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A Process-Oriented Perspective on Translation. Professional and Non-Professional Translators'Approaches To Specialized Texts: A Contrastive Analysis

Candidata

Carmen Calabrese

Tutor

Prof. Paolo Donadio

Il coordinatore

Prof. Dario Bacchini

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Chapter 1

Translation as a process

1.1 Research goals

The aim of this paper is to explore the translation process. This issue is an area of interest within the field of Translation Studies (Holmes 1972/Toury1986/Vinay Darbelnet 1995): the study of mind and the contribution given by cognitive linguistics has opened a new perspective in the field (Halverson 2013). Translation scholars, such as Shreve (2010)/ Risku (2012) started to focus on mental processes and linguists (Halverson 2010/Munoz 2013) have found in translation a suitable application of their theories.

The main effort of this study is to compare the performances of professional translators and post- graduate language students to see whether differences are either "neutralized" (Dragsted 2005b: 49) or can be assessed between these two groups. In one of her recent investigations (Dragsted (2005b), assumed that the different allocation of cognitive resources and the use of long term memory in professional

translators'activity affect translation process. Dragsted (2005b) hypothesizes that the type of text segmentation adopted by professional translators enables them to process textual units quickly. Even though no significant evidence was able to support this hypothesis, Dragsted has identified "parallel" processes in professional translators' activity, measured by the extent to which translators recur to literal translation. (Dragsted 2005b:50).

Other scholars, such as Palumbo (2008) and Jakobsen (2014), have investigated professional performances in their attempt to face the linguistic register of scientific texts. Carl (2013) assumes that professionals, who spend more time reviewing the target text, are supposed to coherently organize the text segments into a flow of continuous production, reducing the attention on the single lexical item.

The present research is based on the interaction between Translation and Cognition (Tabakowska 2000/ Shreve- Angelone 2010/ Rojo2013) and how they are related, taking into account that this area, also definable as "Cognitive Translatology" (Munoz 2013:75), gives a different perspective on translation, on the assumption that concepts are embodied in human experience of real world (Lakoff -Johnson 1980 /Violi 2001/ Halverson 2010).

1.2 Research questions

The focal point of the query is the translation process and the procedural categories that we need to analyse professional translators' and language students' performances: a) segmentation, b) pause

duration and c) processing time. (We will explain these categories in the third chapter) (Methodology). A substantial part of this work will involve an analysis of the possibility to assess the main features which distinguish the professional translators' and post graduate language students' processes, trying to establish whether it is possible to define the boundaries between these two categories.

The adoption of a perspective grounded on precise procedural categories will be fundamental for this study to shed new light on translation activity.

As a result, the work will be based on the analysis of the above mentioned procedural categories, which mostly affect translation. Starting from Dragsted's assumptions (2005a) according to which professionals process translation units more quickly and produce few shorter pauses, the first research question focuses *on the possible correlation between the variations in the procedural categories and the different degree of expertise of the translators*. Surveys such as that conducted by Dimitrova (2005a) suggest that the degree of translator's expertise is not determined by the years of training, but his/her capabilities to exploit problem-solving and decision-making strategies.

A second research question regards *the role played by different genres of specialised texts and the use of metacognitive strategies during translation processes*. The effort of the paper will be to determine whether professional translators adopt a "novice-like behaviour" (Dragsted 2005b:50) or not when dealing with different

genres, thus interrupting the continuous flow of text production (Carl 2012).

The dynamic relationship between procedural categories and translation constraints – translators' expertise and textual genres - will be investigated by reconstructing every single translator's process through a dedicated software, Translog 2.[1]

1.3. Methodology

From a methodological point of view, different methods have been proposed to analyse translation as a process (Alves 2003/ 2011/Condit 2002/ Dimitrova 2005/ Dragsted 2005a/b/ Carl 2009/ Halverson 2010/ Munoz 2013), taking into account that descriptive translation studies are mainly concerned with the product of translation, rather than the process (see, for instanceToury 1986). In this project, priority is given to translation process investigated through a specific software. Some scholars (Alves 2003a /Dimitrova 2005/Carl 2009) have combined

[1] Translog is a Windows-oriented program that allows to record and study all kinds of writing tasks done on a computer keyboard. It was originally developed to study writing processes in translation, hence the name Translog. Without interfering with the writing process, "the program records all the keystrokes, including all changes, deletions, additions, cut-'n-paste operations and cursor movements made by a writer in the process of creating a text" (from www.translog.dk).

online methods, including key logging and simultaneous approaches, with verbal offline

protocols (Tirkkonen 2002) Verbal protocols are data sources which embody individual thoughts regarding translators' performances.

1.4. Chapters overview

In the first chapter, the main objectives of research have been assessed, corroborated by annotations regarding the methodology adopted. The second chapter will initially include the theoretical foundations, explaining the main lines on which Cognitive linguistics is based.

Subsequently, the interest will focus on the appearance of the new discipline, "Translation Studies", which analyses translation as a process, considered "as an act in itself". (Holmes1972) and its evolution.

The rest of the chapter focuses on the interconnection between two branches: Translation and Cognition and continues with the literature review, which starts with the description of other scholar perspectives concerning translation process.

The remaining part proceeds as follows, considering the methodological tools, the evolution of the new branch:" *Cognitive Translatology",* as well as some observations regarding the translation process in its various stages.

The chapter ends with some delucidations about this new perspective and the genre in specialised texts.

The following chapters move on to discuss the methodology, the analysis of professional translators and post graduate language students' log files, including the graphic representation of the segments, which

reflect the approach adopted, allowing to compare the members of the same/ different categories.

The last chapters, going back to the research questions, contain the segmentation, one of the main procedural categories of this study, the results, the interconnection between the process and the product, the reflections concerning the methodology adopted and the concluding remarks.

In conclusion, the materials included in the appendices are the source and target texts, the questionnaires and the linear view, which are part of the analysis.

Chapter 2

Theoretical foundations and analytical frameworks

2.1 Cognitive Linguistics

Cognitive linguistics, which involve mental faculties in communication, looks at the importance of meanings, conceptual processes, internalized language and the interaction between language and mind (Evans 2006:6).

Starting from an abstract vision of language to a more pragmatic one based on the involvement of real speakers' brain faculties, linguists have tried to relate language structures to cognition, contributing in enriching and increasing the interest in the following areas, such as phonology (Bybee Nathan 2008, /syntax and lexicon (Langacker 1987, 1991/ Evans 2006/2007), Construction Grammar (Croft 2004/ Hilpert 2014), Metaphor theory (Lakoff/Johnson 2002), blending (Hampe 2005/ Fauconnier 1994, 1997/ Turn 2002).

Cognitive linguistics appears as an autonomous discipline in 1960, with the intention of giving much more relevance to meaning.

> "In the history of linguistics, the cognitive turn of 1970 represented the passage from a structuralist and formal perspective to the notion of conceptualization" (Donadio 2013: 1).

Initially, this subject was founded as a reaction against Generative Grammar.

> "The cognitive approach also offers exciting glimpses into hitherto hidden aspects of the human mind, human experience and, consequently, what is to be human" (Evans 2006: 6).

With this new approach to the discipline, we can see that physical experiences and their mental and linguistic representations are interrelated. This fact can be explained by the assumption that language is not studied independently from the body and mind dimension, so the Chomskyan modular analysis of human brain has been replaced by a global one (Evans 2014)

According to Langacker (1987, 1991), in fact, syntax and semantics are connected, in opposition to what is stated in Chomsky's theories.

Syntax cannot be separated from semantics because:

> "The primary purposes of language are to frame and express thoughts, and to communicate, not to produce sequence of uninterpreted sounds [……] then one would expect that many (not necessarily all) aspects of natural language syntax would be dependent in at least some way on thought expressed" (Lakoff 1987:228).

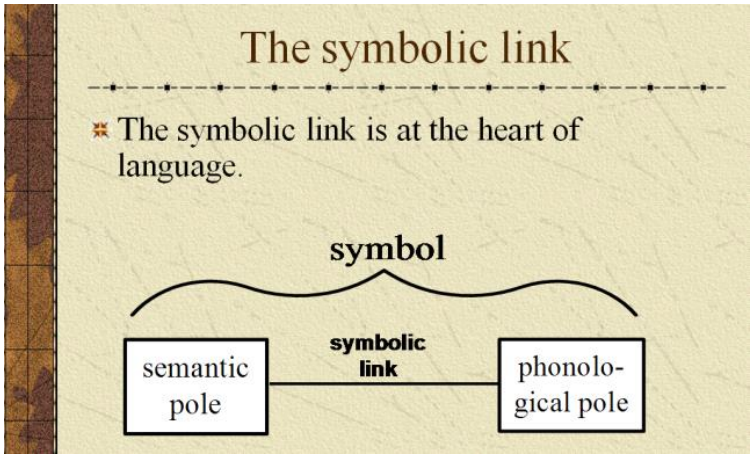
Moreover, Langacker (1987) points out the fact that syntax is a conventional system that introduces the concept. If we analyse

grammatical units, neglecting their semantic value, it would be as if we wrote a dictionary without explaining words' meaning.

Concisely speaking, the most fundamental issue in linguistic theory is the interconnection between language and thought (see Langacker 1987:13). As a result, meaning is experiential and perceivable through the contribution of mental mechanisms, which give us the chance to understand and perceive a more complex reality. The conceptualization of meaning, has become the basis for the elaboration of grammatical theories.

Factually, "language is […] a product of general cognitive abilities" (Rojo 2013 :11), and all linguistic principles are analysed in relation to memory, attention, and reasoning. Human language is symbolic, because it arises from the association between phonology and semantics: the meaning is not transmitted automatically, because it corresponds to idea the speaker elaborates, after receiving the signal: communication is the reproduction of the parts of the articulatory system, which produce the signal.

Figure 1. Relation between phonetics and semantics (source: Tuggy 2000).



The symbolic link is the ground of language process, because it includes the semantic pole of a symbol, called meaning, and the study of speech sound. Symbols allow people to perform one of the main functions of language, which is to express thoughts and ideas that have an impact on life and personal experiences. The human conceptual lexicon contains socially shared concepts which, taken together, con4stitute a cognitive representation of our reality. (seeTalmy 2001).

2.1.1 An interdisciplinary approach

In most of the situations people live through, language offers the instruments to encode and decode complex and simple ideas, according to the features of the context. Even though, it is not clear which factors in the evolution of the human brain could have contributed to the development of language, linguists (see Evans 2006) have stressed the fact that language involves an evolution and a selection of material.

This is the reason why cognitive linguistics needs to cooperate with several different scientific branches such as neuropsychology, neuroscience, and psychology.

According to Evans (2006) this discipline can be divided into two main sub-branches: cognitive semantics and cognitive approach to grammar.

The first category analyses relationship between experience, conceptual system and semantics structure encoded in any given language. In specific terms, it outlines "knowledge representation (conceptual structure) and meaning construction (conceptualisation)" (Evans 2006:48).

The second one, on the other hand, focuses on the principles and grammatical units, through which it is possible to build morphemes, phrases, sentences and explore all possible combinations of language. According to Langacker (Evans 2007: 20): "grammatical or closed class forms are inherently meaningful".

So, Langacker argues that these forms belong to a single structured inventory of conventionalised linguistic units, which in turn represents the knowledge of language in the mind of the speaker, giving rise to a lexicon –grammar continuum.

Knowledge of language (the mental grammar):

> "is represented in the mind of the speaker as an inventory of symbolic assemblies (…) The linguistic units represented in the speaker 's grammar reflects usage conventions (....) The conventionality of a linguistic unit relates to the idea that linguistic expressions become part of the grammar of a language

> by virtue of being shared among members of a speech community. Thus conventionality is a matter of degree"
>
> (Langacker, in Evans 2007: 20-21).

Mental organisation is reproduced in the compositional structure of the language, where every single linguistic item is organised in a logical manner, in order to create words, phrases, sentences, clauses and complex texts. This new approach to grammar is shaped and produced by language use: linguists, in fact, agree with functionalists, holding the view that language is motivated through real use. Experience is the result of embodied sensorimotor and cognitive structures that generate meaning in and through our ongoing interactions with changing environments. Meaning derives not just from internal structures of the organism (the subjectivity), nor solely from external inputs (the objectivity), but rather from recurring patterns of engagement between organism and environment (Hampe 2005).

One of the main assumption on which cognitive linguistics is based is that language is embodied in the cultural, physical and social experience of the speaker:

> "This thesis holds that the human mind and conceptual organisation are a function of the way in which our species –specific bodies interact with the environment we inhabit. In other words, the nature of the concepts and the way they are structured and organised is constrained by the nature of our embodied experience. As cognitive linguists hold that

> language reflects conceptual structure, then it follows that language reflects embodied experience" (Evans 2007:66).

This concept derives from the fact that reality is always mediated through the nature of the speakers' bodies. For instance, if one considers the visual system of animals is not the same for every species. If some animals can see better than others, their approach to the reality is necessarily influenced by this factor.

The internal organisation of the body is obviously connected with mental system, which is responsible also for the linguistic activities. As a result, the mind operates on what the body perceives in the interaction with the sourrended environment (Gaeta 2003).

Even the most abstract concepts are the result of the way through which brain and body interact. They can be unified in a linguistic process, because the presence of the body implies the involvement of the brain, and the meaning also includes features belonging to body's dimension. (Lakoff 1987/Violi 2001.)

Embodiment includes concepts concerning the body, the spaces and the metaphor related to them. The concept of embodiment always derives from a direct approach to reality and so it is based on an image schema:

> "A relatively abstract conceptual representation that arises directly from our everyday interaction with and observation of the world around us. Image schemas derive from sensory and perceptual experience.

> Accordingly, they derive from embodied experience" (Evans 2007: 106).

According to Hampe (2005), they are relevant in concept formulation. Indeed, children who observe a phenomenon use the image they have seen in their description, because, at the beginning, they have no information on pre-verbal concept.

First of all, image schemas share the same pre-verbal concept, but after having understood their mother tongue, their conceptualization of spatial relation obviously changes. Image schemas arise in connection with the physical and psychological development during early childhood through a process of "perceptual meaning analysis" (Hampe 2005: 138).

The term shows that they are not detailed concepts, but abstract ones, consisting of patterns derived from repeated embodied experiences. They provide the basis for more detailed concepts and they play an important role, because they are the ground for the elaboration of abstract thought and the creation of metaphors.

