters.
Table 16. Distracters selected according to the frequency level of the target words.

<table>
<thead>
<tr>
<th>Distracters</th>
<th>Frequency Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Scrivere</td>
<td>VF</td>
</tr>
<tr>
<td>2. Ponte</td>
<td>VF</td>
</tr>
<tr>
<td>3. Fiume</td>
<td>VF</td>
</tr>
<tr>
<td>4. Gelato</td>
<td>VF</td>
</tr>
<tr>
<td>5. Uscire</td>
<td>VF</td>
</tr>
<tr>
<td>6. Parlare</td>
<td>VF</td>
</tr>
<tr>
<td>7. Aereo</td>
<td>VAU</td>
</tr>
<tr>
<td>8. Insegnante</td>
<td>VAU</td>
</tr>
<tr>
<td>9. Martedì</td>
<td>VAU</td>
</tr>
<tr>
<td>10. Ombrello</td>
<td>VAU</td>
</tr>
<tr>
<td>11. Grazie</td>
<td>VAD</td>
</tr>
</tbody>
</table>

The post-tests were administered immediately after the end of the experiment and contained the 11 target words (Appendix G). Each target word was tested in two modalities of word meaning knowledge: productive (P) and receptive (R) recall (§3.6.1). Both post-tests were in the bilingual version. The productive recall post-test (Precall1) was given first. In Precall1 participants were required to provide the L2 target word. The first letter of the L2 target word was provided since it restricted the given responses to the target items. Once the productive recall post-test was completed and the test sheet was collected, participants took the receptive recall post-test (Rrecall2). The second post-test was identical to the Pretest but contained only the target words and in a scrambled order.97 See Table 17 for the instructions and example of the two post-tests.

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97Although the Pretest and Rrecall2 were based on the Vocabulary Knowledge Scale (§3.3.2), only option ‘d’, where participants had to provide the L1 translation of the L2 target word, was considered for assessment.
Table 17. Productive and receptive recall post-test instructions and examples.

<table>
<thead>
<tr>
<th>Recall</th>
<th>Productive Post-test 1 - Precall1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Please give the equivalent word or verb in Italian. The first letter is provided.</td>
</tr>
<tr>
<td></td>
<td>Example. Thank you = G____ =&gt; Thank you = Grazie</td>
</tr>
<tr>
<td></td>
<td>1. To get married = S____________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recall</th>
<th>Receptive Post-test 2 - Rrecall2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Please indicate the sentence that best describes what you know about each word. Tick the appropriate box to the left of the options and follow the instructions for each option.</td>
</tr>
<tr>
<td></td>
<td>Example. PREGO</td>
</tr>
<tr>
<td></td>
<td>☐(a) I don’t remember having seen this word before.</td>
</tr>
<tr>
<td></td>
<td>☐(b) I have seen this word before, but I don’t know what it means.</td>
</tr>
<tr>
<td></td>
<td>☐(c) I have seen this word before, and I think it means ___________ (translation)</td>
</tr>
<tr>
<td></td>
<td>☐(d) I know this word. It means __ You are welcome __ (translation)</td>
</tr>
</tbody>
</table>

The scoring system for the two tests was the same: zero in the case of an incorrect answer and one for a correct answer. In the Precall1, the correct answer was the L2 translation equivalent of the L1 prompt. The first letter was provided since it restricted the given responses to the target items. A spelling error did not make the answer incorrect. In the Rrecall2, the correct answer was the L1 translation of the L2 prompt.

4.3.4 Procedures

A detailed account of how the study was conducted is given in this section (Table 18). The study was carried out over three sessions employing a pre-test/post-test design as outlined in Table 18. During the first session, which lasted one hour, the module was presented to the participants and they had to confirm their availability to attend the second and the third session on the same weekday, choosing among three options. After confirming their availability, participants were asked to take the pre-test (§4.3.3.2) which was explained to be just a general exercise on vocabulary knowledge and they were not told they would be tested again. In this way incidental learning of vocabulary could be investigated (§1.3.1.1). Finally, participants were asked to fill in the VARK learning style questionnaire in paper format, then they
individually checked their results and thus their preferred learning styles. In order to find out more about their learning styles they were told to consult VARK website.\(^98\)

Table 18. Overview of the main study design.

<table>
<thead>
<tr>
<th>Date</th>
<th>Experiment</th>
<th>Duration</th>
<th>UD phase</th>
<th>EG</th>
<th>CG</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/01/2012</td>
<td>-</td>
<td>40 minutes</td>
<td>-</td>
<td>Course presentation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 minutes</td>
<td>-</td>
<td>Pre-Test</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>10 minutes</td>
<td>-</td>
<td>VARK - Learning Style Questionnaire</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6/02/2012</td>
<td>1st hour of treatment</td>
<td>10 minutes</td>
<td>-</td>
<td>AVT introduction</td>
<td>Blackboard overview</td>
</tr>
<tr>
<td>7/02/2012</td>
<td></td>
<td>5 minutes</td>
<td>-</td>
<td>Initial Questionnaire</td>
<td></td>
</tr>
<tr>
<td>8/02/2012</td>
<td></td>
<td>10 minutes</td>
<td>Motivation</td>
<td>Pre-viewing activity</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 minutes</td>
<td>Global perception</td>
<td>First viewing no audio =&gt; hypotheses</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 minutes</td>
<td></td>
<td>Second viewing with audio =&gt; confirmation of hypotheses</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>15 minutes</td>
<td>Analysis</td>
<td>Third viewing with dialogue transcript</td>
<td>Third viewing</td>
</tr>
<tr>
<td></td>
<td>2nd hour of treatment</td>
<td>1 hour</td>
<td>Synthesis</td>
<td>Subtitling</td>
<td>Task-based activities (Oral comprehension &amp; Writing)</td>
</tr>
<tr>
<td>13/02/2012</td>
<td>3rd hour of treatment</td>
<td>1 hour</td>
<td></td>
<td>Subtitling</td>
<td>Task-based activities (Oral comprehension)</td>
</tr>
<tr>
<td>14/02/2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Task-based activities (Writing)</td>
</tr>
<tr>
<td>15/02/2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4th hour of treatment</td>
<td>35 minutes</td>
<td></td>
<td>Subtitling</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Immediate Post-Test</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Final Questionnaire</td>
</tr>
</tbody>
</table>


158
The experiment was carried out during two sessions. The two sessions were carried out in the language laboratories and lasted two hours each. The lesson plan based on UD structure (§1.5.2) and finalised in the pilot course (§4.2.4) was followed throughout the four hours. In the first session, during the first hour, the activity was presented to both the EG and CG. A Power Point presentation, “Introduction to Audiovisual Translation”, was shown to the EG. The aim of the presentation was to give participants a brief introduction to AVT and, in particular, to subtitling: the distinction between intralingual and interlingual subtitles, the modality of transfers and some translation strategies according to time and space constraints (§2.4.1). Meanwhile a general overview of how to use the NUI Galway Blackboard (§1.5.2.5) was presented to the CG. Then, participants of both groups filled in the initial on-line questionnaire which took about five minutes (§4.3.3.1).

In line with the UD structure, the motivation phase started with a pre-viewing activity. Participants were presented with the movie poster and did a brainstorming activity on the image (the two main characters in the car) and the title (Viaggio in Italia). Participants came up with ideas and thoughts on the possible plot of the movie.99 This took about five minutes. The next phase, global perception, lasted 20 minutes. The video (4:36) can be divided into two parts: ‘Milan’ (0:00-2:43) and ‘Florence’ (2:44-4:36). The first part shows the two characters in Milan at the beginning of the trip and the second part is set in Florence where they look for the blind painter as requested by their daughter. The first time the video was shown with no audio. After the first half of the video, participants were asked to make hypotheses on what happened in the scene. Then, the second half was shown and they were asked once again to make hypotheses on what they had seen. All the hypotheses were recorded on the class blackboard on two columns, one for each half of the video. The second viewing was divided into the two parts where students heard the audio and checked their hypotheses. This was done, as a class, by ticking the ideas on the blackboard. Having the video divided into two parts helped the students to focus on the visual and linguistic elements of the video and to avoid cognitive overload (Swaffar & Vlatten, 1997). In addition, hypothesis creation and the discussions after each viewing effectively led to a better understanding of the AV input, both were conducted mainly in L2 which gave participants the chance to

99Some of the main ideas they expressed in Italian: coppia, marito e moglie, vedere posti nuovi, cambiare città and mezzi di trasporto.
practice the language. The third viewing initiated the analysis phase. The phase lasted about 15 minutes. The EG was given the transcript of the dialogue in view of the subtitling task, while the CG watched the video for a third time without the transcript. A brief discussion on the video content was carried out after the third viewing.

Then, in the second hour of the first session, the synthesis phase started. Instructions were given to both groups for completing the assigned tasks. The EG was asked to perform a subtitling task from Italian (L2) into English (L1) of the dialogue transcript using LvS (§2.5.2). Participants were given an LvS Activity which, once unpacked in LvS, would contain one word file, the transcription of the dialogue, and two power point files in the text area. One file was an LvS tutorial which explained how to use the subtitling software and the other one, called ‘Code of Good Subtitling Practice’, was a list of guidelines for best practice in subtitling (§2.4.1) and included some LvS technical aspects. In addition, participants were given written instructions on how to unpack and save the LvS activity in their personal folder. The instructions also explained how to import the video and how to save the subtitle file they were about to create as well as how to re-open the activity in the following session. Participants worked on subtitling for one hour in the first session while they had one hour and 35 minutes in the second session before they had to submit their subtitle file. At the same time, the CG was required to do task-based activities on Blackboard VLE. For practical reasons, the listening and L2 writing tasks were divided into two tests (both tests can be found in the Online Appendix L). The first test contained nine questions. Question 1-8 were oral comprehension exercises whereas question 9 was a short summary participants had to write in a Word file and attach to the test before submitting it. The first test had to be completed in one hour. In the third session, participants had two hours to complete the second test. The test had the same structure: eight questions on oral comprehension and one on L2 writing. The time suggested was one hour for the listening task and one hour for the writing task. The writing task was an essay and, as in the previous summary, participants had to write and attach it before submitting the test. Since the subtitling task required the EG to watch the video over and over again, in order to expose the CG to a similar amount of AV input all the task-based activities necessitate to watch the video clip. However, it was not possible to verify exactly how many times each participant watched the video clip.
Once the tasks were completed, each group took the two immediate post-tests. The first post test - productive recall - was given to participants and when it was finished and collected they were presented with the second post test - receptive recall. Participants were allowed 20 minutes to take the two post-tests. Finally, participants filled in and submitted the final on-line questionnaire. Due to time constraints no plenary discussion was made with the groups but the final questionnaire served for the reflection phase since participants were called to express their opinion on the entire activity. Unlike the pilot, it was not possible to meet the participants and administer a delayed post-test weeks after the experiment. Participants’ responses to the immediate productive and receptive recall post-tests were then subjected to statistical analysis. Descriptive and inferential statistics were carried out using SPSS (Statistical Package for the Social Sciences) programme as described in the following Chapter.