As patterns of sensory-motor experience, image schemas play a crucial role in the emergence of meaning and in the ability to engage in abstract conceptualization and reasoning, which is grounded in the bodily engagement with the environment. However, the current accounts of the workings of image-schematic structures do not adequately capture the qualitative aspects of embodied human understanding. To the extent that these accounts remain exclusively

structural they are bound to leave out significant dimensions of human language (Hampe 2005).

Substantially, it emerges that image schemas show how what we have in our mind is reproduced in the language and in the world outside. Every single concept evokes frames and mental representations, associated with that specific item.

2.2. Cognitive linguistics and Translation

Cognitive linguistics and Translation found their common roots in realizing that language and its meaning are motivated by their real use in everyday language. Meaning, in fact, cannot be pre- determined, because it is influenced by contextual and linguistic factors.

Indeed, during the translation process, the translator has to consider the target audience needs. In this view, from a theoretical and prescriptive perspective, the attention has been switched to a descriptive one, based on the role of language.

Starting from the assumption that cognitive linguistic structures are not abstract entities, because they are embodied in the surrounding reality, meaning is not abstract but it is motivated in the speaker's experience. This theoretical approach has been described by Lakoff and Johnson (2002), as follows:

> "Embodied realism, as we understand it, is the view that the locus of experience, meaning and thought is the ongoing series of embodied organism environment interactions that constitute our understanding of the world. According to such a view, there is no

> ultimate separation of mind and body, and we are always in touch with our world through our embodied acts and experiences"
>
> (Lakoff, Johnson 2002:249).

Thus, language is determined by its real use in common speech:

> "A discourse comprises a series of usage events: instances of language use in all their complexity and specificity. A usage event has no particular size; depending on our analytical purpose, we can segment discourse into words, clauses, sentences, intonation groups, conversational turns and so on.
>
> An event is bipolar, consisting in both conceptualization and means of expression. On the expressive side, it includes the full phonetic detail of an utterance, as well as any other kinds of signals such as gestures and body language[..]. Conceptually, a usage event includes the expression's full contextual understanding, not only what is said explicitly, but also what is inferred, as well as everything evoked as the basis for its apprehension" (Langacker2008 quoted in Rojo 2013:35).

When the need to decode a structure and encode it in another language arises, it is not possible to consider only a textual portion, but the whole text in its integrity. As a result, a bilingual speaker would have a global knowledge of linguistic, pragmatic and background features concerning the target language, because there are cases in which it is not easy to find a correspondence.

This is the reason why an encyclopaedic notion of meaning is needed: linguistic knowledge is not sufficient, considering the fact that languages have their practical roots and every single concept is embodied. As a result, "the creative translation process involves at least:

- an emerging and dynamic contextualized interpretation of the anterior text (including knowledge of the relevant aspects of its discursive, historical, cultural context);
- constraints in the translational situation itself and in the discursive situation for which the emerging translation is destined (including first knowledge of the sort mentioned for the anterior text);
- a conceptualization of the translational act itself, both generally and in specific present;
- the dynamic construction of a new text"

(Rojo 2013: 37).

The translator, as an intercultural mediator, is supposed to follow the points mentioned above, and it is not easy to adapt some elements to the target text, because, in some cases, it is not possible to reproduce them into another language.

Indeed,

> "In the translation process of any individual, there are segments which are translated apparently automatically, without

> any problems, and other segments where the translation is slow, full of many variants and deliberations, which necessitates a problem solving approach and the application of strategies" (Dimitrova 2005:26).

In conclusion, the main body of the theoretical background is based on the relationship between Cognitive Linguistics and Translation, trying to outline the implications that these disciplines have in the process of translation. The way in which this connection evolves from the difference and independence that language gains and establishes with the sourrounding reality and our own personal experience has been discussed. These changes have triggered the desire to discover the mental structures that help organise reality, life and communication.

Cognitive linguistics provides the analytical tools to investigate the process of translation. For the first time, the text gains its autonomy, while meaning and context are given a significant relevance. As a consequence, translator's choices, during the process of transferring from one language into another, should be oriented towards target text readers'needs.

Without the process of translation, it would not be possible to open oneself to the "otherness".

2.3. Translation as an act in itself

Holmes (1972) elaborated two definitions to indicate research goals: the first one was meant to describe particular phenomena in the world of our experience, while the second one was to establish principles

through which they can be explained. These goals can be collocated in two categories: “Descriptive Translation Studies” and “Theoretical Translation Studies”.

By consequence, there are then three kinds of research in descriptive translation studies: product-oriented, function-oriented and process-oriented.

The first type starts from translating individual texts, progressing to a second phase with a comparative analysis involving other translations, analysing the same text in a single or various languages.

The second type, the function-oriented research, studies the context and social cultural factors.

The last type, but not the least important, the process-oriented research, includes the act of the translation itself and it is the most important, because it gives the analyst the chance to investigate the creation of a text.

Another branch, belonging to “Translation Studies” is the “Theoretical Translation Studies”, named “Translation Theory”. (see Holmes 1972). It uses the results of descriptive translation to grasp the theory and models from the context and through this offer an explanation to translation activity.

Actually, “Translation Studies” have provided a technique in foreign language teaching and are considered to be a test for foreign language acquisition. After the Second World War, a new interest in “Translation Studies” and other disciplines was associated to “Translation Theory”. Prague School of Linguistics was established in 1920’s and the studies

it conducted were focused on language uses and their function. One of its promoters was Jakobson who, in his work, distinguished three kinds of translations (Jakobson 1959:233):

- "Intralingual translation" or "rewording", an interpretation of verbal signs by means of other signs of the same language.

- "Interlingual translation" or "translation proper", an interpretation of verbal signs by means of some other language;

- Intersemiotic translation or transmutation, an interpretation of verbal signs by means of signs of nonverbal sign systems:it implies a change of channel (for example, when some words are put into music).

As far as the first category is concerned, it can be considered a rephrasing, and it is such a debated issue in the field of Translation Studies.

"Reframed in a cognitive perspective:

if human communication is an activity in which speaker and hearer try to match their respective sets of symbolic representations, "how can we exclude as Jakobson did in 1959

intralingual formulations from the scope of Translation Studies?

How can we state, within a cognitive framework that only interlingual translation can be labelled as a "translation proper"?" (Donadio 2013:5).

Steiner (1975) also stresses the fact that every act of communication is a form of translation, underlining the fact that:

> […] interlingual translation is […] a way in, an access to an inquiry into language itself. 'Translation', properly understood, is a special case of the act of communication which every successful speech act closes within a given language. On the interlingual level, translation will pose concentrated, visibly intractable problems; but these same problems abound, at a more covert or conventionally neglected level, intralingually. The model 'sender to receiver' which represents any semiological and semantic process is ontologically equivalent to the model 'source-language to receptor-language' used in the theory of translation. In both schemes there is 'in the middle' an operation of interpretative decipherment, an encoding-decoding function or synapse. Where two or more languages are in articulate interconnection, the barriers in the middle will be obviously be more salient, and the enterprise of intelligibility more conscious. But the 'motions of spirit', to use Dante's phrase, are rigorously analogous. So, as we shall see, are the most frequent causes of misunderstanding or, what is the same, of failure to translate correctly. In short: *inside*

or between languages, human communication equals translation. A study of translation is a study of language (Steiner 1975:49).

As a result, intralingual cannot be excluded from translation, because through paraphrases, synonyms, the same message can be expressed in a different way.

Translation as a process is a real complicated and complex task because even if it implies a transfer into another language, it cannot exclude rephrasing or reformulations.

Ricoeur (2004: 50) stresses that there is no real division between interlingual and intralingual because "comprendre c'est traduire" and when we translate we try to say "the meme chose autrement". He assimilates intralingual and interlingual because translation always implies a contact and consequentely a form of hospitality toward other cultures.

Steiner (1975), on the other hand, underlines the fact that "communication is translation" and, there is no division concerning different models of translation. This assumption obviously opposes to Jakobson idea of translation.

2.4. Implications of Cognitive linguistics for Translation Theory

A relevant feature is the notion of "shift "which involves a transfer operation. In a cognitive view, these mechanisms are the product of rational construction and elaboration.

It can be said that translation, in its applied practical side, needs a theory of grammar. Indeed, Tabakowska 2013 assumes that:

> "There is no qualitative difference between "common" and "literary" language […] According to the cognitive stance, literature and poetry in particular, is simply an extreme manifestation of the language use" Summing up, we should not forget that Cognitive linguistics provides a good theoretical framework for translation investigation, and Translation Theory finds, in cognitive linguistics, the explanation of its discoveries. (Takaboska 2013:230).

Thus, translation from a cognitive perspective is produced by the interaction between human mind and external reality.

Rojo introduces the discipline of Cognitive Translatology by claiming that:

> "Adopting a cognitive perspective implies precisely changing the focus of attention from the text to the processes involved in its production and interpretation" (Rojo 2002:70)

As a result, the main interest is on text production and meaning interpretation, increasing the investigation on metacognitive and metalinguistic resources.

In particular, translation problems, their solution and everything connected with translation evaluation, should be investigated.

Cognitive Translatology is interested in meaning and its use. According to this new perspective, language is symbolic and an entity takes its origins from its interaction with the external world.

> "Translation is about communicating meaning. Independently of less central modes of translation, the most basic definition of translation posits that engaging in translation involves deciphering the meaning from a source text and recoding it into a target text using a different linguistic code.
>
> The final aim of translation is thus that of recreating the process of meaning construction undergone by the audience of the source text in order to activate a similar process in the audience of the translated text. Thus, if any linguistic theory has something to contribute to Translation Studies must be one in *which meaning acquires a central role*. Moreover, the fact that meaning in Cognitive linguistics can be ultimately explained in terms of cognitive processes that are involved in its interpretation, provides a link between cognitive linguistics material and cognition which is essential for translation" (Rojo 2013: 284; my emphasis).

It is not easy to construct meaning, which is is not only the product of syntactic and semantic manipulation: it arises from networks of connections, which are grounded in the brain. In the speaker's mind, every concept refers to a mental frame through which it is possible to create interrelated connections. Each unit, evoking a concept, can consequently be linked to another one because they share specific elements through which they can be grouped.

2.5 A different perspective on Translation

In this chapter, we can see that cognitive approach to translation gives its contribution to the rising of a new way of looking at translation. Translation is no more considered as an operation that involves a simple exchange between two linguistic systems related to a referential objective truth. As has been already outlined, this assumption is motivated by the fact that meaning is highly determined by embodied experience. As a consequence, an experiential meaning construed in translation, takes into account social, cultural, linguistic factors of both languages, involved in translation process.

Thus, meaning is the product of the perspective we choose to analyse in the real world.

Without a cognitive investigation, translation would be a confused, empirical and practical production, involving a simple change from one system to another. Cognitive linguistics, on the contrary, does not focus exclusively on the empirical part of the process, because it tries to find the logical motivations underlinyining decision making.

Chapter 3

Translation as a cognitive process

3.1 Translation process and translators'competences

> "The focus of this study is on the translation process and the performance of translation task. In this process, as a communicative and language processing event, the starting point is the ST and the individual translator's comprehension of it, and of the concrete task of translating it" (Dimitrova 2005: 4).

Any translation implies a shift or a transcoding operation from a language into another, which involves an adequate competence of syntactic, morphological and semantic parameters of both languages involved. A translator acts as an intercultural mediator, and should manifest his/her expertise in order to be able to transfer the message of the source language into a target language, without changing the original sense.

Consequently, in this section, an overview will be given concerning the main abilities, competences and phases, which are an integral part

of the translation process, because they give the translator the chance to perform his work, which lies in transcoding, switching, paraphrasing and transforming the original text to its equivalent.

This kind of operation requires the use of semantic and rhetorical devices, which help translator to classify the material, contributing to text analysis and interpretation. Background knowledge plays a relevant function on translator's choices.

Alves argues that:

> "Translation as a communicative activity directed towards achieving aims that involves taking decisions and solving problems and requires expert knowledge [...] is called Translation Competence" (Alves 2003:44).

Translation Competence generally includes declarative and procedural knowledge. While the former underlines the object of investigation and it is obtained through rational control, the latter indicates something about how to acquire a specific competence, thus it is automatic. Translation competence is the product of interrelated sub-competences: linguistic, extralinguistic, instrumental, professional, strategic ones:

a) linguistic competence focuses on the linguistic level, considering linguistic structures and parameters;
b) extra linguistic competence analyses extra textual features like background information;

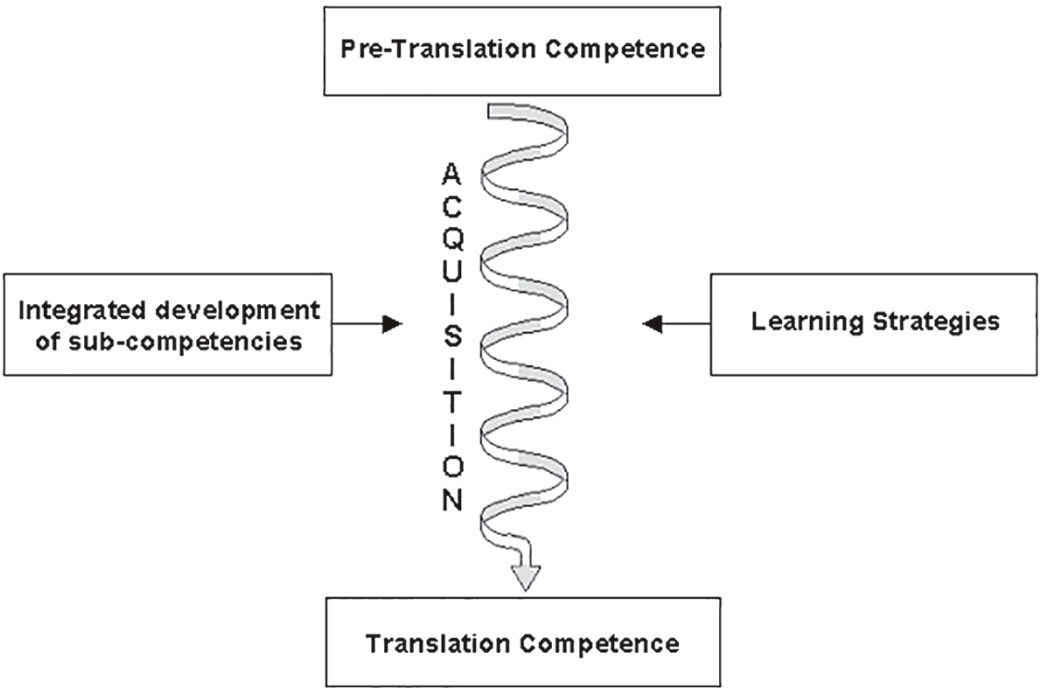
c) instrumental competence includes technical mediums required for an empirical investigation;

d) psychological competence refers to psychological instruments, such as Talking aloud protocols, introspective methods;

e) The strategic competence takes into account the strategies needed in translation process.

Translation is construed step by step, and competences are internalized, integrated and re- expressed (see Alves 2003a).

Figure 2. Learning strategies and competences acquisition (source: PACTE 2000: 93).



As can be seen from the schema above, the integration of competences and sub- competences are interconnected and have a deep impact on language production and comprehension. It is evident that only an expert translator will be able to perform his task successfully, because he/she is able to recognise main typological differences and constructions that cannot find their correspondent into the target language.

Indeed, a bilingual, competent translator should take into account the typological differences of both languages (Grabowski2011) and can arrange the text (Diamond 2010) in order to fit any TL structural devices.

An expert translator should be qualified and specialized, but sometimes years of practice and training are not sufficient to make a translator an expert (Muñoz 2006). According to Muñoz, *adaptive* expertise means to able to able to adapt to different environments and working conditions.

Tirkonnen- Condit (2002) and Dimitrova (2005: 16) argue that expertise, characterized by knowledge, experience and problem solving is a subsystem of translation competence, which helps the translator to organise and re- orient the material acquired. An expert and qualified translator should employ new strategies in order to adapt them to the target language, and be able to transfer declarative into procedural knowledge. While conceptual methods enrich the sentence, and let the translator deduce from the context through inferential processes encoded by lexical categories; procedural methods limit text expansions

and contribute to cognitive processes of an utterance by imposing inferential constraints (Alves 2003).

3.2 Translation process: explicitation and translation phases

Any translator can add new words, which are absent in the source text, and he/she can also explain and clarify some concepts not clearly expressed in the source text.

Universals of translation are linguistic features, which typically occur in TT rather than STand are thought to be independent of the influence of the specific language pairs involved in the process of translation.

These devices can be defined as “new terms” peculiar of target text, never encountered in the source text.

It is not unplausible to assume that a translator is forced to add some extra details because target text requires further explanations.

Consequently, there are two forms of explicitations: explicitation, which clarifies a concept and explicitation which adds further elements. While some elements are required, because they are peculiar of specific language, extra elements are generally used to increase the sense of coherence. Generally speaking, translated texts tend to be more explicit than source texts, because they require different grammatical constraints, which impose further explanations.

In theory, some language combinations need to add extra words to express the same meanings.

Translation arises from the combinations of several factors and can be divided into different phases.

The first phase includes the actual performance of translator task, during which the translator tries to understand the real "moment of translating" (Dimitrova 2005: 19).

This phase refers to the comprehension of source text, which makes the translator grasp the general sense expressed in source text and he/she tries to translate concepts mentally. Therefore, translation involves three cognitive moments: planning, text generation and revision. Before starting the operation of transfer, the translator is supposed to plan his/her activity, taking into account that elements of the source text stored in his/ her memory and the purposes required by the target text.

This moment can be identified as a pre writing phase, which is followed by a writing and a revision phase.

> "The first phase, […], *pre-writing stage* (Jääskeläinen 1999), *[...]* or *initial orientation phase* (Jakobsen 2003b). The second phase […], *writingstage* (Jääskeläinen1999), […] or *drafting phase* (Jakobsen2003b). The third phase, called *post-writing stage* (Jääskeläinen1999), *Revisions phase* or *end revision phase"* (Dimitrova 2005: 21).

The first one includes *pre- writing*, when translator plans his tasks. We can assume that a translator can organise and orient his/her work proceeding through mental images, symbolic associations, connected concepts, during the orientation phase, in order to underline the point of references that can be useful in translation process. It is obvious that they should know textual and intertextual devices.

The second phase or "*writing stage"* refers to the moment in which translator identifies his work with an approximate draft, which implies a following monitoring and revision.

The third phase coincides with *post writing phase*, which includes a proper textual revision.

It is clear that people approach translation tasks in different ways: as a matter of fact, there are translators who prefer reading aloud or silently, stressing key or difficult words and, after that, during verbalization moment, they reflect on what they have done, taking note of their difficulties and uncertainties.

Experts in general try to analyse a text in its whole, while students tend to focus more deeply on single items, they overuse dictionaries and transpose their constructions in other languages without considering typological differences. Many competent translators, indeed, prefer to read the text before revising in order to get a general idea of the text.

In the following table, Dimitrova (2005: 88) underlines how students spend more time than professionals to perform the task.

As we can see, differences are more relevant among professionals because they have shorter pre- writing and post writing phases.

Table 1. Time spent on the task and distribution into phases, group level (minutes) (source: Dimitrova 2005:88).

Translation stages	**Professionals**	**Students**
Pre-writing phase	8	25
Writing phase	80	137
Post- writing phase	48	112
Total time	136	274

As a result, methodologies and translation phases are not universal but they vary according to translators and texts perspectives: they may contain obscure points and involve problem-solving and decision-making.

In order to simplify and clarify his work, duringdecoding and encoding operation, a translator needs to segment sentences in its components using meaningful small chunks:

When performing a task, translators can choose between two directions:

1. The translator reads and comprehends the ST segment and retrieves and produces TL linguistic material, without any problems in the process.

2. There are one or more problems in the process, in the comprehension of the ST and/or in the retrieval and production of TL material; this necessitates the application

> of one or more strategies to solve the problem (Dimitrova 2005: 27).

However, there are some forms of translation like "word to word translation", which do not require a relevant cognitive effort. This form is usually quite common in novices, because they automatically tend to transfer and look for the correspondent items incorrectly.

> "[..] Certain complex operations such as transposition of syntactic structures, modulation of cultural perspective, and selection of equivalent macrosigns (as in the translation of proverbs and so on) could also be automatized" (Dimitrova 2005:55).

The conclusion would be that that this type of translation is allowed when source and target text are similar just because it is more automatic, and thus, it does not require a highly cognitive effort. It implies the division of the text in small chunks, and the translator should evaluate them, considering the stylistic and the pragmatic features of target language.

However, this technique gives the translator the chance to translate and revise quickly and accurately, without missing any parts.

Before a decision is made as to which technique and tools to use, a good translator should follow some norms before coming to a decision; there is obviously the necessity of some rules, which will be of help in establishing the moments and specific phases, where its practical operation is required.

3.3. Memory and Translation

It can be stated that some parameters are the product of mental resources which help translators to select, collect, store information, activating control on different stages before producing a new target text.

However, sometimes, it can also happen that control process activity is limited, and the portion of material gathered in our black box overloads and depletes mental resources.

However, even though the mental load has its limits, it cannot be excluded from translation process.

For instance, memory plays a relevant function in translation and interpretation.

Researchers identify three types of memory:

1. Long term memory
2. Short term memory
3. Working memory

Short term memory implies an immediate reaction when an input, that is a piece of information, is received. Working memory is used to recognise patterns and stores them in our brain.

It can be assumed that, information gathered in our mind, not always flows into long term memory, because our brain keeps and saves only what is required to perform the translator's duty.

The following tables underline task names with corresponding functions:

Table 2. Working memory tasks and corresponding functions

(source: Alves 2003: 102).

Function	Task
Processing speed	1. Letter comparison 2. Symbol comparison 3. Sentence comprehension
Storage capacity	4. Word lists
Task coordination	5. Listening span 6. Digit symbol

As can be deducted from this table, memory highly influences processing speed, capacity to store information and coordinate different tasks.

The processing effort, is strictly correlated with cognitive effort; while open lexical categories aim to enlarge cognitive background, procedural devices like morphological rules constrain and limit inferential framework.

Strictly speaking, both language comprehension and production involve cognitive stages.

While the first one includes perception, semantic analysis and reasoning, the second one refers to semantics, syntax, morphology, phonetics, output monitoring and transfer mechanisms.

The cognitive stage obviously requires the associative stage and coordination of activities. (Moser, Mercer 2010).

Bilingual translators, can also decide to operate through mental and cognitive associations such as priming and prompting. (Stamenov 2010) While the first one focuses on mental lexicon and prototypical

associations among objects, for instance (table can have a priming effect on chair); prompting, on the other hand, is much more considered as a translation tool, which helps the translator to bridge interlingual asymmetries.

It is a form of translation recognition, used when the translator is asked to verify if a text is translated properly. It can be defined as a good strategy that bilinguals apply when they search for word correspondence.

Difficulties do arise in the precence of false cognates which are words with different roots (Stamenov 2010). It must be kept in mind that translation is a creative, dynamic operation that adopts cognitive strategies. All these strategies and competences need the implementation of cognitive resources that help translators to monitor and control their activity.

Experts and novice translators coordinate and use methodological tools in different ways, when they have to grasp the general meaning of text and comprehend, analyze and produce another text.

Translation as a process includes:

Product parameters with all its evaluative target texts instruments.

Process devices, which refer to segmentation, pauses, quantitative and qualitative data.

The pauses stress translator's uncertainty, the moment of indecision, when translator reflects about translation and its problems, and decides how to monitor the situation (Angelone 2010). Experts tend to be much more aware of the type of difficulties that a translator has to deal with.

Uncertainty involves assessment stages, when a translator identifies a problem and thinks about a possible solution.

The following table shows how experts and novices face these metacognitive problems.

Table 3. Textual level at which metacognitive activity was employed (source: Angelone 2010: 33).

Participant	Lexis	Term	Collocation	Phrasal	Syntax	Sentential	Macro level	Unclassifed
Professional	4.12%	35.0 %	31.96 %	9.28 %	8.25%	4.12%	7.22%	0.00%
Bilingual	20.9 %	39.5 %	18.60 %	16.28%	0.00%	0.00%	4.65%	0.00%
Student English	34.8 %	13.9 %	15.12 %	19.77%	3.49%	3.49%	3.49%	5.80%
Student Denmark	31.4 %	31.4 %	19.05 %	10.48%	0.00%	2.86%	3.81%	0.40%

Firstly, the way in which students collocate and distribute items differs from professionals' approach; indeed, while the students isolate lexemes, the experts interpret them in a specific context.

Secondly, contrary to popular belief, we can argue that a low percentage of professionals translate at sentential levels.

This state of uncertainty is captured by Thinking Aloud Protocols.

Thinking aloud protocols (henceforth TAPs) allows translators to express their thought while they are performing their task. It implies the explicitation of translation doubts, reflections, decisions and, consequently, it is said to reduce the translation speed.

By doing this, translators' choices find their motivations and every single step is justified. This method is used to record data, but it is not

considered to be really objective because it contains pauses, that are connected to translator's and problem solving.

Another methodological device, can be brought up, the Talk Aloud Protocol, which does not involve external reflections or justifications of translator behaviour (Jaaskelainen 1999/ Bernardini 2001/Tirkonnen 2002/).

As a result, it seems to be more objective because it simply describes the translator steps after their performance

There is a distinction to be made between concurrent thinking aloud, which takes place during translator task and retrospective method, documented after translator performance.

Thinking Aloud Protocol gives procedural information, Talking Aloud Protocol gives the chance to re analyze and revise information.

Retrospection is mainly used to explain and expose, strategies and problem solving. They are defined qualitative strategies, because they are not based on empirical data. However, information, saved in the long term memory could be subject to manipulation and, above all, retrospection, does not provide a complete recall of information (Dimitrova 2005).

As a consequence, introspective procedures are not considered to be reliable sources of analysis and, in some cases, they are responsible for reducing the translation's speed. On the other hand, quantitative methods are more attestable because they provide more concrete and scientific results.

3.4. Literature review: other studies on cognition and translation as a process

This section will introduce most of the literature available on this topic.

Studies concerning translation as a process have been discussed by a great number of Danish scholars, as shown in the following paragraph.

Starting with Tangsgaard, member of Copenhagen School, (2001), he manipulated 3 texts from the Times, the Daily Telegraph and the Independent according to text complexity, grammatical correctness and coherence selecting 12 language students and 12 professionals, with at least 3 years of expertise in the field.

Alvstad (2011) and Hansen (2002) decided to submit some background tests, so as to assess their competence in English.To evaluate performance under time pressure they are asked to fill in some speed writing tests under individual time pressure, adopted to their individual writing and translating speed. Without time pressure they can use all the sources available. They were asked to describe what went through the process re uploading the file.

Alves (2003/2011) chose texts of 500 words and asked participants to translate short extracts concerning instructions for use of a blood sugar from English to German, imposing no time constraints and using audio recordings on the TAP after the performance.

Jacobsen (2003) with his scholars integrated the use of Translog with TAP protocols and eye tracking to compare novices and professionals

when faced with a difficult text to check how and in which ways their behaviour is different.

Dimitrova (2005b), in her analysis of translation process identified different groups among professional translators, focusing on the segmentation in the writing process and included the whole task, at an individual and group level. In particular, she pointed out the difficulty of the concept of expertise which cannot be related to the years of expertise, without a careful evaluation of problem solving and decision making issues.

Dragsted (2005a) hypothesises that the number of words in a translation unit will be higher among professionals, using long term memory which enable them to process translation units more quickly. The behaviour of the translator depends on whether source text comprehension and target text production occur contemporarily, or not, giving way to the hypothesis that professionals process more than 10 words without influencing the pausing time. Jakobsen, (1999) her supervisor, in one of his recent investigation wandered whether professional translators are able to bind segments into a continuous flow of production.

Palumbo (2008) submitted texts from a Journal (Ceramic Society) concerning online chemistry tutorial for students to his participants (who share the same background and familiarity with the subject matter), searching for metaphors found in the text, prioritising lexical density, length of nominal groups, accessibility of technical manuals and degree of nominalization process.

Malkiel (2009) selected Hebrew texts of approximately 330 words, written for an Israeli newspaper.