The final chapter presents detailed analysis and discussion of the quantitative and qualitative data collected during the main experimental study, in order to concretely contribute to shedding more light on vocabulary acquisition as a result of the subtitling practice.
Chapter V- Data Analysis, Interpretation and Discussion

5.1 Introduction

On a statistical level, this doctoral thesis attempts to answer the research question, formulated after extensive investigation and piloting, of whether subtitling of audiovisual L2 dialogue into L1 affects incidental acquisition of meaning of new L2 words. This issue was addressed using productive and receptive recall tests to measure knowledge of word meaning in a pre-test/post-test design. A mixed-method research approach was employed for data collection and developed in a fixed and a flexible phase in the main study of this research (§4.1). This chapter thus presents in-depth statistical analysis concerning the results of experimental data collected.

Firstly, results of the analysis of quantitative data collected in the fixed phase are laid out. In order to investigate the research question (§4.3.1), 25 English speakers learning Italian as an FL were enrolled in the experiment. Participants’ background information was collected through an initial questionnaire and a description of relevant data is provided (§5.2.1). Participants, according to their group - EG and CG - also filled in a final questionnaire where they expressed their opinion on the task performed. Data obtained from the final questionnaire is described in detail (§5.2.2) as well as the internal consistency of the multi-item scales of the two questionnaires, which was assessed through Cronbach alpha coefficient (§5.2.3). Statistical analysis of the pre-test and two post-tests is then presented and discussed (§5.2.4): in order to examine whether there was a difference in vocabulary acquisition of word meaning between EG and CG participants, post-test results of the two groups were compared using the non-parametric Mann-Whitney U test (for Independent Sample). The Wilcoxon Signed Ranks test was applied to verify if there was an improvement in participants’ performance (for each group and the total population) in the two post-tests when compared to the pre-test. The Wilcoxon Signed Ranks test was also used for testing whether EG and CG participants’ performance showed a significant difference between the two post-tests. The two-way repeated measures ANOVA was applied to check whether repeated words (up to six times) in the audiovisual input are learned better than those
mentioned only once. The relation between the results of the post-tests and participants’ learning style, determined with the VARK questionnaire, was also analysed (§5.2.5).

Secondly, qualitative data collected during the flexible phase was systematically analysed (§5.3). Qualitative data consists of audio and video recordings of the experimental sessions integrated with observations collected through a research journal. Video recordings of participants’ computer screens made possible to observe participants’ work with the subtitling task, as well as with the listening comprehension and writing tasks for the EG and CG. An interpretation of the results is then provided and the details of the study are evaluated (§5.4).

5.2 Quantitative Analysis

The analysis of the quantitative data and presentation of the results of the IBA study is reported here. Quantitative data was collected through an initial and final questionnaires, one pre-test, two post-tests and a VARK learning style questionnaire.

5.2.1 Initial Questionnaire

The structure of the initial questionnaire, which has already been described in detail (§4.3.3.1) can be divided into four main sections as follows:

1. General information about participants: gender, age, nationality, native language (question 1) and knowledge of other foreign languages (question 5).
2. Information about Italian as an FL: length of study, level of fluency, use outside the FL classroom and contexts of use (questions 2-4).
3. Viewing habits for dubbed/subtitled AV material (question 6) and participants’ opinion on subtitles (question 7)
4. Experience in translation (question 8), use of AV material (question 9) in the FL classroom and subtitling experience (question 10).

For more information about the statistical tests used see Larson-Hall (2010) and Dörnyei (2007).
From the first section it emerged that the participants \( (N=25) \), 15 (60%) female and 10 (40%) male, were all native English speakers: 23 were Irish, one English and one South African. Their age ranged from 17 to 27 with a mean age of 18.96. Participants were asked about their knowledge of other foreign languages and 88% of them reported that they could speak at least one other FL (or a second language in the case of Irish participants)\(^{101} \) apart from Italian. As illustrated in Figure 11, 16% of the participants speak two languages in addition to Italian (including Irish) and 12% of them speak three additional languages. The other languages spoken were French (68%), Spanish (36%), German (16%), Irish (14%) and Russian (5%).

**Figure 11. Participants’ additional FL language(s).**

The second section provides information on participants’ study of Italian as an FL. All participants had studied Italian for less than one year. Participants were enrolled in the first year of the Bachelor Degree of Arts. Therefore, they all received the same language instructions for a period of five months, considering that the Italian Language course had started in September 2011 and the questionnaire was completed in January 2012. This ensured that participants had similar language backgrounds and generally homogeneous language levels. When asked how they

\(^{101}\)The participants who acknowledged Irish as another language spoken apart from Italian were all Irish nationals. Irish is therefore considered as a second language since it is one of the two official languages in Ireland together with English. The study of Irish in Ireland is compulsory until the end of secondary education.
considered their level of fluency, 48% of participants rated their level as fair and 32% defined it as weak. Smaller percentages, 4% and 16%, considered their level as good and very weak respectively (Figure 12). In addition, 40% admitted to using Italian outside the language classroom and mainly for personal reasons. In other words, the majority of participants did not practice outside the classroom environment.

Figure 12. Participants’ perception of their own Italian proficiency level.

The third section of the initial questionnaire was about participants’ viewing habits. Questions were aimed at checking participants’ familiarity with subtitles and help them reflect on the use of subtitles in language learning. 84% of participants stated that they watch movies/television shows in a foreign language. Nearly 70% of them tended to watch subtitled AV materials while 16% watched both dubbed and subtitled materials. The fact that most would opt for subtitling is quite understandable considering that, traditionally, Ireland is a ‘subtitling country’ and the AVT practice adopted in cinema and television is subtitling (Media Consulting Group and Peacefulfish, 2007). However, it is interesting to note that some of the participants also watched dubbed FL materials. Question 7 (IQ7) in particular required participants to give their opinion on subtitled material in language learning by indicating their agreement or disagreement with five statements. The question

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was obligatory, in order to avoid missing data, but only the responses of the 21 participants who watched subtitled AV material are reported here (Table 19). All of these believed that subtitles helped in better understanding the general content of the movies/television shows and the vast majority (91%) would also agree on the fact that subtitles help comprehend the spoken text of these shows. Opinions are more diverse regarding learning vocabulary, improving overall competence and production in the foreign language, even though opinions were generally positive: 76% agreed that subtitles help learn new vocabulary, 71% and 62% respectively agreed that subtitles help improve overall competence and production in the FL.

Table 19. Participants’ opinions of subtitled material in language learning.

<table>
<thead>
<tr>
<th>IQ7. In your opinion, subtitles are:</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Helpful in better understanding the general content of the movies/television shows</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>11 (52%)</td>
<td>10 (48%)</td>
</tr>
<tr>
<td>2. Helpful in better understanding the spoken text of the movies/television shows</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>2 (9%)</td>
<td>9 (43%)</td>
<td>10 (48%)</td>
</tr>
<tr>
<td>3. Helpful in learning new vocabulary</td>
<td>0 (0%)</td>
<td>1 (5%)</td>
<td>4 (19%)</td>
<td>9 (43%)</td>
<td>71 (33%)</td>
</tr>
<tr>
<td>4. Helpful in improving your overall competence in the foreign language</td>
<td>0 (0%)</td>
<td>2 (9%)</td>
<td>4 (19%)</td>
<td>8 (38%)</td>
<td>7 (33%)</td>
</tr>
<tr>
<td>5. Helpful in improving your production in the foreign language</td>
<td>0 (0%)</td>
<td>1 (5%)</td>
<td>7 (33%)</td>
<td>6 (29%)</td>
<td>7 (33%)</td>
</tr>
</tbody>
</table>

*Note.* Number of participants’ responses are followed by the corresponding percentages N(%).

The last section of the questionnaire was about participants’ experience in relation to translation (question 8 and optional 8a) and AV material (question 9 and optional 9a) in the FL classroom as well as in subtitling (question 10 and optional 10a). The majority of the participants (80%) stated that they had experienced translating before
and all of them agreed that translating a text from/into an FL helps improve overall competence in that FL (45% agree and 55% strongly agree). It is interesting to note that all participants who had tried translating before supported the use of translation as an effective teaching aid in language learning. The entire sample, 25 participants, admitted to have watched AV materials in the FL classroom and nearly all of them (88%) believed that their use helped improve overall competence in the FL studied. Finally, regarding their subtitling experience, only 16% (4 out of 25) of participants had subtitled before and they all agreed on the positive effects of subtitling on their overall FL competence.

5.2.2 Final Questionnaire

The final questionnaire, previously piloted (§4.2.4) and described in detail (§4.3.3.1), was available in two versions: one for the EG and one for the CG (see flow diagram in Figure 13). The first section on AV material was common to both versions. It contained two rating scales, question 1 (FQ1) and question 2 (FQ2), as well as one dichotomous question (FQ3). The EG version was comprised of a second and a third section: Subtitling Activity and Subtitling Software - LvS. The EG questionnaire included four rating scales and three yes or no questions, while the CG version had only a second section (entitled Video-based activity), which included two rating scales and one dichotomous question.

Figure 13. Flow diagram of the final questionnaire.
5.2.2.1 First Common Section

The results of FQ1, which included three Likert items (FQ1.1, FQ1.2 and FQ1.3), were evaluated as a whole using descriptive statistics. Descriptive statistics are displayed as number of responses and percentages - \( N(\%) \) - for each item according to each option, as can be seen in Table 20.

Table 20. Descriptive statistics of EG and CG’s results to FQ1.

<table>
<thead>
<tr>
<th>FQ1. Please indicate to what extent you agree/disagree with the following statements:</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG</td>
<td>CG</td>
<td>EG</td>
<td>CG</td>
<td>EG</td>
<td>CG</td>
</tr>
<tr>
<td>FQ1.1 The video was adequate for your level</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>2 (13%)</td>
<td>0 (0%)</td>
<td>3 (20%)</td>
</tr>
<tr>
<td>FQ1.2 The video was challenging</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>2 (13%)</td>
<td>0 (0%)</td>
<td>3 (20%)</td>
</tr>
<tr>
<td>FQ1.3 The video was entertaining</td>
<td>0 (0%)</td>
<td>1 (10%)</td>
<td>3 (20%)</td>
<td>2 (20%)</td>
<td>4 (27%)</td>
</tr>
</tbody>
</table>

Responses of the EG and CG to the first two common questions, FQ1 and FQ2, on AV material were compared using the Mann-Whitney U test. The test results showed no statistically significant differences between the EG and CG in the three Likert items FQ1.1 \((p=0.6830)\), FQ1.2 \((p=0.6047)\) and FQ1.3 \((p=0.1600)\). This means that the two groups shared a similar opinion about the video, suggesting that it was equally suitable for participants of both groups.

The results of FQ2, which included four Likert type items, were also evaluated as a whole using descriptive statistics as illustrated in Table 21.
Table 21. Descriptive statistics of EG and CG’s results to FQ2.