Most of scholars use newspaper articles: Sijouroup (2009) selected 3 texts from the Economist to analyse metaphors, with the aim to compare content and function words, focusing on a greater cognitive load and investigating fixations for the linguistic metaphors.

No time constraints were imposed and no translation aids were available in order to keep the participant's gaze on source and target text when using the eye tracking.

In Alves (2011), eight professionals with reported experience in written translation and nine language students attending undergraduate or graduate language courses were asked to read three newspaper reports, regarding the same event, but published on different web site having different rhetorical structures, choosing texts similar to those used by the Copenhaghen School's members.

Gopferich (2011), on the other hand chose extracts from technical manuals and the data were analysed from the product perspective, evaluating the errors and from the process perspective (using TAP protocols to establish problem solving competence)

Sijourop (2011) asked participants to translate two texts from English to Danish, informing that they would be asked questions on comprehension and translation of the text.

Jacobsen (2014) for his experiments recruited 21 participants, choosing three texts, which had to be translated from English to Finnish: one was easy, the second complex and the third difficult for its complex

sentences. Jacobsen (2006) uses ANOVA parameters to calculate speed among semi-professionals and language students, following these variables: the speed, TAP and language direction.

As as already been mentioned above, the translation process has been the key point in scholars such as Alves, Dimitrova, Carl and Dragsted.

Alves in his research (2003) has integrated in a triangular perspectives quantitative and qualitative data, focusing like Dimitrova, on the Translog software combined with eye tracking in some cases, for the analysis of texts in specialised technical manuals.

In particular, he distinguishes the segments which remain invariable from that ones, which change or are taken up in the different phase of translation.

Dragsted (2005b) hypothesized that professionals tend to assume a more novice like behaviour, Carl (2012) pointed out that certified translators spend more time in inserting characters and reading the target text, without being influenced by source text reading and text elimination.

Chapter 4

Methodology

This work focuses on the analysis of translators' process logfiles, in order to get a profile of translator's activities while performing their tasks, focusing on micro and macro segments which remain stable or change across process phases. Methodologically, the study follows a qualitative approach; research is conducted on different types of specialised texts, so as to provide firmer empirical grounds.

4.1 General methodological considerations

The main point consists in an observational analysis to obtain data useful to answer the research questions and goals while trying to match descriptive studies and theoretical ones. The analysis provides a simultaneous approach to translation, which includes the translator's writing activities (the "process") and the target texts (the product) collected during the tests through keystroke loggings.

4.2 About Translog

In a process- based perspective, quantitative data have usually been associated to qualitative ones to overcome the typical limitations of TAP protocols (Jacobsen 1999; Alves 2003, quoted in Palumbo 2008).

One method used in the triangulating tradition (Alves 2003) is the Translog software. TRANSLOG II, is a software designed to record user activity data in the

process of translation, as well as reading, writing, copying and editing tasks. The software was developed by Arnt Lykke Jakobsen and Lasse Schou at Copenhagen Business School in 2000, while it was programmed by Lasse Schou, Morten Lemvigh, Jakob Elming and Michael Carl (2009)[2].

TRANSLOG II consists of two main components: supervisor and user. TRANSLOG II Supervisor, allows researchers to create an experiment and replay a file generated by an experimentee. The experiment,created in TRANSLOG II Supervisor can be opened in TRANSLOG II User, and run by a subject.

TRANSLOG User includes the open project tool. Once the source text has been uploaded, two windows are opened: the first one includes the source text and shows what the text is actually like, while the second window is the space the translator writes his translation.

Figure 3. Translog User: source and target text windows (source www.translog.dk).

[2] As their predecessors TRANSLOG 2000 and TRANSLOG 2006 also TRANSLOG 2 consists of the same components (User and Supervisor). As far as the latest version is concerned, some functions, such as Prompt for subject names and Translation Units have been deleted, and replaced by news ones, which provide the application of new tools (the eye tracking) to quantify the translators' effort on a specific construction.

This software is functional in that it will be of use in controlling source and target text simultaneously on the screen. Translog II records user activities data and is used specifically to run a text production experiments, such as writing or translating a text.

TRANSLOG Supervisor is used for process analysis: once the project is uploaded, the Replay tool gives the possibility to reproduce the whole translation taskof the required/ selected speed. Supervisor contains different tools, such as a) linear view, b) statistics and c) pause plot.

a) Linear view reproduces all the actions performed by the translator on the keyboard chronologically and graphically. (deletions, back spaces etc.).

Figure 4. An example of linear view

[◄◄◄◄◄◄◄◄◄◄•C•osa•conosci?••••Apprendere•,•pensaere•••e•conoscere••in•◄◄◄◄••in•un•mondo•digitale.•••••Che•significa••••conoscere•••qualcosa?••••Il•filos•fo••••Gilbert••••Ryle••(•••1964•)••••ha•distinto••••tra•••••••••modalità•di•conoscenza•••[▼][▲]••••••••[▼][▲

There are some red dots that stand for the standard pause of 0.1 sec. The other pauses which parse the segments into translation units are reported chronologically, taking into account that a segment of a text is a cognitive unit having the purpose to establish a source/target equivalence.

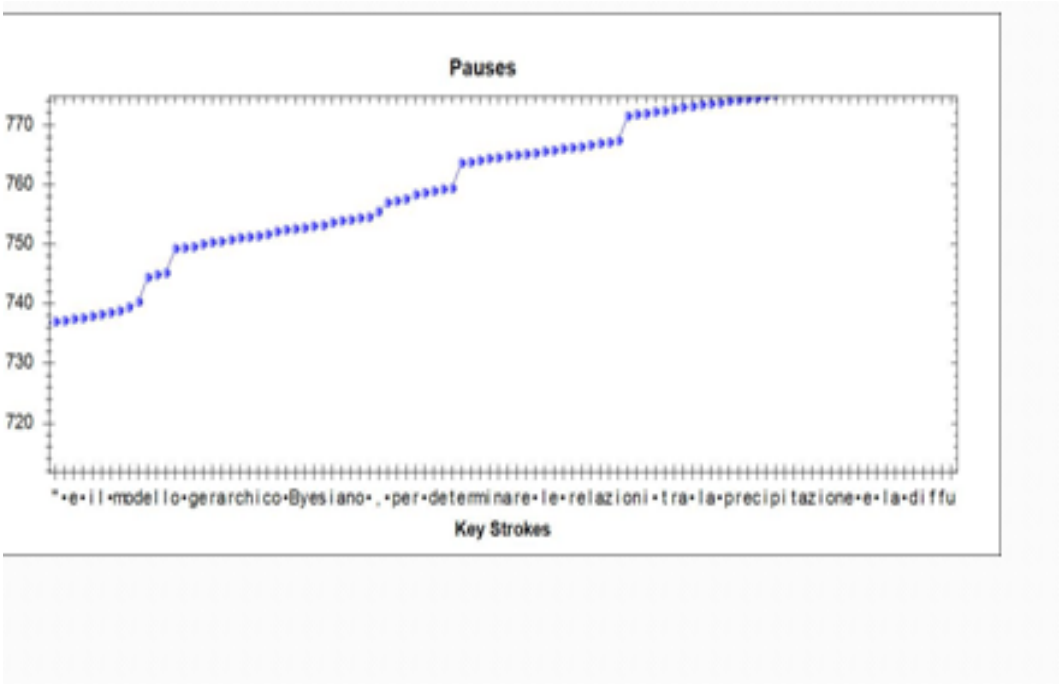
b) Statistics gives a complete profile of translator's performance, calculating exactly all the the activities performed, called "user events": text production, elimination and miscellaneous, even reporting speed time and duration of every single event.

Table 4. An example of statistics

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS4	27 minutes	87	82	67 sec	2411	2273	103	35

c) Pause plot is used to offer a deeper visual representation of the linear view, which gives the chance to reproduce the process graphically, enhancing the supervisor to focus on segments associated with pause length and represented through the rising of the curve: on the horizontal axis there is the text reproduction, and on the vertically axis the software reports the time.

Figure 5. Pause plot: Example of a graphic representation of a portion of a segment, recorded in the linear view (source www.translog.dk)



4.3 Describing the task: participants and text genres

This research project is based on a selection of five language post-graduate students (henceforth LSs) and five professional translators (henceforth PTs), selected according to their language proficiency and their years of expertise. There is a consideration to be made: the texts have been chosen according to the criterion

of lexical density (henceforth LD) in order to compare segments and investigate the management of metacognitive strategies. The specialized texts used for testing belong to three different genres (see Appendices): research medical article, newspaper article, and conference abstract (linguistics).

Source text 1

Dry weather induces outbreaks of human West Nile Virus infections.

Abstract

Background. Since its first occurrence in the New York City area during 1999, West Nile Virus (WNV) has spread rapidly across North America and has become a major public health concern in North America. By 2002 WNV was reported in 40 States and District of Columbia with 4,156 human and 14, 539 equine cases of infection. Mississipi had the highest human incidence rate of WNV during the 2002 epidemic in the USA. Epidemics of WNV can impose enormous impacts on local economies. Therefore, it is advantageous to predict human WNV risks for cost- effective controls of the disease and optical allocations of limited resources. Understanding relationships between precipitation and WNV transmission is crucial for predicting the risk of the human WNV disease outbreaks under predicted global climate change scenarios.

Methods: We analysed data on the human WNV incidences in the 82 counties of Mississipi in 2002, using standard morbidity ratio (SMR) and Bayesian hierarchical models, to determine relationships between precipitation and human WNV risks. We also entertained spatial autocorrelations of human WNV risks with conditional auto correlative (Car Models) implem ented in Win Bugs 1.43.

Results We observed an inverse relationship between county level human WNV incidence risk and total annual rainfall during the previous year. Parameters representing spatial heterogeneity in the risk of human exposure to WNV improved model fit. Annual precipitation of the previous year was a predictor of spatial variation of Wnv risk

Conclusions. Our results have broad implications for risk assessment of WNV and forecasting WNV outbreaks. Assessing risk of vector-born infectious diseases will require understanding of complex ecological relationships. Based on climatologically characteristic drought occurrence in the past andon climate model predictions for climate change and potentially greater drought occurrence in the future, we suggest that the frequency and the relative risk of WNV outbreaks could increase.

Source: https://www.ncbi.nlm.nih.gov/pubmed/20181272 2010 Feb 24

Number of words: 315

Lexical density: 0.7

Source text 2

Know what? Learning, thinking and knowing in a digital world.

What does it mean to know something? The philosopher Gilbert Ryle (1949) distinguished between knowing how and knowing that. Psychologists talk about differences between procedural and declarative memory for that which one knows (Zimmermann 2014). In common parlance, we speak of data, information and knowledge. While lacking a shared set of terminology, we generally assume that to know something is different than having to look it up.

Growth of the internet is changing both our pedagogy and our everyday beliefs about the value of internalized knowledge. Research by BetsySparrow and her colleagues (2011) indicates we are more likely to remember internet search paths than the findings they yield. Work reported by Kaspersky Lab (2015) speaks of" digital amnesia", that is, our failure to remember the content of what is availablethrough an online search.

In her new book Mind Change, Susan Greenfield (2015) argues that digital technologies are bringing about major alterations in the ways people think. Greenfield's focus is on such issues as the effects of social networking, the ways in which we are learning from the internet (especially from images) rather than from text on paper, and the kinds of

learning transfer that video games can produce. In my own work (Baron 2015), I have argued that the rising shift from reading in print to reading on digital screens is potentially reshaping what it means to read. The issue of reading is critical to questions of knowledge, since in literate societies, much of what we come to know is through the written word.

While digital technology is partially responsible for shifts in our understanding of what it means to know, pedagogy in both lower and higher education is reinforcing the change from emphasizing knowledge within our heads to valuing search. This presentation explores the nature and implications of this change.

Source: http://www.clavier.unimore.it/site/home/conferences/articolo29283.html

International Conference Clavier 2015

Number of words: 314

Lexical density: 0.59

Source text 3

Casey Hathway from North Carolina hailed a "survivor" by police after becoming lost in sub-zero temperatures

A three-year -old boy who survived two nights alone in the woods in freezing conditions has told police and family he was helped out by a friendly bear that was with him the whole time.

Rescuers responding to reports of a baby crying found Casey Hathaway tangled up in a thorny bushes,cold and soaked but safe on Thursday night. He had gone missing on Tuesday in conditions so bad the subsequent search had to be called off.

As it turned out, help- perhaps real, perhaps imaginary but certainly useful - was at hand in those woods in North Carolina, a state that is home to plenty of black bears. Craven county sheriff Chipp Hughes said Casey " did say that he had a friend in the woods that was a bear that was with him".

The claim was reportedly repeated by the boy's aunt Breanna Hathaway. "He said he hung out with a bear for two days," Hathway wrote in a Facebook post."Miracles do happen".

Hughes said the boy had been playing with two other children in his grandmother's backyard in Ernul on Tuesday, but did not come inside with them.

Brutal weather conditions in the low 20s(Fahrenheit) and concerns Casey wasn't dressed for the cold sparked a search that involved helicopters, drones, K-9 units and drivers, as well as hundreds of volunteers. By Thursday the wind and rain had become so bad authorities urged volunteers to stay away.

"He's a survivor", said Hughes on Friday, pointing out that rescuers had to wade through waist-high water to reach the boy. Casey escaped with just a few scrapes and simply wanted some water and his mother, he said.

Source: The Guardian January 28 https://www.theguardian.com/us-news/2019/jan/28/three-year-old-boy-missing-in-woods-for-two-days-says-friendly-bear-kept-him-safe

Number of words: 299

Lexical density: 0.61

4.3.1 Textual genres

As already mentioned in the previous paragraph, this type of analysis is more accurate, because texts have been chosen observing lexical density criterion, differently from Condit (2002), the Danish Malkiel (2009) who selects texts from newspaper articles and Alves (2003/2011) who chooses short extracts from mauals of explicitation.