<table>
<thead>
<tr>
<th>FQ2. Please rate how much you think the following aspects helped you to understand the content of the video.</th>
<th>Not at all</th>
<th>Not really</th>
<th>So-so</th>
<th>Quite a lot</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FQ2.1 The language spoken</strong></td>
<td>EG</td>
<td>CG</td>
<td>EG</td>
<td>CG</td>
<td>EG</td>
</tr>
<tr>
<td></td>
<td>1 (7%)</td>
<td>0 (0%)</td>
<td>2 (13%)</td>
<td>0 (0%)</td>
<td>4 (27%)</td>
</tr>
<tr>
<td></td>
<td>6 (60%)</td>
<td>4 (40%)</td>
<td>1 (7%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td><strong>FQ2.2 The images</strong></td>
<td>EG</td>
<td>CG</td>
<td>EG</td>
<td>CG</td>
<td>EG</td>
</tr>
<tr>
<td></td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>2 (13%)</td>
<td>0 (0%)</td>
<td>5 (33%)</td>
</tr>
<tr>
<td></td>
<td>1 (10%)</td>
<td>4 (27%)</td>
<td>1 (10%)</td>
<td>0 (0%)</td>
<td>9 (90%)</td>
</tr>
<tr>
<td></td>
<td>4 (27%)</td>
<td>4 (27%)</td>
<td>4 (27%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td><strong>FQ2.3 The soundtrack</strong></td>
<td>EG</td>
<td>CG</td>
<td>EG</td>
<td>CG</td>
<td>EG</td>
</tr>
<tr>
<td></td>
<td>3 (20%)</td>
<td>1 (10%)</td>
<td>3 (20%)</td>
<td>3 (30%)</td>
<td>5 (33%)</td>
</tr>
<tr>
<td></td>
<td>3 (30%)</td>
<td>4 (27%)</td>
<td>3 (30%)</td>
<td>4 (27%)</td>
<td>2 (20%)</td>
</tr>
<tr>
<td></td>
<td>2 (20%)</td>
<td>0 (0%)</td>
<td>1 (10%)</td>
<td>1 (10%)</td>
<td></td>
</tr>
<tr>
<td><strong>FQ2.4 Watching the video over and over again</strong></td>
<td>EG</td>
<td>CG</td>
<td>EG</td>
<td>CG</td>
<td>EG</td>
</tr>
<tr>
<td></td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>1 (10%)</td>
<td>0 (0%)</td>
<td>2 (13%)</td>
</tr>
<tr>
<td></td>
<td>2 (20%)</td>
<td>6 (40%)</td>
<td>2 (20%)</td>
<td>6 (40%)</td>
<td>6 (60%)</td>
</tr>
</tbody>
</table>

The Mann-Whitney U test detected no statistically significant differences between the two groups in any of the four items FQ2.1 (p=.892), FQ2.2 (p=.567), FQ2.3 (p=.723) and FQ2.4 (p=.495). This suggests that the two groups had similar opinions on the aspects of the video which helped them to understand the content. It should also be mentioned that the EG had a fifth item: ‘The transcript of the video’. 60% rated the transcript of the dialogue as helping them to understand the content very much, 33% quite a lot and 7% so-so. The last question of the first common section, question 3 (FQ3), asked participants if they would like to watch more AV material in their regular FL class. All participants of the EG and 90% of the CG answered positively to this question.
5.2.2.2 EG Version, Second and Third Sections

The second section of the EG version of the final questionnaire was on the Subtitling Activity. Question 4 (FQ4) was a Likert scale which included three items (FQ4.1, FQ4.2 and FQ4.3). In view of their subtitling experience, participants were asked to indicate to what extent they agreed or disagreed with three statements. The first statement (FQ4.1) was about translation and whether it improves overall competence in an FL. The second (FQ4.2) and the third (FQ4.3) items repeat the same statement with reference to AV material and subtitling respectively. Participants’ responses were quite homogeneous for the three statements (see Table 22): 87% agreed that translation helps to improve a overall FL competence and 93% of the respondents had the same opinion on AV material. It is worth noting that all participants agreed that subtitling helped them improve their overall competence in an FL.

Table 22. EG participants’ responses to FQ4.

<table>
<thead>
<tr>
<th>FQ4. After the subtitling activity, please indicate to what extent you agree/disagree with the following statements.</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>FQ4.1 Translating a text from/into a foreign language helps you to improve your overall competence in that foreign language</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>2 (13%)</td>
<td>7 (47%)</td>
<td>6 (40%)</td>
</tr>
<tr>
<td>FQ4.2 The use of audiovisual material in foreign language classes helps you to improve your overall competence in that foreign language</td>
<td>0 (0%)</td>
<td>1 (7%)</td>
<td>0 (0%)</td>
<td>9 (60%)</td>
<td>5 (33%)</td>
</tr>
<tr>
<td>FQ4.3 Subtitling a video from/into a foreign language helps you to improve your overall competence in that foreign language</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>10 (67%)</td>
<td>5 (33%)</td>
</tr>
</tbody>
</table>

The three Likert items (FQ4.1, FQ4.2 and FQ4.3) are identical to optional questions (8a, 9a and 10a) in the last section of the initial questionnaire (§4.2.1). The number of EG participants who answered these three optional questions were as follows: 11 replied to question 8a, 15 to question 9a and 1 to question 8a. Therefore participants’ responses in the initial and final questionnaires (8a and FQ4.1, 9a and
FQ4.2) were compared using Related-Samples Friedman’s Two-Way Analysis of Variance by Ranks test. Statistically significant differences between the initial and final questionnaire responses were detected when comparing 9a statement with FQ4.2 ($p=.030$). This means that, after subtitling, participants believed that AV material helped improve their overall competence. It is also interesting to note that the only participant of the EG who answered question 10a indicated ‘Neither agree nor disagree’ but marked ‘Agree’ in FQ4.3. This shows that this particular participants’ opinion changed after experiencing subtitling in the FL classroom.

The second section contained two Likert type scales (question 5 and question 6). In FQ5, participants were required to rate how much they felt they had improved their listening comprehension, vocabulary, grammar and translation skills. 93% of participants felt they had enhanced their vocabulary, 80% their translation skills, 47% their listening comprehension and 40% their grammar. In the other rating scale (FQ6) participants were asked to rate how they had found the subtitling activity: interesting, entertaining, difficult, challenging or a pleasant change. Responses are presented in Table 23. As much as 93% of EG participants found the subtitling activity interesting and 80% entertaining. Although it was a pleasant change for most of them (80%), it was also challenging for many (67%) and almost half of them (40%) found it difficult. This positive opinion about the subtitling practice was also reflected in FQ7. All participants agreed that they would like to have more subtitling activities in their regular FL course. When asked if they would like to have more computer-based activities, however, only 73% of the participants agreed. While this may seen contradictory, it could suggest that a quarter of the participants would prefer to have subtitling rather than other types of computer-based activities.
**Table 23. EG participants’ responses to FQ6.**

<table>
<thead>
<tr>
<th>FQ6. You found the subtitling activity:</th>
<th>Not at all</th>
<th>Not really</th>
<th>So-so</th>
<th>Quite a lot</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interesting</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>1 (7%)</td>
<td>9 (60%)</td>
<td>5 (33%)</td>
</tr>
<tr>
<td>Entertaining</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>3 (20%)</td>
<td>6 (40%)</td>
<td>6 (40%)</td>
</tr>
<tr>
<td>Difficult</td>
<td>2 (13%)</td>
<td>0 (0%)</td>
<td>7 (47%)</td>
<td>6 (40%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Challenging</td>
<td>2 (13%)</td>
<td>0 (0%)</td>
<td>3 (20%)</td>
<td>9 (60%)</td>
<td>1 (7%)</td>
</tr>
<tr>
<td>A pleasant change</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>3 (20%)</td>
<td>2 (13%)</td>
<td>10 (67%)</td>
</tr>
</tbody>
</table>

The third part of the EG version (question 9 and question 10) regarded the LvS software. In FQ9 participants were required to express their opinion on four statements see Table 24. A large number of participants stated that LvS was easy to use (87%), that the time spent on learning how to use the software was adequate for the learning result (80%) and that the software offered all the appropriate functions and tools needed to complete the LvS activity (93%). In addition, 80% of the participants agreed on the usefulness of LvS software as a tool for foreign language learning.

**Table 24. EG participants’ responses to FQ9.**

<table>
<thead>
<tr>
<th>FQ9. Please indicate to what extent you agree/disagree with the following statements:</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>FQ9.1 The LvS software is easy to use</td>
<td>0 (0%)</td>
<td>2 (13%)</td>
<td>0 (0%)</td>
<td>8 (54%)</td>
<td>5 (33%)</td>
</tr>
<tr>
<td>FQ9.2 The time spent for learning how to use the LvS software was adequate for the learning result</td>
<td>0 (0%)</td>
<td>2 (13%)</td>
<td>1 (7%)</td>
<td>8 (54%)</td>
<td>4 (26%)</td>
</tr>
<tr>
<td>FQ9.3 The LvS software offers all the appropriate functions and tools to complete the LvS activity</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>1 (7%)</td>
<td>10 (67%)</td>
<td>4 (26%)</td>
</tr>
<tr>
<td>T FQ9.4 The LvS software is a useful tool for foreign language learning</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>3 (20%)</td>
<td>7 (47%)</td>
<td>5 (33%)</td>
</tr>
</tbody>
</table>
As much as 87% of participants stated that they encountered technical difficulties with LvS during the subtitling practice (FQ10). From audio and video recordings of the experimental sessions it emerged that these technical difficulties referred to the fact that the LvS software would crash when participants attempted to add subtitles when there were other subtitles with no time code assigned. Notwithstanding technical difficulties, the overall opinion of LvS can be considered extremely positive.

5.2.2.3 CG Version, Second Section

The second section of the CG’s version of the final questionnaire contained one Likert scale, one Likert type scale and one dichotomous question. The questions regarded the opinion of the CG participants about their learning experience (the video-based activity). All participants agreed with the fact that the use of AV helped them improve their overall competence in the FL. They also rated how much they felt they had improved in a number of skills. Participants felt they had learned new vocabulary (80%), and enhanced their listening comprehension (60%), grammar (50%) and writing (50%). Finally, most participants (80%) stated that they would like to have more computer-based activities in their regular FL class.

5.2.3 Questionnaires’ Internal Consistency Reliability

In order to process questionnaire data, and closed questions in particular, Dörnyei (2010: 94) suggests computing the Cronbach Alpha internal consistency reliability coefficient for each multi-item scale in the questionnaire. The Cronbach Alpha internal consistency reliability coefficient ranges from zero to +1. In extreme cases, when the sample is small and items measure different things, the coefficient can also be negative. SLA questionnaires are usually made up of many different topics and do not employ very large scales. Therefore Cronbach Alpha coefficients can be lower than 0.80, which is the internal consistency estimate to be expected in well-developed 10-items scales. However, even in 3-4 item scales reliability coefficients should be above 0.70.
With regard to the initial questionnaire, the Cronbach Alpha Coefficient for the one multi-item Likert scale (IQ7) was .801 which is considered a rather good result, while for what concerns the EG final questionnaire, the Cronbach Alpha Coefficient results for the six multi-item rating scales (FQ1, FQ2, FQ4, FQ5, FQ6 and FQ9) are displayed in Table 25.