As can be seen in the following tables, newspaper article records the lowest lexical density. In a genre based discourse, the style is easily predictable and codified. It is different from the general language for its use of specific rules and

specific conventions being used in specific contexts, sharing rules and features of a specialised community: as a result, a specialised speaker covers a specific topic in a way typical of his professional affecting the morphosyntactic textual and pragmatic level. The main features of specialised language are objectiveness, concreteness, neutrality, unambiguity, impersonality, consistency, use of technical terms and anaphoricity on a textual level On a lexical level it is monereferential, objective, trying to hide the emotional side of language. On a syntactic level it is concise neglecting additional phrasal elements. In particular, these are full of nominalisation prioritising passive rather than active forms and depersonalisation rather than personal forms.

John Swales (1990: 467) focuses on the concept of "genre" that could be defined as "types of texts" used by the speakers to fulfil the goals of the rhetorical settings of the community they are included in. This could lead to the assumption that every member of community should do their best to satisfy the needs of their group. As a result, each community has its "genre" with its own conventions that must be followed to communicate efficiently with the other members: the discourse is defined by the conventions through which the community operates and, as a result, each community has acquired its own genre. The genre is functional in that it will be use of use in simplifying group strategies taking into account that some genre conventions are known even by members who are not part of the group and it is functional for the design issues of this research.

4.3.2 Participants

Participants (see appendices) were asked not to interrupt the translation before having completed the task, and are given the possibility to use all the resources available (printed and online), without imposing any limits of time. All tests were carried out by using Translog II. Participants (see appendices) were divided into two groups and data include users' events in relation to time. Analyzing the available data the software gives the chance to understand how translators' approach varies in relation to the text genre and its discourse constraints.

Translog reproduces the target text segments, allowing the supervisor to see which ones have been taken up and modified and which ones have not been transformed in the final text rendition. Therefore, the resulting conclusions are that the keyboard activities and segments obtained from Translog log file analysis can be considered, so far, the most useful instruments that contribute to the interpretation of single translation processes. In short, this software documents information, and supports the translator finding the motivations for his choices. This can verify the hypothesis of a clear distinction between discourse-oriented and language-oriented approaches in the management of general specialized discourse, and finds out if different discourse configurations trigger different several process configurations.

4.4 Design issues

This investigation reports an empirical study, conducted with a group of five LSs from "University of Naples Federico II", "University of Naples L' Orientale" and "University of Siena", and five PTs, with at least ten years of experience. This

selection followed homogeneous criteria, trying to reduce any confusing variables.

The following tables include participants' biodata:

Table. 5. Language Students' biodata.

Name	Age	Education	Training as translators	University	City	L1	L2	L2 level
LS1	28	Post-graduate student	Occasional	Siena	Avellino	Italian	English	C1
LS2	30	Post-graduate student	Occasional	Federico II	Naples	Italian	English	C1
LS3	30	Post-graduate student	Occasional	Orientale	Avellino	Italian	English	C1
LS4	31	Post-graduate student	Occasional	Federico II	Salerno	Italian	English	C1
LS5	32	Post-graduate student	Occasional	Federico II	Avellino	Italian	English	C1

Table. 6. Professional translators' biodata.

Name	Age	Education	Training	L1	L2	L2 level
PT1[3]	50	Professional	20 years	Italian	English	C2
PT2	37	Professional	10 years	Italian Russian	English	C2
PT3	49	Professional	30 years	Italian	English Spanish French	C2
PT4	40	Professional	15 years	Italian	English French German	C2
PT5	59	Professional	40 years	Italian	English German	C2

[3] PT1 is the only PT who took part both in the first part of the experiment (pilot project) and in its second session (see par. 3.6).

As can be seen in the first table, most students included in this research project are from the University of Naples Federico II and just two of them belong to University of Siena and L'Orientale. The students selected for the study come from Campania, being easier for me and for them to meet and work with Translog software. All of them attended postgraduate ESP courses and translated and analysed specialised texts during the lessons. LSs final degree was in Foreign European Languages and correspond to an advanced English level (C1), usually lower than professional translators.

All professional translators passed the exams which recognize them

as professional translators, being part of AITI (Italian Association of Interpreters and Translators)[4], with at least ten years of experience, sharing the same second language level as students (C1) or higher (C2).[5]

Both LSs and PTs were asked to fill in a questionnaire which split into two sections.The first section submitted before the translation and requires respondents to give information on their background education/training, The second section, submitted after the first, asked participants to provide a short description about their approach to the text and its degree of difficulty (see Appendices).This phase can be seen as a Talk Aloud Protocol that has a double advantage(see Chapter 3.3): it completes the qualitative analysis carried through TRANSLOG II and prevents the translator from interrupting the translation process.

[4] The AITI (ASSOCIAZIONE ITALIANA INTERPRETI E TRADUTTORI (www.aiti.org) is the most recognized and reliable organisation in Italy,connected to the F.I.T. (Fédération International des Traducteurs).

[5] All language descriptors conform to the Common European Framework of Rreferences for Foreign Language Learners (www.coe.int.it).

4.5 A process-oriented perspective on translation: parameters for analysis

The perspective chosen for this analysis is based on the activities that are supposed to take place in every translator's mind.

As being said before, (see paragraph 1.3) the parameters selected for the present work are:

1) segmentation: the text division to small portions, called segments.

> "A segment was any sequence of keystrokes occurring between two pauses lasting longer than certain time value" (Alves2003a:89).

Translation units are:

> "keystroke data which enumerate text modification operations (insertions and delitions) together with time of keystroke and the word in the final target text to which the keystroke contributes" (Bangalore/ Carl/ Schaffer 2016).

Indeed, translation units indicate

> "cognitive entities that can be observed in the process data […] contrasted with alignment units, which refer to cognitive entities that can be observed in the process data" (Carl 2009:25)

This enhances the comprehension of translation process, indicating the number of translation units processed in each segment and the time related to each portion of text. Thus, gives elucidations about the way in which different units have been transferred from source to the target text.

Alves and Vale (2011) define micro unit as:

> "the flow of continuous TT production…separated by pauses during the translation process. A macro unit, then is a collection of micro unit that comprises all the interim text productions that correspond to the translator's focus on the ST segment (Alves and Vale 2011:7)

Segmentation might depend on two different approaches to the text (Carl 2009):

a) *microplanning*, which is the text division in a huge number of segments, containing few translation units delimited by longer pauses;
b) *macroplanning*, which provides fewer segments containing more translation units separated by shorter pauses;

2) time and pause duration: they provide information about decision-making reasoning processes and problem -solving strategies;

3) processing time: one of the most representative tool which records the time before writing incorporating the reasoning process and the elaboration phase which takes place before the translator starts writing. This procedural category is manually calculated by the researcher, without being recorded in Translog II.

The data provided through these parameters should be interpreted in relation to the degree of expertise, and other strategies that can affect the final product and translators' performance.

Text production and keyboard typing skills can give a more complete profile of translators' performance, providing important remarks about cognitive strategies, but they are not the main object of this research. As a result, typing speed tests are not included in this study.

4.6 Data collection

Data are collected from the ongoing process which involves translator's activities recorded on the keyboard. First of all, some conditions were established:

- translators were not allowed to interrupt the process before completing the translation and the ensuing log file;

- no translators had never read the source texts before; as a matter of fact, they have been just told that they were about to translate a specialised text;
- translators worked at home, using the computer connected to the Internet, having the chance to use all the resources available (printed and online);
- no time limits were imposed and I was there, during the translation, to ensure that testing rules were always followed.

The test was guided by a pilot project, carried out in November 2017 and devised for the International Conference Clavier [6], which involved one PT and five LSs. The pilot project was then expanded into a larger test, which is reported and discussed here.

4.7 Testing steps

The sequence of steps involved in every test included the following points:

- submission of background test (first part ofthe questionnaire) concerning participant personal data and linguistic level;
- start of the translation activity using Translog;
- end of the translation activity.
- Submission of second part of questionnaire (TAP protocols see Chapter 3.3)

The analysis was then based on the examination of the log files and segments, distinguishing the ones that are revised and the ones that are not revised during the revision phase. The different type of segmentation adopted by the two groups

[6] Clavier Conference in 2017: *"Representing and redifining specialised knowledge"* (from www.uniba.it.clavier17)

involved was then followed by a comparison between the two categories and among the members of the same categories. In the end, a comparison between process and product quality (through QA, quality assessment) is meant to verify whether and in which way the process may affect the product.

Chapter 5

Language Students Process analysis through Translog log files

5.1. An analysis of LSs' translation processes: the abstract

This dissertation follows a case study design, with an in depth analysis of students' log files. Data are collected by using Translog II statistical tool and linear view included in the Supervisor component. As previously mentioned, students' processes are categorised with regard to the following parameters: segmentation, processing time and pause duration which offer a complete overview of every single process.

The first group of participants, the students, was asked to translate an abstract presented at a conference of linguistics.

Know what? Learning, thinking and knowing in a digital world. What does it mean to know something? The philosopher Gilbert Ryle (1949) distinguished between knowing how and knowing that. Psychologists talk about differences between procedural and declarative memory for that which one knows (Zimmermann 2014). In common parlance, we speak of data, information and knowledge. While lacking a shared set of terminology, we generally assume that to know something is different than having to look it up. Growth of the internet is changing both our pedagogy and our everyday beliefs about the value of

internalized knowledge. Research by Betsy Sparrow and her colleagues (2011) indicates we are more likely to remember internet search paths than the findings they yield. Work reported by Kaspersky Lab (2015) speaks of “digital amnesia", that is, our failure to remember the content of what is available through an online search.

In her new book Mind Change, Susan Greenfield (2015) argues that digital technologies are bringing about major alterations in the ways people think. Greenfield's focus is on such issues as the effects of social networking, the ways in which we are learning from the internet (especially from images) rather than from text on paper, and the kinds of learning transfer that video games can produce. In my own work (Baron 2015), I have argued that the rising shift from reading in print to reading on digital screens is potentially reshaping what it means to read. The issue of reading is critical to questions of knowledge, since in literate societies, much of what we come to know is through the written word.

While digital technology is partially responsible for shifts in our understandingof what it means to know, pedagogy in both lower and higher education is reinforcing the change from emphasizing knowledge within our heads to valuing search. This presentation explores the nature and implications of this change.

Table 7. LSs in the abstract

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS4	27 minutes	87	82	67 sec	2411	2273	103	35
LS3	33 minutes	88	76.32	12 sec	2952	2562	325	65
LS1	34.34 minutes	89	69	58 sec	3061	2388	239	434
LS2	34.35 minutes	98	81	32 sec	3397	2827	470	100
LS5	50 minutes	57	46	13 sec	2908	2374	280	254

a) LS4

Starting from LS4, the student who records the lowest duration *(*27 minutes), it is possible to reload her process by using the Supervisor Component and display the linear view, which reproduces all the keyboard activities chronologically, as can be seen from the following image. All the examples discussed below are highlighted in red in the linear view. The same conventions will be followed for all the other participants' linear views.

Figure 6. LS LS4's linear view in the abstract

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nfatizzare•[•24.703][▼][▲]••••la•conoscenza•nella•mente•••••alla•ricerca•dei•valori.••Ques ta•••prese••n•••tazione••••esplora••la•natura•e•le•implicazioni•di•quest••o•cambiamento.

The linear view reports all the activities performed chronologically: the red dot corresponds to a minimum pause of 0.2 seconds. Moreover, all deletions cut and space and back spaces activities are included.

As far as the segmentation's category is concerned, the student records long pauses even on single lexical items. For instance, she stops the process before/ after:

-the noun phrases *"conoscenza interiore*" for approximately 1,06 minutes/ *"Greenfield*" for 24 sec. / *"testo su carta*" for 14 sec and "*pedagogia"* for 12 sec;

- on the verb + adverb phrase *"sta potenzialmente*" for 15 sec;

- on the adjective phrase *"nostro"* for 12 sec.

Therefore, LS4 separates the noun from the adjective, the object from the verb and the first from the secondary clause.

Every segment, which contains from a single to a huge number of units, is reported and separated by a pause of a specific duration. The data in the following table, incorporated in the statistical tool of the Supervisor, contain the speed per minute, the processing time and total user events which reproduce the writing movements on the keyboard, such as text production, elimination and miscellaneous (all cut and paste activities):

Table 8. Statistics in the abstract: LS LS4

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS4	27 minutes	87	82	67 sec	2411	2273	103	35

As far as the processing time is concerned, LS4 records the highest value among students, 67sec. The lowest data, connected to the writing abilities on the keyboard are inevitably influenced by the duration (see the Statistics). Contrary to the expectations given by the long values of processing time, the pauses show that LS4 does not get the whole meaning of the text and chooses micro-segments rather than macrosegments. During her brief revision, which lasts 38 seconds, LS4 spends her time re- reading the text only once, still being unaware of the main problems.

b) LS3

Moving on to the following student, LS3's process lasts 33 minutes. The lowest value of processing time sheds the light on the lack of the comprehension of the source text, which signals a microplanning approach. The linear view shows how the translator interrupts the process on single lexical items. The lack of initial reading probably causes some misunderstandings: in fact, some segments remain unchanged or modified during the longer final revision, which lasts 608 sec. After having completed the translation, LS3 is able to modify some expressions giving a more appropriate extent to the word meaning, as has been recorded in the following linear view (see "*valore enfatizzante", "concentra", "lavoro"*):

Figure 7. LS LS3's linear view in the abstract

[Start]••••••••••[▼][▲]•••Sai•cosa••?•••••••ImparRE,•◄◄◄are,••pensare•••e•conoscere •in•un•mondo•digitale.•[Return]•••cosa•••◄◄◄◄◄Cosa•significa•conoscere•quLCOS◄ ◄◄◄•alcosa?•••••Il••filosofo•••Gilbert•Ryle•••(1949)••••••fece•una•s◄distinzione•tra•••••c ome•••co◄••◄sapere•e••••◄◄◄◄◄◄◄◄◄◄◄◄◄◄sapere•come•e•sapere•xhe◄ ◄◄che•••.•Gli•psicologi•parlno•◄◄ano••••di•differenze•tra••••••••la•memoria•••procedura le•e•dichiar◄◄◄◄•◄◄eclarativa••••••••••••per••quello•che•si•cono◄••osce.•••••••Comu nem,ente,••••parliamo•did••◄•dati•••◄,••••informzio•i•◄◄ni•e•conoscenza•••.••••mentre•• •◄◄◄◄◄◄◄Mentre•ci•••manca••••••un••insiem•condiviso•di•termini,•••••••generalment e•[•13.109]diamo•per•assunto•che•••◄◄◄◄◄◄◄◄◄◄◄◄◄◄◄◄◄ ◄◄◄◄◄[•10.625]consideriamo•che•••••conoscere•qualcosa•sia•diverso••da•do ver•cercarla•••••••◄◄◄◄◄◄◄◄ricercarla.•••[Return]••lo•sviluppo•di•internet•••sta•cam biando•sia••••••la•nostra•pedagogia•e••••••la•nos••••◄◄◄◄◄e•nostre•convinzioni•quoti diane•••••••sul•valore•della•conoscenza••••internaliozz••◄◄◄zzata•.••••una•ricerca•fatta• da•••Betsy•Sparrow••e•i•suoi•colleghi••••indica•che•••••siamo•più•inclini•a••••ricordare•[•1 7.078]i•campi•di•ricerca•si◄u•internet•piuttosto•che•••••••i•risultati•che•ci•forniscono.•••••• •••[Return]•••••••un•lavoro•••◄◄◄◄◄◄◄◄◄◄Un•lavoro•[•29.656]i◄[•01:02.687]i ◄[•16.453]svolto•da••••Kapersky•Lab•••••parl•D◄◄◄◄◄◄◄◄◄••b•parla•di•"amnesia•• digitale"••,•vale•a•dire,••••il•nostr◄◄◄◄◄◄◄◄la•nostra•incapaco••◄ità•di•rkicordare• •••••il•contenuto•di•ciò•che•è••••disponibile•attraverso•••una•ricerca•••online.••••[Return]ne el•suo•nuovo•◄◄◄◄◄◄◄◄◄◄◄◄◄◄◄Na◄el•suo•nuovo•libro••••••Mingì◄d•Cha nge•◄◄◄◄◄◄◄◄◄d•Change••••••,•Susan•Greenfield••••••••sostiene•che••••le•tecnol ogie•digitali•••••••••stanno•apportando••••maggiori•alterazioni•••nelle•modalità•in•cui•lòe•p ersone•pensano.••••••••[▼][▲]◄••[▼][▲]•••[▼][▲]•••••l'attenzione•di•Greenfil◄e•ld•su•••• •tali•questioni••••come•conseqjuenze••dell••••◄◄◄◄◄◄◄◄◄◄◄◄guw◄enze••• de[•19.906]◄i•◄ei•social•network,•••••i•mo◄◄◄◄••◄◄,••le•modalità•in•cui•stiamo• apprendendo•••••••da•internet•(in•particolar•modo•dalle•immagin•i••)•••••piuttosto•che•dai• testi•cartacei••••,•e•i••◄◄••le•tipologie•di•apprendimento•••••◄◄◄◄•◄◄◄◄◄◄◄◄ ◄◄•trasferimento•della•conmoscenza••◄◄◄◄◄◄◄◄◄noscenza•••che•••i•video••gi

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This linear view confirms the translator's tendency to produce more than ten segments containing single lexical items, such as the noun phrase *"lavoro"* where the translator stops the process for more than one minute.

In relation to the values connected to speed and movements on the keyboard, a discussion would be triggered by assuming that the reduction of text production per minute can be due to the lack of initial reading, which may have forced LS3 to interrupt the process frequently. A more suitable meaning gives way and facilitates the context understanding (see questionnaire in Appendix 1), even though there are some difficult expressions related to the genre, which highlight LS3's problem-solving strategies (see the construction "*cio' che uno sa*") and reduce miscellaneous events (monitoring), as shown in the following table:

Table 9. Statistics in the abstract: LS LS3

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS3	33 min.	88	76.32	12 sec	2952	2562	325	65

From the analysis of the linear view, LS3 shows uncertainties at the beginning, and stops the process on the following expressions:

- the noun phrases "*società letterate"* for 10 sec / "lavoro" for 29 sec / *"conseguenze"* for 19 sec / "*crescente passaggio"* for 16 sec;

- the verb phrases "*diamo per assunto"* which becomes *"consideriamo*" for 13 sec/ "*enfatizza"* for 13 sec;

- the adverbe phrase "*generalmente*" for 13 sec.

LS3 does not get the meaning of the expression "Internet search paths": after a short pause of 17 sec, the student moves on giving a different sense to the expression.

c) LS1

LS1 finds it difficult to deal with specific English constructions (as pointed out in the questionnaire) and chooses a microplanning approach, producing a higher number of shorter segments, divided by long pauses:

Figure 8. LS LS1's linear view in the abstract

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As shown in the linear view, this log file is full of pauses and segments, and

LS1 focuses on the following expressions:

- the verb phrases *"sapere"* for 14 sec/ *"Stanno"* for 10 / *"Ho asserito che"* for 15 sec / *"capire cosa*") for 24 sec/ *"leggere su carta*" for 12 sec; (verbs isolated from the rest of the clause and lexical uncertainties): *"ricordare"* for 45 sec;

- the noun phrases *"Pedagogia"* for 24 sec / "*credenze quotidiane*" for 52 sec/ "percorsi" for 45 sec/ "*Greenfield*" for 26 sec / *"Tematiche"* for 12 sec / *"Social network"* for 17 sec / *"Risultati che*" for 18 sec (isolated from the rest of the clause)/ *"amnesia digitale"* for 16 sec.

What is interesting about these data is the occurrence of the highest number of miscellaneous events, which can be due to the uncertainties related to extensive processes see (Bernardini 2011:250) and the longer processing time, which does not prevent the translator from splitting the text into a huge number of segments. The lowest text production per minute can be influenced by the microplanning, which reduces the speed, as shown in the following Statistics. The revision lasts 233 sec, focusing on noun phrases such as "*nella bassa e alta educazione / in base a"*. As pointed out in the questionnaire, priority is given to lexis and vocabulary, without grasping the whole sense from the text.

Table 10. Statistics in the abstract: LS LS1

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS1	34.34 min	89	69	58 sec	3061	2388	239	434

d) LS2

Unlike the students reported above, LS2 adopts a different approach, in spite of the duration of 34 minutes and a low value of processing time, from a closer inspection of the table below, we can assume that LS2's process differs from the other students in terms of macroplanning strategy and the higher values of keyboard activities. LS2 produces a lower number of segments, delimited by shorter pauses, as can be seen in the following linear view:

Table 11. Statistics in the abstract: LS LS2

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS2	34 min	98	81	32 sec	3397	2827	470	100

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Figure 9. LS LS2's linear view in the abstract

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Another feature to keep in mind and highlight is that LS2 reads aloud the title, showing lexical uncertainties on the same constructions and noun phrases which have created problems to LS4, stopping the process on the same segments. The student revises every single lexical item, dividing the first from secondary clause, replacing the noun with the verb, searching the best solution to fit the context. As pointed out in the interview, despite larger segments, the student finds the text a bit convoluted (see the questionnaire).

Moreover, LS2 is the only one who has associated Reading and Thinking Aloud while performing translation task. The revision lasts 455 sec, during which the participant focuses on the reformulation of "*questioni relative a"*. The main segments, which she pays attention to are:

-the prepositional phrase *"diverso da*" for 37 sec;

- the verb phrase *"ricordare"* for 37 sec;

- the noun phrases "*fulcro"* for 10 sec / "*Baron 2015*" for 14 sec;

- *"Per cio' di cui uno sa*" / "*in riferimento a",* where she stops the process for more than 1 minute.

As stated in the questionnaire, the conclusion would be that LS2 finds the text easy, except for some constructions.

e) LS5

Moving on to the last participant, the highest duration recorded in LS5 reflects the difficulty of the student in translating this text, not being satisfied with the final solution and text fluency due to the philosophical background (see questionnaire).

The shortest processing time of 13 sec prevents the translator from grasping the whole meaning, which also manifests an evident lack of final revision.

Subsequently, the number of user events are reduced: LS5 records the lowest values (excluding miscellaneous), which testify how difficulties extend process duration (see Bernardini 2001). The speed is reduced because LS5 tends to focus on single lexical items, dividing the main from the secondary clauses and producing a higher number of segments separated by long pauses. The highest duration does not prevent the translator from dividing the text in micro-segments, as shown in the linear view:

Table 12. Statistics in the abstract: LS LS5

Name	Total time	User event per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS5	50 minutes	57	46	13 sec	2908	2374	280	254

What stands out in the linear view is that LS5 produces a huge number of segments.

Figure 10. LS LS5's linear view in the abstract

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LS5,for instances, focuses on the following expressions:

- the prepositional phrase *"tra"* for 26 sec;

- the noun phrases "*memoria"* for 58 sec*, / "dichiarativa e procedurale*" for 26 sec/ *"terminologia condivisa"* for 10 sec / *"crescita"* for 13 sec / *"nostra pedagogia"* for 16 sec / *"pensieri giornalieri"* for 16 sec"/ *"ricerche su internet"* for 1.08 minutes*" / "opera di"* for 34 sec/ *"amnesia digitale"* for 12 sec / *"Greenfield focus"* for 1.13 minutes / *"Baron"* for 2 minutes and 50/ *"educazione primaria secondaria"* for 11 sec / *"testi scritti"* for 1.39 minutes / "*società dei letterati*" for 50 sec.

5.2 An analysis of LSs' translation processes: the article

For the analysis of LSs' log files processes related to a different genre - a newspaper article - the same parameters have been adopted.

Casey Hathway from North Carolina hailed a "survivor" by police after becoming lost in sub-zero temperatures

A three-year -old boy who survived two nights alone in the woods in freezing conditions has told police and family he was helped out by a friendly bear that was with him the whole time.\par
Rescuers responding to reports of a baby crying found Casey Hathaway tangled up in a thorny bushes, cold and soaked but safe on Thursday night. He had gone missing on Tuesday in conditions so bad the subsequent search had to be called off.
As it turned out , help- perhaps real, perhaps imaginary but certainly useful - was at hand in those woods in North Carolina,a state that is home to plenty of black bears. Craven county sheriff Chipp Hughes said Casey " did say that he had a friend in the woods that was a bear that was with him".

The claim was reportedly repeated by the boy's aunt Breanna Hathaway. "He said he hung out with a bear for two days," Hathway wrote in a Facebook post."Miracles do happen".

Hughes said the boy had been playing with two other children in his grandmother's backyard in Ernul on Tuesday, but did not come inside with them.

Brutal weather conditions in the low 20s(Fahrenheit) and concerns Casey wasn't dressed for the cold sparked a search that involved helicopters, drones, K-9 units and drivers, as well as hundreds of volunteers. By Thursday the wind and rain had become so bad authorities urged volunteers to stay away.\par

"He's a survivor", said Hughes on Friday pointing out that rescuers had to wade through waist-high water to reach the boy.Casey escaped with just a few scrapes and simply wanted some water and his mother, he said. \

Source: The Guardian January 28,2018

Table 13. LSs in the article

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS5	24 min	92	86	37 sec	2234	2083	124	27
LS1	28 min	108	87	10 sec	3075	2460	293	322
LS3	29 min	101	85	14 sec	3021	2544	376	101
LS2	31 min	92	78	51 sec	2939	2501	335	103
LS4	50 minutes	47	42	87 sec	2387	2127	165	95

a) LS5

The lowest duration has been recorded in LS5, whose process lasts 24 minutes, differently from the abstract (50 minutes). Having a look at the values reported in the statistical tool, the processing time is constantly lower (30 sec); even if it is higher than in the abstract, a logical deduction could be that the lowest values in the article are connected to the type of genre, which has implied a limited usage of cognitive strategies, as shown in the following table:

Table 13. Statistics in the article: LS LS5

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS5	24 min	92	86	37 sec	2234	2083	124	27

LS5 records a higher speed than in the abstract, being less aware of the difficulties related to the genre, as pointed out in the questionnaire. Considered in this perspective, differently from the abstract, the newspaper article enhances the translator to grasp the information from the context. Subsequently, the student seems to be satisfied with the final solution, apart from some lexical uncertainties.

LS5 focuses on the following expressions, producing more segments than in the abstract separated by longer pauses (more than 1 minute), as reported in the following linear view:

Figure 11. LS LS5's linear view in the article

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The following expressions are underlined:

-the adjective phrases *"salvo"* for 10 sec;

-the verb phrases *"bimbo che piange"* for 27 sec / *"aiutato"* for 28 sec / *"giocando"* for 16 sec / *"equipaggiato al freddo"* for 14 sec / *"come volevasi dimostrare"* for 14 sec / *"è stato utile"* for 15 sec;

-the noun phrases "*Carolina*" for 11 sec / "Casey" for 25 sec.

b) LS1

Moving on to another post graduate LS, LS1's process lasts 28 minutes, reporting a shorter duration and processing time than in the abstract. This leads to the

specialised texts features (as pointed out in the questionnaire where the need arises for the student to underline some difficulties related to the vocabulary (lexical choices) "*affermato" / "sostenuto"*. During the revision, which lasts 118 sec, LS1 focuses on temporal reformulation *"era sostenuto*". Substantially, as reported in Statistics, LS1 records higher values than in the abstract:

Table 14. Statistics in the article: LS LS1

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS1	28 min	108	87	10 sec	3075	2460	293	322

The parameter which deeply enhances the comprehension of translation process is segmentation. What stands out in the linear view of the article is an evident macroplanning strategy:

Figure 12. LS LS1's linear view in the article

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LS1 focuses on the following expressions:

-the noun phrases "*Casey"* for 32 sec/ *"Hathaway dalla North Carolina"* for 1,38 minutes/ *"preoccupazioni su Casey'* for 16 sec*";*

-the verb phrases *"rispondono ai"* for 14 sec/ "stato" for 11 sec / *"attraversare"* for 10 sec;

- the prepositional phrase "*tra"* for 23 sec (separated from the noun).

During the revision phase, LS1 highlights the noun phrase "*Fahrenheit*" and the verb phrase *"è fuggito soltanto"*.

c) LS3

In LS3's log file, despite the duration of 29 minutes and the low processing time of 14 seconds, the results are different from the ones analysed previously, as shown in the following table:

Table 15. Statistics in the article: LS LS3

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS3	29 min	101	85	14 sec	3021	2544	376	101

From the reconstruction of the translation process through keystroke logs reported in the linear view, it can be noticed that LS3 adopts a top -down approach and prefers a macro- to microplanning, trying to grasp the meaning from the whole. The revision lasts 50 sec and she spends her time attributing a more proper meaning to the following adjective *"ispidi*" and the construction "at hand".