**Table 25. Cronbach Alpha Coefficient of EG final questionnaire rating scales.**

<table>
<thead>
<tr>
<th>Question</th>
<th>Cronbach Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>FQ1</td>
<td>-1.292</td>
<td>3</td>
</tr>
<tr>
<td>FQ2</td>
<td>.488</td>
<td>5</td>
</tr>
<tr>
<td>FQ4</td>
<td>.869</td>
<td>3</td>
</tr>
<tr>
<td>FQ5</td>
<td>.694</td>
<td>4</td>
</tr>
<tr>
<td>FQ6</td>
<td>.617</td>
<td>5</td>
</tr>
<tr>
<td>FQ9</td>
<td>.731</td>
<td>4</td>
</tr>
</tbody>
</table>

The first section of the EG final questionnaire consisted of two multi-scale items. The coefficient of FQ1 was negative, probably due to the small sample and the limited number of items; whereas FQ2 had an alpha coefficient of .48, which is also quite low. The second section was comprised of three multi-item scales: FQ4 had a rather good reliability coefficient of 0.86, while FQ5 and FQ6 had still acceptable coefficient of 0.69 and of 0.61 respectively. The only multi-item (about the subtitling software) in the third section, was FQ9, whose alpha was 0.73. These results indicate that each questionnaire item within its scale is addressing the same construct, though to a lesser extent for FQ1 and FQ2. Therefore, the items in each scale are consistent.

A reliability analysis was conducted on the three multi-item scales of the CG final questionnaire (Table 26). FQ1 was identical in EG and CG’s versions of the questionnaire, but its coefficient in EG was negative and in the CG was low. The alpha coefficient of FQ2 and FQ5 indicated that each item in the scale is measuring the same construct.
Table 26. Cronbach Alpha Coefficient of CG final questionnaire rating scales.

<table>
<thead>
<tr>
<th>Question</th>
<th>Cronbach Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>FQ1</td>
<td>.324</td>
<td>3</td>
</tr>
<tr>
<td>FQ2</td>
<td>.655</td>
<td>4</td>
</tr>
<tr>
<td>FQ5</td>
<td>.846</td>
<td>4</td>
</tr>
</tbody>
</table>

5.2.4 Post-tests

Two post-tests - productive recall (Precall1) and receptive recall (Recall2) - were given to participants of the EG and CG groups (§4.3.3.2). Both post-tests contained 11 target words which participants encountered in the AV input used in the experimental sessions. The aim of these tests was to verify the effects of subtitling an L2 audiovisual dialogue into L1 on the incidental acquisition of target word meanings by comparing the results of the EG (subtitling condition) with those of the CG (non-subtitling condition). Four weeks before administering the post-tests, participants took a pre-test (Pretest) containing 11 target words and 11 distracters (§4.3.3.2).

5.2.4.1 Post-tests’ Objectives

Main Objective
The main objective was to test the differences in performance between the EG and CG in order to answer the research question and verify the research hypotheses (§4.3.1). Beyond the research hypothesis, a null hypothesis (H₀), which “states that there is no difference between the two groups under investigation”, was formulated. “The statistical task is to reject the null hypothesis and to show that there is a difference between EG and CG” (Mackey & Gass, 2005: 100-101). The differences between the two groups were analysed through the following vocabulary post-tests: Precall1 and Recall2.
Secondary Objectives

1. To test whether there has been an improvement in Precall1 and Recall2 compared to the Pretest (by group and with the total of the population).
2. To verify the differences between the two groups for the followings test:
   - Repeated words and words mentioned once.
3. To test within-group differences (by group and with the total of the population) between these tests:
   - Precall1 versus Recall2;
   - Repeated Words and words mentioned once

5.2.4.2 Statistical Methods

Participants’ responses were subjected to statistical analysis - descriptive and inferential - using the SPSS statistical package v20.0. The alpha level for all statistical tests was set at $p<.05$. Taking into account the small sample size, in most cases non-parametric tests were used. In order to test whether the sample was normally distributed, the Kolmogorov-Smirnov Test was carried out. Even though the variables followed a normal distribution, the non-parametric Mann-Whitney U test (for Independent Sample) was implemented to meet the main objective: verifying whether there were significant differences between the two groups (EG and CG). The Wilcoxon Signed Ranks test, on the other hand, was used to achieve the secondary objectives: check whether there was an improvement in Precall1 and Recall2 with respect to the Pretest for each group and the total population, as well as testing whether each group showed a significant difference in learners’ performance between the two tests (Precall1 versus Recall2 - productive knowledge versus receptive knowledge). The two-way repeated measures ANOVA was also applied to test Repeated Words vs. words mentioned once.
5.2.4.3 Results

Results of the Pretest revealed that some participants already knew four of the target words: *sposarsi, cieco, regalo* and *sordo* (Table 27).

**Table 27. Target words already known by some of the participants.**

<table>
<thead>
<tr>
<th>Target Word</th>
<th>Frequency Level</th>
<th>Number of Instances</th>
<th>Number of Participants who knew the Target Word according to the Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>EG</td>
</tr>
<tr>
<td>sposarsi</td>
<td>VF</td>
<td>2 times</td>
<td>4</td>
</tr>
<tr>
<td>cieco</td>
<td>VF</td>
<td>4 times</td>
<td>0</td>
</tr>
<tr>
<td>regalo</td>
<td>VF</td>
<td>6 times</td>
<td>1</td>
</tr>
<tr>
<td>sordo</td>
<td>VAU</td>
<td>1 time</td>
<td>0</td>
</tr>
</tbody>
</table>

It should be noted that three of the four already known target words belong to the VF frequency level group, which consists of the 2000 most frequently used function and content words which participants are likely to learn before those of the second and third frequency level groups, VAU and VAD respectively (§3.2.1). Only one participant knew one VAU word. Considering that these four target words were familiar to a very limited number of participants and in the case of *cieco* and *sordo* only one participant, and that they were three of the four words in the pool of repeated words, two analyses were conducted for the post-tests. In the first analysis (a), the 4 already known words were excluded, therefore the test of each hypothesis was carried out with the 7 words which were new to all participants. Then, a second analysis (b) including the 11 target words was performed to complement the first analysis.
5.2.4.3.1 Analysis a

Precall1 and Rrecall2

Table 28 shows the main statistics for Precall1 and Rrecall2 tests for each group and for the total sample. The table provides useful descriptive statistics including median and standard deviation. The median is considered instead of the mean due to the small sample of participants in the experiment.103

Table 28. Analysis a: Precall1 and Rrecall2 statistics.

<table>
<thead>
<tr>
<th>Group</th>
<th>Statistics</th>
<th>Precall1</th>
<th>Rrecall2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>EG</td>
<td>Mean</td>
<td>3.60</td>
<td>3.47</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.80</td>
<td>1.85</td>
</tr>
<tr>
<td></td>
<td>Min-Max</td>
<td>1-7</td>
<td>1-7</td>
</tr>
<tr>
<td>CG</td>
<td>N</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>1.70</td>
<td>2.90</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>1.50</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>1.89</td>
<td>1.97</td>
</tr>
<tr>
<td></td>
<td>Min-Max</td>
<td>0-5</td>
<td>0-6</td>
</tr>
<tr>
<td>Total</td>
<td>N</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>2.84</td>
<td>3.24</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>2.03</td>
<td>1.88</td>
</tr>
<tr>
<td></td>
<td>Min-Max</td>
<td>0-7</td>
<td>0-7</td>
</tr>
</tbody>
</table>

103 The median is a typical measure of central tendency, together with the mode and the mean, which serves to provide an overall picture of the data. “The median is the score at the center of the distribution - that is, the score which splits the group in half. [...] This measure is commonly used with a small number of scores or when the data contain extreme scores” (Mackey & Gass, 2005: 254). While the mean is the arithmetic average and, although is the most commonly used, it is sensitive to extreme scores and small number of participants.
Main Objective

In analysis a, Precall1 and Rrecall2 do not need to be compared with the Pretest, as in this case the Pretest value was always 0. This is because only the 7 words which were unknown to all participants were considered in analysis a. When the differences between groups were tested using Mann-Whitney U, statistically significant differences were detected in Precall1 ($p=.048$) as can be seen in Table 29. The EG median was 3 and the CG’s was 1.5, therefore it can be noted that the improvement in Precall1 was higher in the EG than in the CG. In Rrecall2, however, the median for the EG and CG was the same and no significant difference was found (the $p$-value is greater than .05). This indicates that the two groups performed equally well in the Rrecall2. In the graph, Figure 14, the difference between the two groups can be observed in Precall1.

Table 29 Analysis a: Precall1 and Rrecall2 vs. group ($p$-value).

<table>
<thead>
<tr>
<th></th>
<th>Precall1</th>
<th>Rrecall2</th>
</tr>
</thead>
<tbody>
<tr>
<td>$p$-value test</td>
<td>.048$^a$</td>
<td>.643$^a$</td>
</tr>
</tbody>
</table>

Figure 14. Analysis a: Precall1 and Rrecall2 by the EC and CG.

Secondary Objectives

Finally, as illustrated in Table 30, when comparing the differences between Precall1 vs. Rrecall2 within groups, differences were detected in the CG (.048). The median of the CG was 1.50 and 3 in Precall1 and Rrecall2 respectively. Thus the CG
improved in Rrecall2 when compared to the Precall1; while EG performance was the same in the two tests. One reason for the improvement of the CG may be the type of task: Rrecall2 (providing the L1 equivalent of the L2 target word) is easier than Precall1 (providing the L2 target word when prompted with the L1 equivalent).

Table 30. Analysis a: Differences between Precall1 vs. Rrecall2.

<table>
<thead>
<tr>
<th>Group/p-value</th>
<th>Precall1 vs. Rrecall2</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG</td>
<td>.719</td>
</tr>
<tr>
<td>CG</td>
<td>.048</td>
</tr>
<tr>
<td>Total</td>
<td>.232</td>
</tr>
</tbody>
</table>

5.2.4.3.2 Analysis b

In this second analysis 11 target words were considered. Since the Pretest results showed that some participants already knew four of the target words, in order to make sure that the EG and CG were homogeneous before the experiment, it was necessary to determine whether there was any difference between the two groups in the Pretest. Specifically, the Mann-Whitney U test was performed and no differences were found (p=0.4952): the median was .00 for both groups. It was possible, therefore, to consider the two groups homogenous and conduct the analysis b.

Precall1 and Rrecall2

Table 31 reports the main statistics for the Pretest, Precall1 and Rrecall2 for each group as well as the total of participants.
Main Objective
As in analysis a, when testing the differences between the EG and CG using Mann-Whitney U test, statistically significant differences were only found in Precall1 ($p=.002$) (see Table 32). The EG median was 6 and CG median was 3.50, the performance of the EG was higher than that of the CG in Precall1, as can be observed in the graph (Figure 15).

Table 32. Analysis b: Precall1 and Rrecall2 vs. group ($p$-value).

<table>
<thead>
<tr>
<th></th>
<th>Precall1</th>
<th>Rrecall2</th>
</tr>
</thead>
<tbody>
<tr>
<td>$p$-value test</td>
<td>.002</td>
<td>.196</td>
</tr>
</tbody>
</table>
Secondary Objectives
Statistically significant differences were detected in all cases \((p<.05)\) when testing whether there was any difference between Precall1 vs. Pretest and Rrecall2 vs. Pretest in the two groups and the total of the sample, as can be observed in Table 33. This means that both groups and the total sample improved their performance with respect to the Pretest.

Table 33. Analysis b: Differences between Precall1 and Rrecall2 vs. Pretest.

<table>
<thead>
<tr>
<th>Group/p-value</th>
<th>Precall1 vs. Pretest</th>
<th>Rrecall2 vs. Pretest</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG</td>
<td>.001</td>
<td>.001</td>
</tr>
<tr>
<td>CG</td>
<td>.007</td>
<td>.008</td>
</tr>
<tr>
<td>Total sample</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

In analysis b, contrary to analysis a, (within groups) there were no statistically significant differences for the total sample between Precall1 vs. Rrecall2 \((p=.376)\) neither within the EG \((p=.943)\) nor within the CG \((p=.210)\), as in Table 34. This fact indicates that each group provided a similar amount of correct answers in the two tests. This is the only difference between analyses a and b.
Table 34. Analysis b: Differences between Precall1 vs. Rrecall2 within group.

<table>
<thead>
<tr>
<th>Group/p-value</th>
<th>Precall1 vs. Rrecall2</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG</td>
<td>.943</td>
</tr>
<tr>
<td>CG</td>
<td>.210</td>
</tr>
<tr>
<td>Total sample</td>
<td>.376</td>
</tr>
</tbody>
</table>

Analysis b (11 target words) also includes the four target words with various repetitions: *sposarsi, cieco, regalo* and *nozze* (§4.3.3.2). Two-way repeated measures ANOVA was used to test whether there was a difference in learning repeated words and words mentioned once within groups and between groups. The descriptive statistics of the two independent variables are illustrated in Table 35.

Table 35. Repeated words and words mentioned once statistics.

<table>
<thead>
<tr>
<th>Group</th>
<th>Statistics</th>
<th>Repeated words</th>
<th>Words mentioned once</th>
</tr>
</thead>
<tbody>
<tr>
<td>EG</td>
<td>N</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>.95</td>
<td>.70</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>1</td>
<td>.68</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.09</td>
<td>.16</td>
</tr>
<tr>
<td></td>
<td>Min-Max</td>
<td>.75-1</td>
<td>.46-1</td>
</tr>
<tr>
<td>CG</td>
<td>N</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>.78</td>
<td>.63</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>.81</td>
<td>.64</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.15</td>
<td>.13</td>
</tr>
<tr>
<td></td>
<td>Min-Max</td>
<td>.56-.94</td>
<td>.43-.86</td>
</tr>
<tr>
<td>Total</td>
<td>N</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>.88</td>
<td>.67</td>
</tr>
<tr>
<td></td>
<td>Median</td>
<td>.93</td>
<td>.67</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>.14</td>
<td>.15</td>
</tr>
<tr>
<td></td>
<td>Min-Max</td>
<td>.56-1</td>
<td>.43-1</td>
</tr>
</tbody>
</table>
Statistically significant differences were detected between repeated words and words mentioned once both within the EG ($p<.001$) and the CG ($p=0.002$). The two groups successfully identified repeated words better than words mentioned once, as illustrated in the graph, Figure 16. Statistically significant differences ($p=0.001$) were also contrasted between the EG and CG concerning repeated words. The EG successfully identified more words than the CG. However, no differences were found between the two groups for words mentioned once.

Figure 16. Distribution of the median of repeated words and words mentioned once in the EG and CG.

<table>
<thead>
<tr>
<th></th>
<th>EG</th>
<th>CG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeated words</td>
<td>1.00</td>
<td>.81</td>
</tr>
<tr>
<td>Words mentioned once</td>
<td>.68</td>
<td>.64</td>
</tr>
</tbody>
</table>

5.2.5 VARK Learning Style Questionnaire

All participants filled in a VARK questionnaire to determine their most dominant learning styles, if any (§1.3.4). Participants completed the questionnaire in hard copy and results were recorded in the VARK Research Spreadsheet provided by Neil Fleming, designer of the VARK questionnaire.\textsuperscript{104} When participants’ scores are

\textsuperscript{104}Many thanks to Neil Fleming for allowing the use of the VARK Research Spreadsheet.
entered in the VARK spreadsheet - which has an algorithm for calculating such scores - each participant’s preferred learning style appear automatically. The general distribution of learning styles across the entire sample was as follows: two visual (8%), four aural (16%), four read and write (16%), six kinesthetic (24%) and nine multimodal (36%) as in Figure 17:

Figure 17. Distribution of participants’ learning styles.

![Bar chart showing the distribution of learning styles.]

The relationship between participants’ performance in the two vocabulary post-tests (Precall1 and Rrecall2) and their learning style was analysed and recorded in two contingency tables in relation to each post-test (Table 36 and Table 37). In order to compare post-test performance and learning style, the results of the two vocabulary post-tests (Analysis a - 7 words) were categorised into two groups: scores (less than or equal to 3 and scores greater than 3). As can be seen in Table 36, of the total participants with a kinesthetic learning style, 50% scored >3 in Precall1, while 33.3% and 25% of participants, with multimodal and read and write learning styles respectively, scored >3. None of the participants with visual or aural preferences scored > 3 in Precall1.
The multivariate distribution of VARK and Rrecall2 variables can be observed in Table 37. As much as 66.7% of the total participants with kinesthetic learning style scored >3 in Rrecall2, followed by 50% of participants with a read and write preference and 33.3% of those with a multimodal style. As for Precall1, none of the participants with a visual or aural style achieved scores greater than 3 in Rrecall2.
Table 37. Multivariate distribution of VARK and Rrecall2 variables in the EG and CG.

<table>
<thead>
<tr>
<th>VARK</th>
<th>Visual</th>
<th>Auditory</th>
<th>Read &amp; Write</th>
<th>Kinesthetic</th>
<th>Multimodal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precall 1</td>
<td>Count</td>
<td>% in Precall 1</td>
<td>% in VARK</td>
<td>% of Total</td>
<td>% in Precall 1</td>
<td>% in VARK</td>
</tr>
<tr>
<td>1 ≤ 3</td>
<td>2</td>
<td>12.5%</td>
<td>0%</td>
<td>8%</td>
<td>25%</td>
<td>2.2%</td>
</tr>
<tr>
<td>&gt; 3</td>
<td>0</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>12.5%</td>
<td>16%</td>
<td>16%</td>
<td>24%</td>
<td>36%</td>
</tr>
</tbody>
</table>

Participants whose learning style preference was kinesthetic scored better than the rest in both Precall1 and Rrecall2. As for multimodal learning style participants, an equal amount of them scored >3 in both post-tests; whereas within read and write participants, a slightly higher percentage of them obtained >3 in the second post-test. It should be stressed that participants in the EG and CG were required to use video and personal computers to carry out practical activities, namely a subtitling task using subtitling software (EG) and listening comprehension and writing tasks in Blackboard VLE (CG). For this reason, people who learn by doing may have found the activity particularly suitable for their learning style. In addition, both types of tasks involved participants in reading and writing, thus participants with this preference may have been facilitated. However, even if they made up a small percentage, the multimodal participants - who have no particular preferences - scored >3. It is quite surprising that participants with aural or visual preferences did not
obtain better scores in either of the two post-tests, due to the audiovisual nature of the input.

When considering learning style preferences by group, distribution was as follows for the EG: one visual (7%), three aural (20%), three read and write (20%), three kinesthetic (20%) and five multimodal (33%); while for the CG one visual (10%), one aural (10%), one read and write (10%), three kinesthetic (30%) and four multimodal (40%). When looking at scores of the EG, according to participants’ learning style preferences in particular (Table 38), it can be noted that all participants (100%) with a kinesthetic preference and 60% of those with a multimodal preference scored >3 in Precall1. All participants with visual, aural and read and write preferences scored less or equal to 3.

Table 38. Multivariate distribution of VARK and Precall1 variables in the EG.

<table>
<thead>
<tr>
<th>Contingency Table Precall12 * VARK</th>
<th>VARK</th>
<th>Visua l</th>
<th>Aural</th>
<th>Read&amp;Write</th>
<th>Kinestheti c</th>
<th>Multimodal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precall 1</td>
<td>Count</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>% in Precall 1</td>
<td>11.1%</td>
<td>33.3%</td>
<td>33.3%</td>
<td>0%</td>
<td>22.2%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>% in VARK</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
<td>40%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>% of total</td>
<td>6.7%</td>
<td>20%</td>
<td>20%</td>
<td>0%</td>
<td>13.3%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>&gt; 3</td>
<td>Count</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>% in Precall 1</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>50%</td>
<td>50%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>% in VARK</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>60%</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>% of total</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>20%</td>
<td>20%</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>% in Precall 1</td>
<td>6.7%</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
<td>33.3%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>% in VARK</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>% of total</td>
<td>6.7%</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
<td>33%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>
In Recall2 as well, all participants with a kinesthetic preference (100%) scored greater than 3, as illustrated in Table 39. At the same time only 20% of multimodal participants and 33% of read and write participants also scored >3 in Recall2. Once again, visual and aural participants scored less than or equal to 3 in the second vocabulary post-test. These results therefore suggest that people with kinesthetic and multimodal learning style preferences, (as well as read and write to some extent) may find the subtitling task more suitable than people with visual or aural preferences.

Table 39. Multivariate distribution of VARK and Recall2 variables in the EG.

<table>
<thead>
<tr>
<th>Contingency Table</th>
<th>PreCall12 * VARK</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VARK</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Visual</td>
<td>Aural</td>
</tr>
<tr>
<td>PreCall12 ≤ 3</td>
<td>Count</td>
<td>1</td>
</tr>
<tr>
<td>% in PreCall1</td>
<td>10%</td>
<td>30%</td>
</tr>
<tr>
<td>% in VARK</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>% of total</td>
<td>6.7%</td>
<td>20%</td>
</tr>
<tr>
<td>PreCall12 &gt; 3</td>
<td>Count</td>
<td>0</td>
</tr>
<tr>
<td>% in PreCall1</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>% in VARK</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>% of total</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>1</td>
</tr>
<tr>
<td>% in PreCall1</td>
<td>6.7%</td>
<td>20%</td>
</tr>
<tr>
<td>% in VARK</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>% of total</td>
<td>6.7%</td>
<td>20%</td>
</tr>
</tbody>
</table>
5.3 Qualitative Analysis

Qualitative data was gathered during this study through a research journal (i.e. a diary kept by the researcher during the research project), as well as audio and video-recordings of the experimental sessions. The research journal followed Silverman’s (as cited in Dörnyei, 2007) organizational framework, made up of four categories: “observation notes about experiences, methodological notes about how and what kind of data were collected, theoretical notes describing hunches, hypothesis and ideas, and personal notes containing feeling statements (concerning for example, satisfaction, surprise, shock, etc.) and other subjective comments”. Audio and video-recordings of the first experimental session (the first two hours of the experimental classes) for both the EG and CG were made. Due to technical problems in the Language Labs, audio-recordings were opted for regarding the second session (the last two hours of the experimental classes) for the EG and CG. All audio and video-recordings can be found in the Online Appendix I. The audio was recorded using an mp3 recorder and video recordings of the teacher’s computer were made using Sanako Smart Board. In addition, Sanako Lab, software for managing and monitoring all computers in the classroom, was installed on the teacher’s computer and used to visualise the classroom’s computer monitors in order to see what participants viewed and the activities they carried out. The audio file was then merged with the corresponding video file using Windows Movie Maker. Unfortunately the recordings are unintelligible at points due to background noise while the recordings made during the pilot did not present this issue, probably due to the smaller number of participants.