As pointed out in the questionnaire a prominent role is given to the context, just because the student finds the text easier than the abstract, with the exception of some lexical uncertainties. As can be shown in the following linear view,

Figure 13. LS LS3's linear view in the article

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LS3 focuses on the following expressions:

-the noun phrases *"bambino in lacrime"* for 12 sec/ *"cespugli"* for 11.50 sec/ *"utilità'"* for 14 sec / *"Carolina*" for 13 sec;

-the adjective phrase *"aggrovigliato"* for 11.50 sec;

-the verb phrases *"è stato*" for 17 sec "*Fahrenheit"* for 14 sec.

During the revision phase, she focuses on the following:

- the adjective phrase *"ispidi"* for 23 sec;

- the construction *"a portata di mano"* for 10 sec;

Unlike the other students, LS1 pays attention to the temporal reformulation, and the features of the specialized texts.

Substantially, the findings collected in the statistics are in line with the genre, which is more understandable (see the questionnaire) than in other translations.

d) LS2

The same tendency is confirmed in LS2, who adopts a macroplanning approach. The language student focuses on the following points:

-noun phrases *"Carolina"* for 40 sec/ *"Gelo"* for 12 sec*,* showing lexical uncertainties on the noun phrase *"Casey"* for 26 sec;

-verb phrases "*acclamato":* she reads all the options available, connecting this verb with the verb to "tell"/ *"rispondevano ai*" for 1 minute/ *"attraversare*" for 48 sec;

-the adjective phrases *"pungenti*" for 15 sec *"spinose"* for 14 sec *"infreddolito"* for 21 sec.

Despite the similarity with the abstract, concerning the duration recorded (31 minutes in the article) and the longer processing time (51sec), the unawareness of the text complexity reduces the number of events reported in Statistics which are lower than in the abstract, as shown in the following table:

Table 16. Statistics in the article: LS LS2

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS2	31 min	92	78	51 sec	2939	2501	335	103

As far as the segmentation is concerned, the translator adopts a macroplanning approach:

Figure 14. LS LS2's linear view in the article

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•)◄9••••e•sommozzatori••,••••oltre•ad•una•centi◄◄◄◄◄◄◄•◄•centinaio•di•vola◄ontari••••.•••••••••••◄•ll•giovedì•••il•vento•e•lla◄◄a•pioggia•erano•diventati•cosi◄ì•fitti••••••che•le•autorità•••hanno•impostoo•◄•a◄ai•volontari•di•stare•alla•larga•.•••••"•è•un•sopravvissuto••",•ha•diLS3to•G◄Hughes•••••••••veners••◄dì,•••••facendo•luce•sul•fatto•che•i•soccorritori•••••••ha••nn◄◄◄◄◄•••hano•dovuto•••••attraversare••◄◄◄◄◄◄◄◄◄◄◄◄◄◄◄◄[•48.687]attraverd◄◄•••e◄r•◄sare•con•m•olta•difficolt••à•ac•q◄◄◄◄•••l'acqua•alta•fino•a••• ◄•in•vita•••ppe◄◄er•raggiungere•il•bambino•.•••••Casey•se•'è•v◄cavata••←←←←←←←←←←•l•••[▼][▲]•••con•◄◄◄◄◄•con•qualche••graffio•••e•volevv◄a•semplicemnte•dell'acqua•e••sua•madre•,•ha•detto.[•31.125][▼][▲]•◄U••••••[▼][▲],••[▼][▲]•→,[•11.437][▼][▲],•••••••••[▼][▲]•→••◄[•18.922][▼][▲]••••[▼][▲]→pp[•10.469][▼][▲]•,•••[▼][▲][•16.250][▼][▲]◄◄◄◄◄◄◄◄◄◄passato[•15.562][▼][▲]••• ◄••a,•••[▼][▲]◄◄◄•••••••••[Delete][Delete][Delete][Delete][Delete][Delete][Delete]•••[▼][▲]•marted•ì••••••[▼][▲]◄•••••[▼][▲]•••••••••[▼][▲]•[▼][▲][▼][▲]•anno•[•27.328][▼][▲]◄◄◄•••••alla••• ••••••••[▼][▲][▼][▲]•••••••[Stop]

e) LS4

In conclusion, differently from the abstract, the student who records the highest duration is LS4. Contrary to the expectations, despite the higher duration and processing time of 87 sec, LS4 adopts a microplanning strategy.

Table 17. Statistics in the article: LS LS4

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS4	50 minutes	47	42	87 sec	2387	2127	165	95

The evident lack of problem-solving strategies forces LS4 to interrupt the process, reducing the speed on the same constructions, which have created

problems to the other participants, as shown in the questionnaire. The revision lasts 38 sec spent in re- reading the final target text. Despite having found the text easier (see TAP protocols), the translator's linear view is full of segments (more than 20), containing few translation units (single noun / prepositional phrases, adjective phrases) separated by longer pauses:

Figure 15. LS LS4's linear view in the article

[Start]••••[Interface][Interface][Interface][Interface][Interface][Interface][Interface][Interface]
[Interface][Interface][Interface][Interface][Interface][Interface][Interface][Interface][Interfac
e][Interface][•01:20.500]U•n•babino•◀◀◀◀◀◀ambino•••di•3••anni•••••perso•nei◀l•bos
co••per•2•giorni•••••••ha•riferito•che•un•orso••••••••••gentile•l'•◀◀◀◀◀◀◀◀◀◀◀◀◀◀
◀◀◀◀tenero•orso••l'•ha•tenuto••al•sicuro.•[Return]••Casey•••Hat••hway•••d
al••N•orth••Car••olina•[•44.313]ha•acclamato•[•40.218]"••un••••••••superstite"••
dalla•polizia•••••••••dopo•••••••essere••••[▼][▲]••[▼][▲]•••••[▼][▲]•••◀si•pesto•◀◀◀◀e
◀rso•al•gelo.••••••[Return]•••••••••Un•bambino•••di•3•anni•[•10.438]◀•,•sopravvissutp◀p
◀o••••••••due•notti•solo•nei•boschi•••••al•••gelo••••••ha•riferito•••alla•polizia•e•alla•famiglia
[•29.593],•che•è•stato••••aiutpo◀◀ato•da•un•tenero•orso•••••che•era••con•lui•tutto•il•tem
po[•14.094].[•11.406]I•soccorrittori•••••◀◀◀◀◀◀◀••◀•itori•che•[•27.766]◀◀◀◀◀◀•in•r
iferimento••••alle•notizie•[•14.125]di•un•bambino•[•34.187]che•piange•[•26.469][▼][▲]v
a•ha•trovato•••••••••Csey•••Hat•haway•[•28.891][▼][▲]a••••[▼][▲][▼][▲]impigliato•[•0
2:18.844][▼][▲]nno[•31.281][▼][▲]•[▼][▲][▼][▲][▼][▲]•••◀◀◀◀◀◀◀◀◀◀◀◀••◀•a
ggrovigliato•in•cespugli•spinod•◀si•[•17.250],•al•freddo•e•[•29.656]bagna••to,•ma•••••san
o•e•••salvo•giovedi'•notte.••••Si•era•perso•martedi'[•10.141]•in•condizioni•terribili•[•42.641
]che•la•••successiva•••ricerca•dovevs••••essere•annullata••–
◀••.[Return][•12.750]Come•vuolesi•dimostrare,•••••••,•l'aiuto,•forse•••reale,•forse•immagi
nario•ma•sicur•amente•utile•[•18.359]si•è•rivelato•[•37.766]◀◀◀◀◀◀◀◀◀◀◀◀◀◀
◀◀••••è•stato•[•57.375]a•portata•di•mano••••••••nel•North•Carolina••••••••,•uno•stato•
che•è•[•10.922]dimora•di•numerosi•orsi•neri.[•57.328]Il•b◀•••vile•sceriffo•della•contea••••
••Chipp••••Hughes••••ha•detto•a•Casey••:"•••••ha•detto•che•aveva•••un••amico•nei•boschi
•••••••••••,•che•un•o••rso•era•••con•lui••".•••[Return]•••••La••notizia••fu••riportata•••◀◀◀◀
◀◀•rtata•••••••••dalla•zia•del•fanciullo••••Breab◀nna••Hath•away••••••••"••Il•bimb
o•[•02:03.953]ha•detto•di•essere•stt•◀ato••con•un•orso•••••c◀per•2•giorni•••"••Hat••h
way•••ha•scritto••••su•un•post•••Facebb◀ook••••••M◀I•miracoli•possono•accadere•••••.•
Hughes••••••••Hughes••sa◀◀•ha•dett•o•[•29.031][▼][▲]◀◀◀◀◀◀◀[•37.719][▼][▲]al•r
agazzo••••••••[▼][▲][▼][▲]◀•che•il••[▼][▲]••••stava•[•26.640]giocando•con•altri•[•10.17
2]bambini•[•33.281]ne••l•giardino••della•nonna••••••in•Ernul•martedi••••••',••••ma•non•è•e•
•ntrato••dentro•••con•loro[•11.015].••Le••••terribili•condizioni•atmosferiche•[•34.484]con•u
na••temperay◀tura•in•••••feriore•••••••••••a•20•gradi••••••••[▼][▲][▼][▲][▼][▲]◀di••[▼][
▲],•[•43.562][▼][▲]•◀◀◀◀◀◀◀◀◀◀◀•bassa••[▼][▲]◀◀••[▼][▲]•◀◀•◀◀•di••(•[▼]
[▲][▼][▲]•)•••••••••••••(••Fa•••hrenheit•••)•••[▼][▲]◀◀•e•••••riguarda•[•50.922]◀◀◀◀
◀◀◀◀◀il••problema••che•Casey•[•16.609]non•fesso•adeguatamente•equipaggia
to•per•il•freddo•[•01:38.015]inn•escasse•••••una•ricercs•••◀◀a•con•elicotteri,•droni
••••••••K–
••••9•unità•[•56.204]e•••guidator[•12.562],•◀◀◀ri,••••come•ce•ntinaia•••di•volontari[•10.3
91].•••Da•giovedi'•[•25.234]il•vento•e•la•pioggia•[•28.359]si•sono•cosi'•intensifica••ti•[•26.2
81]da•indurre•i•volontati•••a•stare•via.•[•17.781]◀◀◀◀◀fuori•••••[▼][▲]◀◀ri••••••••••[
▼][▲]••.•E•'•un•[•11.375][▼][▲]◀◀◀◀◀◀◀◀◀◀◀◀◀interrompere•le•ricerche••••[▼][
▲]•!•[▼][▲]••su◀opravvissuto•◀••"•••••,•ha•riferito•H•ughes,•••venerdi'••.◀,•••ribadendo
•che•i•soccorritt◀••ori•[•01:18.406]doveva•no•barcamenarsi•[•51.063]in•alt

a•marea•per•raggiungere•il•bambino•••••.•••X◄•Casey•[•01:27.766]è•fuggit
p•[Home]◄[•15.407][▼][▲]◄•o•◄◄◄◄◄◄◄◄◄◄◄•se•ne•è•uscito•solo••con•qualche
•graffio•••••a◄e•voleva•semplice•mente•sua•madre•e•dell'••ac•qua,•ha•detto•••◄•.[•39.4
22][▼][▲][▼][▲]◄a•[•54.734][Stop]

As can be seen in the linear view reproduced above, in spite of a high duration and processing time, LS4's log file contains a higher number of micro segments full of lexical uncertainties and longer pauses. Indeed, she stops the process on the following expressions: *"acclamato" for 40 sec / "impigliato"* for 2 minutes / *"dovevano barcamenarsi in alta mare" for 51 sec;*

-the adjective "*utile*" for 57 sec;

-the noun phrases "*notizie"* for 14 sec / *"soccorritori"* for 1.18 minutes / *"bimbo"* for 2 minutes";

-the adjective phrases: *"utile" for 18 sec / for 17 sec "equipaggato per il freddo"* for 1.38 minutes.

In the first case, data collection is more complicated for the lexical constraints of the specialized texts, which increases the tendency to focus on single lexical items and single phrases.

Summing up, we can deduce that the students adopt the microplanning in the abstract, which provides the text division in a huge number of segments, delimited by longer pauses: a part from LS2, all the students tend to split the discourse, separate the constructions, producing small chunks within each segment. In the article some students change their approach and adopt the macroplanning, which is the text division into a broad limited number of segments separated by shorter pause. In this case the main difference is genre based, because the newspaper article

enhances the students to adopt a top down approach and grasp the meaning from the whole.

Chapter 6

Professional Translators Process analysis through Translog log files

6.1. An analysis of PTs' translation processes: the abstract

In the analysis of PTs' log files the same parameters are followed.

Table 18. PTs in the abstract

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT4	22minutes	137	117	4 sec	3067	2619	253	195
PT5	32 minutes	99	80	90 sec	3222	2632	216	374
PT3	42 minutes	89	64	30 sec	3859	2784	376	699
PT1	36 minutes	192	170	208 sec	4893	2615	199	2079
PT2	43 minutes	64	57	167 sec	2806	2503	208	95

a) PT4

The lowest pause duration has been recorded in PT4 (27 minutes): despite the lowest processing time (4 seconds), the translator adopts a macroplanning approach which increases the values recorded as shown below:

Table 19. Statistics in the abstract: PT PT4

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT4	27 min	137	117	4 sec	3067	2619	253	195

The log file contains few segments, separated by shorter pauses, as we can see in the following linear view.

The professional focuses on the following expressions:

-the noun phrase *"terminologia comune"* for 13 sec*;*

-the conjunction *"ossia"* for 21 sec*;*

-the verb phrase "*concentra"* for 16 sec.

As can be shown in the questionnaire submitted, PT4 is the only professional translator who thinks that the software increases consistency and speeds the process. However, difficulties do arise when avoiding repetition while attempting to stay close to the original. One of the limits of the software is that the text cannot be revised or double checked at a later stage, taking into account that the translator has a look at the text, to understand the structure re- arrangement.