As Dörnyei (2007: 292) states, “the dominant form of [qualitative] evidence involves extracts from word-based narrative accounts of either the respondents or the researcher him/herself”. There are two general analytical approaches to qualitative data analysis: subjective intuition and formalized analytical procedures. What they have in common is that neither of them make use of statistical techniques. The former relies on the subjective and reflexive involvement of the researcher during the analysis. It allows the researcher to follow a creative, data-led analytical position. The latter applies a step-by-step process to analyse data. In this study a formalized analytical procedure was followed by conducting a systematic analysis of qualitative data. Mile and Huberman (1994) suggest a structured approach to analysis which
involves reducing the amount of data, making interpretation easier. Dörnyei (2007: 245) lists a set of generic analytical moves, an approach known as qualitative content analysis. Content analysis grew out of the tradition of quantitative analysis of written texts and has recently become related to qualitative analysis with one main difference: “the qualitative categories used in content analysis are not predetermined but are derived inductively from the data analysed” (ibid.: 246). This generic analytical process can be summarised in four phases: data transcription; pre-coding and coding; ideas development; data interpretation and drawing conclusions. The content analysis of the overall data collected in this study - observation through the research journal and audio/video-recordings - led to the establishment of one qualitative category: focus on vocabulary. All the other categories (class dynamics, subtitling and technical issues) inductively emerged from the data during the content analysis. Since the study follows a mixed-method research approach and qualitative data is intended to grant additional clarification, the transcribing phase of audio recordings was conducted in form of ‘tape analysis’. ‘Tape analysis’ indicates the process of note-taking while listening to audio-recordings, where generally relevant parts of the data are identified and marked for subsequent analysis. Partial transcriptions of the audio recordings were also made when needed. Pre-coding was then carried out giving informative labels (descriptive codes) which were replaced or supplemented with ‘pattern codes’ during a second-level coding process. This process aimed at identifying patterns among the descriptive labels and clustering them into broader labels. The process of coding and recoding was carried out several times.

5.3.1 Research Journal and Audio/Video Recordings

Once the coding process was finalised, two steps were envisaged, each focusing on vocabulary. These steps correspond to the UD phases of (1) global perception and (2) synthesis (§4.3.4). Participants focused on vocabulary during the global perception phase when, after being exposed to the AV input for the first time without audio, they had to formulate hypotheses on what they had just seen and, after the second viewing with audio, they were asked to confirm the hypotheses previously formulated. They therefore had to concentrate on the comprehension of lexical
elements in order to understand the content of the video and verify what they had hypothesised about the first viewing. The second step was realised during the synthesis phase, when EG participants were called upon to perform the subtitling task and the CG participants were asked to carry out oral comprehension and writing tasks. Participants had to watch the video several times and pay attention to the linguistic input. At this point, participants started to show interest in lexical items in the video but also to those related to it.

(1) Global perception
During the first viewing without audio, learners concentrate their attention on extra-linguistic elements and create factual and linguistic expectations which can help them to better understand the dialogue in the subsequent viewing, as confirmed by Mariotti (2002). In this study, when formulating hypotheses after the first viewing without audio, both EG and CG participants asked how they could convey in Italian some ideas referring to specific words. Some of these words were to be found in the spoken dialogue of the video clip such as *litigare* (to argue), *in ritardo* (to be late), *bambina* (little girl). Learners found these elements as well as new elements which were crucial for understanding the spoken dialogue. Other lexical items participants picked up during the second viewing while listening to the AV input were *si sposa* (she is getting married), *dipingere* (to paint) and *regalo* (present), which are also three of the selected target words. Other words such as * cercare* (to look for someone), *lettera* (letter), *pittore* (painter) and *turisti* (tourists) also emerged during the process of hypothesis creation. In addition, learners not only received feedback from the teacher but also from their peers when they needed to know how to say specific vocabulary in Italian.

(2) Synthesis
From the video recording showing the computer screens of EG participants’, it can be observed that vocabulary was checked on online dictionaries, especially on http://www.wordreference.com/105 which was the link suggested by the teacher/researcher. Some participants also used Google Translate to find word meaning and, in rare cases they also used it to translate entire sentences, even though it was forbidden. Participants who were seen using computer translations were asked to stop.

105 Last accessed on 15 February 2013.
Participants in the EG also needed some help with vocabulary during the synthesis phase. They found it challenging to understand vocabulary with a figurative meaning (idiomatic expressions, metaphors, etc.). In figurative language, the literal meaning is substituted by another of symbolic nature. This type of language may be difficult to learn because that of one linguistic community can be obscure to speakers from other communities. Teaching this type of language is usually marginal but it should have a more central role in the learning process (Cardona, 2008) because its use in informal oral interaction is quite common. Levorato (1993) defines the ability to deal with this type of language as ‘figurative competence’. This competence is acquired gradually, in native speakers as well, and represents the transition from a limited linguistic competence which refers to literal and referential language to a more complete competence which makes use of metalinguistic competence. Translation may help learners develop figurative competence since they have to understand the intended meaning of vocabulary and lexical units in a determined context to be able to convey the message correctly.

Video recordings of the EG participants made it possible to view participants’ progress with their subtitling task. It can be seen from the video recording of the EG, that participants - when spotting (§1.5.2.4) - adopted two writing ‘techniques’: they synchronise (cueing) the subtitles to the original dialogue, write the transcription of the original text and then translate it or synchronise the subtitles and write the translated text.

CG participants were also advised to consult http://www.wordreference.com/ as an online dictionary. The video recordings show that most of the participants made use of this site along with other dictionaries available on the internet. CG participants seemed to consult different vocabulary than those of the EG. Some of the vocabulary pertained to the L2 spoken dialogue and some to the instructions of the listening comprehension and writing tasks. In addition, participants looked for vocabulary to employ in their writing composition in L2. The tasks also required some creative writing, although based on the video (§4.3.4).

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106Levorato (1993: 103) states that: “Nonliteral language where a discrepancy exists between what is said and what is meant can take a great variety of forms, ranging from expressions that are clearly figurative (e.g., proverbs, metaphors, idioms, and similes) to expressions in which the discrepancy is more subtle (such as irony and indirect speech acts)”. 
5.4 Discussion

This study was designed to comparatively explore the efficacy of the subtitling practice by evaluating the performance of the EG and CG in two vocabulary post-tests (productive recall and receptive recall). The answer to this study’s research question - whether subtitling of L2 audiovisual dialogue into L1 affects incidental acquisition of meaning of new L2 words - was provided by descriptive and inferential statistical analysis. The results of this study demonstrate that the subtitling practice facilitates incidental vocabulary acquisition in terms of productive recall of vocabulary meaning. This analysis suggests that words repeated from two up to six times are recalled better than words mentioned only once, and that these words were learned at a higher rate of frequency in the EG. On the other hand, there was no evidence found to indicate that the subtitling practice facilitates receptive recall of vocabulary meaning, participants in the two experimental conditions - subtitling vs. task-based - demonstrated comparable vocabulary acquisition results in the receptive recall post-test.

Results of the Pretest showed that four of the target words were already known by some of the participants, therefore two analyses were conducted: analysis a (with 7 words new to all participants) and analysis b (with 11 words, including the four already known). The median of the EG, both in analyses a and b, was higher than the median of the CG in the productive recall post-test. Statistically significant differences between the EG and CG were found, using the Mann-Whitney U test, in analyses a \((p=0.048)\) and b \((p=0.002)\). Therefore, the subtitling practice proved to foster productive recall of word meaning.

Considering that four of the selected target words (analysis b) were repeated in the AV, statistical analysis was performed. Significant differences were detected within the EG \((p=0.001)\) and CG \((p=0.001)\) between repeated words and words mentioned once. Differences \((p=0.001)\) were also found between the EG and CG, with regards to repeated words. Nevertheless, the words had various repetitions, from two to six times, and it is not possible to pinpoint an exact number of repetitions which promotes learning. It can be noted however that repeated words (at least two) are learned more than words mentioned once.

Results of the two vocabulary post-tests (analysis a) were examined in relation to participants’ learning style preferences according to the VARK
questionnaire. In the entire sample, participants with a kinesthetic learning preference, followed by multimodal and read and write participants, had better scores in the productive recall test. Kinesthetic participants had also achieved higher scores in the receptive recall test, and were followed, this time, by participants with a read and write learning preference, who outperformed those with a multimodal style. Participants with visual or oral preferences had lower results than kinesthetic, multimodal and read and write participants in both post-tests. Participants with a kinesthetic and multimodal preference may find subtitling and task-based activities particularly suitable to their learning style due to the practical nature of the task. This tendency is especially evident in the subtitling practice where all EG participants with a kinesthetic learning style had better scores in productive and receptive recall.

The results obtained from this study present evidence that subtitling practice aids productive knowledge of word meaning. However, there are a number of limitations which constrain the extent to which this claim might be generalized within SLA research: duration, vocabulary post-tests and sample size. The study was structured into three encounters. During the first (the module presentation), the pre-test was administered. After four weeks, two two-hour experimental sessions were carried out over two consecutive weeks. Therefore, learners were exposed to the AV input and required to perform the experimental tasks in a total of 215 minutes over two sessions. The results reported in this study are based on learners’ performance in immediate vocabulary post-tests administered at the end of the last session, immediately after the task was completed. The acquisition claims of this study are limited to outcomes of short-term intensive experimental sessions. Although delayed post-tests had been prepared and previously administered during the pilot course, it was not possible to give them to participants of the main study because, despite the attempts made, it proved impossible to meet again with all the learners who took part in the main study. Delayed post-tests would have given additional evidence to the acquisition claims in a long-term perspective and could have clarified whether subtitling facilitates receptive recall of vocabulary meaning. Thus, future longitudinal research is required to better support these claims.

The vocabulary post-tests employed in this study aimed at testing productive and receptive recall of word meaning. The pool of target words selected for the study was quite small due to the vocabulary available in the short AV input. The selection of vocabulary can be greatly limited by the use of this kind of input. The pre-test
showed that some words were previously known by some of the participants and had to be excluded, further reducing the pool of target words. As a result, two complementary analyses had to be performed. A greater number of target words will be required in future research to strengthen the findings of this study.

The sample size ($N=25$) of the participants in this study also limits the generalizability of the findings. It has to be pointed out that Italian is studied by a restricted number of students at NUI Galway and that the highest numbers are found in the first year of the Bachelor Degree of Arts. For this reason, 1BA students were involved in the main experimental study, even though their level of proficiency was slightly lower than that of the participants of the pilot study. In addition, three encounters increased the possibility of participants’ mortality (§4.3.2). The number of participants did in fact decline from an initial number of 40 to 25. Even though the sample size was quite small, analysis revealed statistically significant differences in vocabulary development. Additional research with a larger sample could report further evidence.

During the fixed phase of this study, supplementary quantitative data was also gathered through initial and final questionnaires. Besides their background information, EG and CG participants provided their feedback on the tasks performed. The AV input used was considered suitable by both groups and similar aspects of the video (the language spoken, the images and watching the video several times) helped them to understand video content. Nearly all participants expressed their willingness to watch more AV material in their FL classroom. EG participants found that subtitling helped them to improve their overall competence in the FL and all of them stated that they would have liked to see the subtitling practice integrated in their regular FL class.

Finally, in the flexible phase, qualitative data was collected through a research journal as well as audio and video recordings of the experimental sessions. The systematic data analysis showed that there were two steps for focus on vocabulary during the experimental sessions. The two moments match the UD phases of global perception and synthesis. EG and CG participants paid attention to lexical elements during the global perception when asked to formulate hypotheses after the first viewing with no sound and when exposed to the linguistic input during the second viewing. In the synthesis phase, while performing the subtitling and task-based activities, participants also focused on vocabulary, and in particular on the
figurative language typical of informal oral texts. These moments demonstrate that the two groups had equal opportunities to focus their attention on vocabulary.
Conclusion

This thesis has sought to investigate the effects of the subtitling of audiovisual L2 dialogue into L1 on incidental vocabulary acquisition in the Italian Foreign Language classroom. By triangulating quantitative and qualitative methods, the main experimental study shows that interlingual subtitling promotes incidental vocabulary acquisition of new L2 word meanings, in terms of productive recall. In addition, words mentioned various times in the audiovisual L2 dialogue are learned better than words mentioned only once. The relationship between participants’ performance, after the subtitling task, in the immediate vocabulary post-tests and their preferred learning style also shows that participants with a kinesthetic preference (learning from experience and direct practice) scored better and, thus, subtitling may result especially suitable for learners with this learning style.

In addition to the empirical evidence central to this study, learners’ evaluation of subtitling as a pedagogical tool for language learning was also considered. Learners’ views were collected through a final questionnaire given to the participants of the main experimental study of this research project. Most learners state that they believe that translation and the use of AV material helps to improve overall FL competence. Importantly, all learners agreed that the subtitling practice helped them to improve their overall competence in the FL. Furthermore, the great majority of learners found subtitling interesting and entertaining, although challenging. All participants found subtitling a pleasant change and agreed that they would like to have more subtitling activities in their regular FL course. The main experimental study was conducted as a one-off activity, whereas in preliminary and pilot studies a subtitling module was offered annually within the general language course and it was thus integrated in their language curriculum.

Investigations on subtitling in language learning are still limited in number and very few studies focus on vocabulary. The two most prominent studies considered here were carried out by Williams and Thorne (2000) and Bravo (2008) (§2.5.1). The results obtained in this thesis corroborate the findings of both studies: Williams and Thorne’s investigation of subtitling as a medium for language learning (with university students of Welsh as an L2 trained as subtitlers) similarly showed, through an end-of-course questionnaire, that students felt their working vocabulary had increased and that they were able to extract language from the AV material used
and adapt it for their own purposes in production of new phrases. The results of the statistical analysis of the present research project seem to verify Williams and Thorne’s students’ perception of subtitling, as here participants not only felt that they learned new vocabulary but actually demonstrated to have incidentally acquired meaning of new words and, when prompted, were able to productively provide L2 words with their equivalent in L1.

Bravo’s study measuring idiomatic expression retention and recall through a subtitling task of one group of Portuguese undergraduate A2/B1 students of English as an FL also illustrates results complementary to those observed here. The present experimental study concerns participants’ immediate productive recall of word meaning, while Bravo’s investigation focuses on immediate recognition as well as delayed productive recall and in-context use of idiomatic retention. The two studies together would thus seem to validate the efficacy of subtitling for productive recall of vocabulary.

Bravo also used the VARK learning style questionnaire to verify students’ preferred style. The distribution of learning style included mainly visual, aural and kinesthetic preferences with only a few reading/writing. Bravo therefore concluded that subtitling respected a broad range of different learners’ styles as it involves aural, visual and written elements with a fundamental kinesthetic feature. The study can therefore extend Bravo’s investigation by suggesting that subtitling is particularly suitable to learners with a kinesthetic preference, as shown by the relationship between learners’ learning styles and their linguistic performance in vocabulary post-tests.

**Limitations Encountered and Suggestions for Future Research**

Most of the limitations presented by the current study can be addressed in future research. The current study was carried out in the context of Italian as an FL with a restricted number of participants. Future studies should employ a greater number of participants to increase the generalizability of these results and ideally also involve learners of different L2s. In this and other previous empirical studies on intralingual subtitling as a pedagogical tool, English was either the L2 to be learned or the L1 of the learners who took part in the studies. It is therefore advisable to test subtitling with different language combinations.
The numbers of target words selected for the present research was also limited due to the nature of the AV input and to the context of the experimental study (participants and time constraints). Although it can prove to be quite challenging, future research should make use of a larger number of target words, since, even when words are carefully selected, participants may already know some of them and the word pool is therefore reduced. Target words in this study belong to three different frequency levels but researchers can decide to focus on one or two frequency levels instead. The two dimensions of word meaning knowledge - productive and receptive - were assessed here for each word in recall tests. These two dimensions should also be tested in recognition tests to evaluate learners’ knowledge and hence check the efficacy of the subtitling practice on the four degrees of knowledge of word meaning.

The design of the complementary study can also be used for future research (§4.2.5). The four degrees of knowledge of meaning can be tested in monolingual or bilingual versions. The bilingual version of the test results as appropriate for lower levels while the monolingual version of the test can be more suitable for more advanced learners. In addition, the complementary study included a delayed post-test, unlike to the main study, which availed of an immediate post-test only. A delayed post-test is recommendable in future trials to provide long-term evidence in supports of vocabulary acquisition claims.

Future research may also address the benefits of subtitling on other aspects of word knowledge in the field of SLVA. The focus here was on word meaning, however word form could represent another relevant aspect. Considering the AV nature of the input, spoken and written forms of the word can be tested, according to Nation’s 2001 framework (§3.3.1). The use dimension of word knowledge (grammatical functions, collocations and constraints of use) can also be investigated in order to shed further light on the effects of subtitling on vocabulary acquisition.

Future lines of investigation can focus on other subcomponents of communicative competence (linguistic, sociolinguistic and pragmatic) for oral and/or written reception, production and interaction, as described in the CEFR (§1.2.1). Another interesting aspect for future investigation could be to test subtitling in on-line learning environments since previous studies have been carried out in face-to-face contexts. The recent ClipFlair project provides the ideal tool for on-line teaching and learning thanks to the Studio and the Social Network (§2.5.2). Different
profiles of learners should also be involved considering that the previous studies were carried out with university students only.

Standard interlingual subtitling has been the most widely studied modality up to the present. Reversed subtitling, although not offering L2 linguistic and cultural elements as input, also has great potential for language learning. Learners can practice L2 written production and become aware of L2 linguistic and cultural aspects through the translation process. Intralingual subtitling, even though it does not require translation, can also benefit language learners. Intralingual subtitling (L2>L2) can, for example, enhance learners’ summarizing and paraphrasing skills. Due to the complexity of reformulating in an L2, this type of subtitling may be more suitable for advanced learners.

A final proposal for future SLA research is the creation of corpora of students’ subtitles. Learner Translation Corpora (LTC) usually contain translations made by trainee translators and serve to identify common difficulties and errors of translation students, but they can have different applications, including those concerning L2 pedagogy (Castagnoli, 2009). This depends on the directionality of translation. If translation is from L2>L1 focus is then paid to translation problems rather than detection of typical features of learners’ L2 production. While in L1>L2 translation the emphasis is on L2 pedagogy. Learners can fully understand the L1 source text but they can make errors in the L2 target text. It has to be considered that LTC contain learners’ translations rather than free or guided L2 production and thus may not represent learners corpora in the purest sense. Reversed interlingual subtitling can therefore be used for this scope. However, considering that learners may make mistakes even when translating into their L1, standard interlingual subtitling can also be applied for error analysis.

The many possibilities outlined above illustrate the vast and yet uncharted potential of the use of subtitling in the context of SLA research, and in the everyday practice of teaching and learning in the foreign language classroom.
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Appendix A
NUI Galway Student Questionnaire on Teaching

NATIONAL UNIVERSITY OF IRELAND, GALWAY

Date ____________________________
Lecturer's name __________________
Subject or unit ____________________
Lecture room _____________________

Student Questionnaire on Teaching

The information that you contribute will be anonymous and you will never be identified. Respond to the statements below by filling in the appropriate box.

<table>
<thead>
<tr>
<th>A Core statements</th>
<th>STRONG YES</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>The course was well organized</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The lecturer was always well prepared</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The lecturer was enthusiastic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The lecturer was audible and understandable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The pace of the course was satisfactory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handouts were clear and very useful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The lecturer was easy to approach for extra help</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The lecturer's dealings with students are fair and impartial</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B Other core statements</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The objectives of the course were clear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The lecturer makes the topic easy to understand</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The lecturer encourages questions and interaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The lecturer makes good use of examples</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The lecturer made the topic interesting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The lecturer gave good advice on learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The lecturer shows care for student learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C Student's efforts</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I revised sufficiently to keep up with the classes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am satisfied with my own overall effort on this topic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I worked much harder than average on this course</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall, the lecturer’s teaching was excellent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I attended the following percentage of lectures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;50%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50.75%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>70.80%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>80.90%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

222
1. In your opinion, how could the relevance and usefulness of this course be improved?

2. What were your expectations for this course? Were they fulfilled?

3. Would you recommend this subject or course to a new student? How would you describe it to him/her.

4. What aspect of the lecturer's teaching did you appreciate most?

5. How could the lecturer improve his/her teaching?

6. Any other comments or suggestions

Thank you!
Appendix B
Main Study: Initial Questionnaire

1BA-Language through Culture-Initial Questionnaire

This is a small study on the use of subtitling activities in foreign language learning. Please answer sincerely to the following questions. Information provided and your identity will be treated with absolute confidentiality.

*Required

Last Name *

First Name *

Student ID Number *

Gender *

- Female
- Male

Age *

Nationality *

1. What is your native language? *

2. How long have you been studying Italian? *

- 0-1 year
- 1-4 years
- more than 4 years

3. How do you consider your level of fluency in Italian? *

<table>
<thead>
<tr>
<th>Very weak</th>
<th>Weak</th>
<th>Fair</th>
<th>Good</th>
<th>Very good</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
4. Do you use Italian outside foreign language classes? *
   - Yes
   - No

4a. If yes, in which contexts:
   - Personal life (family, friends, holidays)
   - Work
   - Both

5. Do you speak any other foreign language? *
   - Yes
   - No

5a. If yes, please state the foreign language(s).
   - French
   - German
   - Spanish
   - Other: ____________

6. Do you ever watch movies/television shows in foreign languages? *
   - Yes
   - No

6a. If yes, do you watch them dubbed or subtitled?
   - Dubbed
   - Subtitled
   - Both

7. In your opinion, subtitles are: *
   Please indicate to what extent you agree/disagree with the following statements:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Helpful in better understanding the general content of the movies/television shows</td>
<td>☢️</td>
<td>☢️</td>
<td>☢️</td>
<td>☢️</td>
<td>☢️</td>
</tr>
<tr>
<td>2. Helpful in better understanding the spoken text of the movies/television shows</td>
<td>☢️</td>
<td>☢️</td>
<td>☢️</td>
<td>☢️</td>
<td>☢️</td>
</tr>
<tr>
<td>3. Helpful in learning new vocabulary</td>
<td>☢️</td>
<td>☢️</td>
<td>☢️</td>
<td>☢️</td>
<td>☢️</td>
</tr>
</tbody>
</table>
4. Helpful in improving your overall competence in the foreign language

5. Helpful in improving your production in the foreign language

8. Have you ever experienced translating before? *
   ☐ Yes
   ☐ No

8a. If yes, please indicate to what extent you agree/disagree with the following statement:

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Translating a text from/into a foreign language helps you to improve your overall competence in that foreign language.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

9. Have you ever experienced audiovisual material (e.g. movies, short video clips, advertising, etc.) in a foreign language class? *
   ☐ Yes
   ☐ No

9a. If yes, please indicate to what extent you agree/disagree with the following statement:

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The use of audiovisual material in foreign language classes helps you to improve your overall competence in that foreign language.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

10. Have you ever subtitled a video (for Youtube, fansub websites, etc.)? *
    ☐ Yes
    ☐ No
10a. If yes, please indicate to what extent you agree/disagree with the following statement:

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subtitling a video from/into a foreign language helps you to improve your overall competence in that foreign language.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Thank you for your cooperation!

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Appendix C
Main Study: EG’s Final Questionnaire

1BA-Culture through Language-Final Questionnaire

Thanks for participating in this small study. Please answer sincerely to the following questions. Your personal opinion is very important to understand the use of subtitling activities in the foreign language class. Information provided and your identity will be treated with absolute confidentiality.

*Required

Last Name *

First Name *

Audiovisual material

1. Please indicate to what extent you agree/disagree with the following statements: *

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The video was adequate to your level.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The video was challenging.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The video was entertaining.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Please rate how much you think the following aspects helped you to understand the content of the video. *

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Not really</th>
<th>So-so</th>
<th>Quite a lot</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>The language spoken.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The images.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The soundtrack.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The transcript of the dialogue.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watching the video over and over again.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Would like to watch more audiovisual material in the regular foreign language course? *

- Yes
- No
### Subtitling activity

4. After the subtitling activity, please indicate to what extent you agree/disagree with the following statements: *

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Translating a text from/into a foreign language helps you to improve your overall competence in that foreign language.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>The use of audiovisual material in foreign language classes helps you to improve your overall competence in that foreign language.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Subtitling a video from/into a foreign language helps you to improve your overall competence in that foreign language.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

5. Please rate how much you feel you have improved the following abilities: *

<table>
<thead>
<tr>
<th>Ability</th>
<th>Not at all</th>
<th>Not really</th>
<th>So-so</th>
<th>Quite a lot</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening comprehension</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Learning new vocabulary</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Grammar</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Translation</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

6. You found the subtitling activity: *

<table>
<thead>
<tr>
<th>Quality</th>
<th>Not at all</th>
<th>Not really</th>
<th>So-so</th>
<th>Quite a lot</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interesting</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Entertaining</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Difficult</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Challenging</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>A pleasant change</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
7. Would you like to have more subtitling activities in the regular foreign language course? *
   - Yes
   - No

8. In general, would you like to have more computer-based activities in the foreign language class? *
   - Yes
   - No

The subtitling software - LvS

9. Please indicate to what extent you agree/disagree with the following statements: *

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The LvS software is easy to use.</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>The time spent for learning how to use the LvS software was adequate for the learning result.</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>The LvS software offers all the appropriate functions and tools to complete the LvS activity.</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>The LvS software is a useful tool for foreign language learning.</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>

10. Did you encounter any technical difficulties? *
   - Yes
   - No

Thank you for your cooperation!

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Appendix D
Main Study: CG’s Final Questionnaire

1BA-Final Questionnaire

Thanks for participating in this small study. Please answer sincerely to the following questions. Your personal opinion is very important to understand the use of computer-based activities in the foreign language class. Information provided and your identity will be treated with absolute confidentiality.

*Required

Last Name *

First Name *

Audiovisual material

1. Please indicate to what extent you agree/disagree with the following statements: *

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The video was adequate to your level.</td>
<td>☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The video was challenging.</td>
<td>☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The video was entertaining.</td>
<td>☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Please rate how much you think the following aspects helped you to understand the content of the video. *

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Not really</th>
<th>So-so</th>
<th>Quite a lot</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>The language spoken.</td>
<td>☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The images.</td>
<td>☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The soundtrack.</td>
<td>☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watching the video over and over again.</td>
<td>☐ ☐</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. Would you like to watch more audiovisual material in the regular foreign language course? *

☐ Yes
☐ No
Video-based activity

4. After the video-based activity, please indicate to what extent you agree/disagree with the following statement: *

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The use of audiovisual material in foreign language classes helps you to improve your overall competence in that foreign language.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

5. Please rate how much you feel you have improved the following abilities: *

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Not really</th>
<th>So-so</th>
<th>Quite a lot</th>
<th>Very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening comprehension</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Learning new vocabulary</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Grammar</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Writing</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

6. In general, would you like to use more computer-based activities in the foreign language class? *

☐ Yes
☐ No

Thank you for your cooperation!
Appendix E
Main Study: Pre-test

Vocabulary

Name________________________

Please indicate the sentence that best describes what you know about each word. Check off the appropriate box to the left of the options and follow the instructions for each option.

Example.

PREGO
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___you are welcome___ (translation)

1. SCRIVERE
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

2. INSEGNANTE
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)
3. SPOSARSI
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

4. TAGLIARE
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

5. PARLARE
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

6. DIPINGERE
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

7. SORDO
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)
8. NOZZE
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

9. FIUME
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

10. MARTEDÌ
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

11. FAVOLA
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

12. CIECO
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)
13. GELATO
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

14. REGALO
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

15. GRAZIE
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

16. OMBRELLO
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

17. FERMATA
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)
18. PONTE
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

19. TAPPA
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

20. USCIRE
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

21. AEREO
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

22. GRIDARE
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)
Appendix F
Main Study: Dialogue Transcript

Viaggio in Italia

Margherita: Carissimi mamma e papà, ormai ci siamo, il 20 mi sposo. Matteo mi pare un bravo ragazzo e a me sembra di amarlo molto. Stromboli mi piace sempre di più, soprattutto la gente, il vulcano e i cannoli.

Chiara: Sei in ritardo.

Piero: C’era traffico.

Chiara: C’era traffico? È notte.

Piero: Sono le otto.

Margherita: Ma questa lettera è per dirvi che il regalo lo decido: voglio che al mio matrimonio veniate insieme, ma non in aereo troppo facile, troppo veloce. Voglio che veniate con il vecchio macinino di papà. Lo so che da Milano a Stromboli sono molte ore, lo so che sarà un viaggio un po’ scomodo ma è il mio regalo di nozze, non avete scampo! Il mio regalo di matrimonio continua a Firenze, voglio che andiate in centro a trovare quel cieco che dipingeva i monumenti, li faceva come li immaginava ed erano più belli degli originali, vi ricordate?

Piero: La prossima fermata è a Firenze.

Chiara: Sì, l’ho letto ma non mi va di fermarmi.

Piero: No, ti deve andare è il regalo di nozze per Margherita.

Chiara: Se continuiamo così non arriviamo più. Non faccio mica l’insegnante io, tanto meno lo scrittore di favole, ho un negozio devo lavorare.

Piero: Anche gli insegnanti lavorano.


Piero: No, perché sarebbe un mezzo regalo.

Chiara: Però sarebbe il nostro segreto.

Piero: No, ormai abbiamo promesso e poi, lo sai, io non riesco a mantenere un segreto.

**Margherita:** Cara mamma, so che avresti chiamato. Mi dispiace ma non posso aiutarti, anzi mi raccomando, voglio...

**Chiara:** Non c'è dai.

**Piero:** Guarda, guarda là.

**Chiara:** Guarda che cosa? Il ponte è stato costruito... il Davide... bravo professore.

**Piero:** Guarda è ancora lì, dopo tanto tempo.

**Chiara:** Certo! Chi lo muove il ponte?

**Piero:** Il cieco, non vedi? È lì, al solito posto, lì sul fiume. Vieni. Ciao.

**Chiara:** Ciao.

**Uomo:** Ciao. Chi siete?

**Chiara:** Siamo dei turisti, siamo stati qui quindici anni fa con una bambina che aveva dieci anni che era rimasta molto incantata dai tuoi disegni.

**Uomo:** E dov’è la bambina?

**Chiara:** Si sposa. Voleva che lo sapessi così siamo venuti a dirtelo.

**Piero:** Ma tu chissà quanti bambini vedi, come fai a ricordarti.

**Chiara:** Ma che dici vedi? È cieco.

**Piero:** Sei tu che sei ipersensibile, così lo offendi tu.

**Chiara:** Non mi fare la lezioncina sull’handicap.

**Piero:** Noi si va.

**Chiara:** Sei diventato fiorentino? ‘Si va’.

**Piero:** La bambina voleva una foto, possiamo fartela?

**Chiara:** Che gridi? È cieco non è sordo.

**Uomo:** Il mio regalo di nozze. Non mi piacciono le foto sono bugiarde.

**Chiara:** Grazie.
Appendix G
Main Study: Productive and Receptive Recall Post-tests

Name________________________

Please give the equivalent word or verb in Italian. The first letter is provided.
Example. Thank you = G_____ => Thank you = Grazie

1. To get married = S__________
2. Deaf = S____________
3. To shout = G____________
4. Wedding = N_____________
5. Blind = C_____________
6. Gift = R______________
7. To paint = D____________
8. To cut = T_____________
9. A stop = F_____________
10. Fairytale = F___________
11. A stop or lay over (in a journey) = T________________

Vocabulary 1
Name______________________

Please indicate the sentence that best describes what you know about each word. Tick the appropriate box to the left of the options and follow the instructions for each option.

Example.

PREGO
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___you are welcome___( translation)

1. GRIDARE
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

2. NOZZE
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

3. SPOSARSI
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)
4. **DIPINGERE**
   - (a) I don’t remember having seen this word before.
   - (b) I have seen this word before, but I don’t know what it means.
   - (c) I have seen this word before, and I think it means ___________ (translation)
   - (d) I know this word. It means ___________ (translation)

5. **TAGLIARE**
   - (a) I don’t remember having seen this word before.
   - (b) I have seen this word before, but I don’t know what it means.
   - (c) I have seen this word before, and I think it means ___________ (translation)
   - (d) I know this word. It means ___________ (translation)

6. **SORDO**
   - (a) I don’t remember having seen this word before.
   - (b) I have seen this word before, but I don’t know what it means.
   - (c) I have seen this word before, and I think it means ___________ (translation)
   - (d) I know this word. It means ___________ (translation)

7. **FAVOLA**
   - (a) I don’t remember having seen this word before.
   - (b) I have seen this word before, but I don’t know what it means.
   - (c) I have seen this word before, and I think it means ___________ (translation)
   - (d) I know this word. It means ___________ (translation)

8. **CIECO**
   - (a) I don’t remember having seen this word before.
   - (b) I have seen this word before, but I don’t know what it means.
   - (c) I have seen this word before, and I think it means ___________ (translation)
   - (d) I know this word. It means ___________ (translation)
9. FERMATA
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

10. REGALO
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)

11. TAPPA
☐ (a) I don’t remember having seen this word before.
☐ (b) I have seen this word before, but I don’t know what it means.
☐ (c) I have seen this word before, and I think it means ___________ (translation)
☐ (d) I know this word. It means ___________ (translation)