Figure 16. PT PT4's linear view in the abstract

[Start][•02:46.328][▼][▲][▼][▲][▼][▲][▼][▲][▼][▲]••••••iL••◀◀◀Il•sapere?•••Imparare
,•èensare•◀◀◀◀◀◀◀◀◀pensare•e•conosc◀••••cere•in•un•mondo•do◀igitale[Return]
•Cosa•significa•conoscere•qualcosa?•Il•filosofo•••Gilbert•Ryle•(••19499••••••◀◀9•◀◀)•d
istingueva•tra••••la•conoscenza•di••e•la•conoscenza••••••←←←←←←←←←←←←←←←←
←←processi•↓↑•←•→→→→→→→→→→→→→→→→→→→→→di•con•tenuti.•[Return]••Gli•psic
ologi••••••descrivono•le••differenze•tra•memoria••procedurale•e••diLS3tiva•••••••in•relaion
e•a•c◀◀◀◀◀◀◀◀◀zione•a•ciò•che••••••si•sa••(Zimmermann•201•4)•.•••Nel•linguaggi
o•comune,••◀◀•parliamo•di•dati,•informazione•e•conoscem◀nza.••••S•••e•••••è•vero•◀
◀o•che•••••un•••◀◀◀nin◀◀on•disponiamo•i◀di•un•insieme•◀◀◀◀◀◀◀◀◀◀••••◀◀
••••na•terminologia•comune,•[•13.343]←←←←←←←←•→→→→→→→→→[•14.3
59]è•altrettantpo•v◀◀◀◀o•vero•che•in••••••genere•si•presyme•••◀◀◀◀ume•che•con
oscere•qualcosa•è•diverso•dal•ricercarl•◀e◀••◀◀◀◀◀◀◀◀◀◀••••dover•svolgere•delle
•ricerche•per••••◀•••••••capire•di•cosa•si•tratti.•[Return]••••Lo•sviluppo•di•Internet••••sta•
modificando•la••◀◀◀◀◀•sia•la••nostr◀◀◀◀◀◀◀◀◀••••◀•il•nostro•approccio•pedago
gico•sia•••le•nos•••nostre•◀◀◀◀◀◀◀◀tre•conoscenze•di•tutti•i•giorni••su◀◀◀◀◀◀◀
◀◀◀◀◀◀◀◀◀◀◀◀◀◀◀comuni•sul•valore•della•conoscenza•interiorizzata.•••R◀•
Dalle•ricerche•di•Betsy•Sparow•e••colleghi•(2011)••emerge•che•••••ci••risulta••••più•facile
•ricordare•percorsi•di•ricerca•su•Internet•che••••←←←←←←←←←←←←←←←←←←←←
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•••••In•un•••lavoro••••desc◀◀◀◀riportato•dal•Kaspersky•Lab•(•2015)•si•menzi••ona•la•"
di◀◀◀◀◀•'"•amnesia•digitale•",•ossia•[•21.735]la•nostra•••incapacità•di•ricordare•il
•contenuto•di•ciò•che•risulta•disponibile•da•una•ricerca•online.[Return]••Nel•s◀◀◀lla•su
a•recenbte•◀◀◀◀te•pubblicazione••••••Mind•Chanfeìi◀◀◀◀ge•,•Susan•Greenflied•
•(2015)•••••sostiene•che•le•tecnologie•digitali••••stanno•apportaì◀◀◀◀◀◀◀◀modific
ando•in•misura•significativa•••••••il•modo••di•pensare•della•gente◀◀◀◀◀◀◀e•person
e.•••Greenfield•si•so◀◀concentra•[•16.125]su•temi•quali••gli•effetti•dei•social•neto
◀work•••,•il•modo•in•cui•impariamo•da•Internet•(••in•particolare•••dalle•immagine◀i)••an
ziché•••◀◀◀◀◀◀◀◀◀rispetto•a•testi•cartacei•,•e•la•••••tipologia•di•trasferimento•delle
••comoscenze•◀◀◀◀◀◀◀◀◀noscenze•prodotta•da•i•videogiochi.•••Nel••mio•lavoro
•◀◀◀◀◀◀◀◀◀◀◀◀◀◀la••mia•ricerca•(Baron•2015)•••••••••a••◀argomento•che•••••il•
crescenì◀◀◀◀◀◀◀◀passaggio•sempre•più•acenta◀◀◀◀cem◀ntuato•da••••◀la•
le•••ttura•••su•carta•••alla•lettura•su•schewrmi•digitali•••••può•contribuire•a••ridefinire•il•si
gi◀nificato••••••••della•lettura•stessa.•[•20.188]Il•tema•della•lettura•è•crir◀tico•[•13.469]p
er•quanto•concerne•la•conoscenza,•dal•momento•che•in•società•••••basate•sulla•conosc
enza••••molto•di•cu◀iò•che•apprendiamo•••••è•••◀◀••p◀è•desuto•dalla•parola•scritta.[
Return]••Mentre••la•tecnologia•digitale••è•in•parte•responsabile••per•◀◀◀◀◀di••una•[•1
2.485]◀•◀•mutamento•della•nostra•comprensione••della•conoscenza,•••la•◀••◀◀◀gli•
approcci•pedagogici•nel'istruzione•inferiore•e•superiore•••••sottolineano•il•cambiamento•i
n•atto,•sottolinbeando•••••••[▼][▲][▼]••[▲][▼][▲]•→•◀•[▼][▲]•••••la•conoscenza••••••••
.•La••••←←←←←←←←↓↓•••[▼][▲]•pregressa•per••••••••i•risultati•delle•rie◀cerche•••→◀
••[▼][▲]•→•◀valutare•••[▼][▲]•◀pre◀◀◀◀◀◀◀Il•prese•nte•studio••◀◀◀◀◀◀◀◀◀
◀◀◀◀◀◀◀◀◀◀◀◀◀•L•a•••presentazione•in•oggetto•esplora•la•natura•e•le•implicazio
ni•di•tali•mutamento.[•10.328][▼][▲][•27.609][▼][▲][▼][▲]dà•per•scontato••••••[▼]•[▲]•
'•evoluzione••••••[▼]••[▲]ndivise••••••[▼][▲][▼][▲][•34.390][▼][▲]•••••••[▼][▲][▼][▲][•
32.329][▼][▲]i••••••••[▼][▲]•sostengo•la•tesi•secondo•cui••→→→→→◀◀◀◀◀••••[▼][▲
]I•••[▼][▲]◀[•10.437][▼]••[▲]veicolato[•11.594][▼][▲][▼][▲]evidenziando•••↓••[▼][▲]
◀'im◀mportanza•delle↓→→→•••[▼][▲]→◀e→→→→→→→→→→→→◀◀e•••all◀◀◀
nel••→→→→→◀◀◀◀[•48.641][Stop]

b) PT5

Moving on to another professional, PT5 records a 32 minute duration and 90 seconds processing time, as shown in the Statistics:

Table 20. Statistics in the abstract: PT PT5

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT5	32 min	99	80	90 sec	3222	2632	216	374

The file contains few segments (see linear view) delimited by shorter pauses. A part from the revision phase, which lasts 350 sec (see *"conoscere*" / *"parla"* / "*cambiando espressione*", PT5 is the only professional who divides the process in six-seven macrosegments:

Figure 17. PT PT5's linear view in the abstract

Start][•01:27.875]Che•••significa•tradurre•qualcosa?••O◀Il•filosofo•G•ilbert•Ryle••(1949••
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The professional focuses on the noun phrases "*pedagogia che*" for 12 sec and "*percorsi*" for 11 sec.

Despite some difficulties to accept the design issues of the project, the higher processing time, as shown again in the following table, facilitates the macroplanning and the problem-solving adopted during the revision phase:

Table 21. Statistics in the abstract: PT PT5

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT5	32 minutes	99	80	90 sec	3222	2632	216	374

c) PT3

Moving on to analyse another professional log file, the attention shifts to PT3's log file, whose process lasts 42 minutes. The lower processing time (30 sec) influences the activities on the beyboard during the process, as recorded in the Statistics especially text production, elimination and miscellaneous):

Table 22. Statistics in the abstract: PT PT3

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT3	42 minutes	89	64	30 sec	3859	2784	376	699

The lack of planning and initial reading, confirmed by the lower values of processing time has a deep impact on the approach adopted: as matter of fact, PT3 produces more than 18 segments, containing a single- double micro unit, isolated from the whole production and delimited by longer pauses (more than 1 minute):

Figure 18. PT PT3's linear view in the abstract

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PT3 focuses on:

-the same noun phrases "*lavoro"* for 20 sec/ *"Greenfield"* for 12 sec / *"lettura"* for 15 sec *"conoscenza"* for 22 sec/ *"pedagogia sia primaria"* for 13 sec / *"mutamento"* for 11 sec;

-the verb phrases *"rinforzando"* for 25 sec *"/ ridisegnando"* for 11 sec.

During the revision phase she pays attention the following expressions*: "testo"* for more than 15 sec*" / "effettuata tramite"* for 22 sec / *"incoraggiando la trasformazione"* for 23 sec / *"che parte in forma di"* for 12 sec.

PT3's process is more articulated and full of miscellaneous and text production (the highest ones), as shown in the table reported in the Statistics. This phenomenon can be due to the re-organisation of the structure, being connected with the microplanning adopted. PT3 seems to be in line with the students for the lack of resources adopted, a microplanning approach and the frequent activities on the keyboard which increase the extensiveness of the process during problem-solving phases.

d) PT1 and PT2

The remaining part of this paragraph focuses on processes of longer duration, which have been recorded in PT1 and PT2, two professionals who adopt a different approach. PT1 records the highest values concerning keyboard activities excluding text production and elimination, reduced for the macroplanning.

Table 23. Statistics in the abstract: PT PT1

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT1	36 minutes	192	170	208 sec	4893	2615	199	2079

This is the highest processing time (208 sec) and is consistent with the approach adopted, that is the macroplanning.

PT1 activates her cognitive strategies, producing few larger segments, separated by lower pauses. This professional adopts the reformulation, spending her time, searching on the net to acquire more information concerning the background. Differently from the students, the translator starts writing the main part of the sentence and adds the extra components (the arguments related to the noun), after having grasped the whole meaning - see "*la nostra comprensione di tecnologie digitali"* and "*la natura del sapere dipende da nostra comprensione di tecnologie digitali"*.

PT1 finds the text difficult (see the questionnaire) as can be seen from the problem-solving strategies adopted for the problems of comprehension. She is the only translator whose linear view includes higher activities of monitoring:

Figure 19. PT PT1's linear view in the abstract

[Start]••••••[▼][▲][•03:12.396][▼][▲]••••••••SAper•◀◀◀◀◀apere•cosa?••••Appren dimento,••••pensiero•e•conosccen••••••••sa•[•21.403][▼][▲]↓←←←←← ←[Delete]→→→→••[Return]•••••Cosa•significa••◀◀◀◀idi◀◀fica•[•18.923]sapere••[Ctrl+Left]"[Ctrl+Right]←[Shift+Left]←"→?•••••il•fiolo◀◀◀◀iilosofo••••Gilbert•Ryle•••(1 949)••••••distingueva•tra•conoscensa••••••••procedurale•e•••conoscensa••••••••dei•con tenuti.•[•11.388][Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Right]•••metodologia•della•[Ctrl+Shift+Right][Ctrl+Right][Ctrl+Shift+Righ t][Delete][Ctrl+Right][Ctrl+Right][Ctrl+Right]→→→→→→→→→→•••In•psicologia•si•p arla•di•••••una•di•••fferensa••••ra◀◀tra•memoria•procedurale•e•[•01:17.236][▼][▲]•[Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Rig ht][Ctrl+Right][Ctrl+Left][Ctrl+Shift+Left]fatti[Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Rig ht][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl +Right]•◀◀memoria•diLS3tiva•.•••••••••◀◀◀•◀a••in•riferimenot◀◀to•alle•••••propri e•••conoscense•.•••••←←•(••Simmermann••••2014)••→→••••••Nel•linguaggio•qotidiano, ••••••••••parliamo•di•dati,•••••••informasioni•e•••sapere.•••••••••••Pur••••non•disponendo• di•una•terminologia•••••••condivisa,•[•10.250]in•genere••••te◀◀◀•diamo•per•sc ontato•che•[•13.105]conoscere••••••[Ctrl+Left]→→→→→→[Ctrl+Left]esista•••una•diffe rensa•tra•[Ctrl+Right]•e••dover••••••••••••••••ricercare••••••••••[Ctrl+Left][Ctrl+Left][Ctrl+L eft]←←←•nsa••[Ctrl+Left]una•[Ctrl+Right]acquisita•••←→[Delete][Delete][Delete]→→ una•conoscensa•[Ctrl+Shift+Right][Ctrl+Shift+Right]a•acquisire.••[Return]•••↑↑↑[Ctrl+R ight][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right]↓→→→→→→→→ →→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→ →→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→→ →→→→→→→→→→→→→→→→→→→→→→→→→←←←←←←→••[Ctrl+

Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right]••••[▼][▲]→u[Ctrl+Right][Ctrl+Right]•••••[Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right]→→→↑•[Ctrl+Right][Ctrl+Left]←←←•[Ctrl+Right][Ctrl+Right]←,[Ctrl+Right]••↓↓••••••••La•diffusione•di••internet••••sta•mutando••••sia•le•nostre•convisioni••pedagigiche•sia••←←←←←←←←←←◀o[Ctrl+Right][Ctrl+Right]•••le•••notrse•◀◀◀◀◀stre•convinsioni••••••••••in••••◀◀◀•••su•••◀◀◀•circa•il•valore•dell•••••a•conosce••nsa•acquisita•••.••••l•lavori•di•◀◀◀della•Sparrow•••e•dei•••◀◀◀◀◀◀◀••◀••(•2011••[Ctrl+Left]Sparrow•et•al.•→→→→→)••••indi•◀◀◀◀[•12.324]mostrano•che••siamo•più•inclini•a••••ricordare••••il•percorso•di•ricr••◀erca•in•rete••••piuttosto•che•i•risultrati•della•←←←←←←←←←←←[Delete][Ctrl+Right]→→→→→→ricerca•stessa.•[•01:11.511][▼][▲]↓[Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right]•↓•••••Secondo•alcune•ricere◀◀crche•◀◀◀i•studi••riportati•dal••◀◀◀◀◀◀◀◀◀•ortati•dal••Kaspersky•Lab••(◀•(2015)••••••••[•13.759]siamo•di•fronte•a••••casi•di••"amnesia•digitale"•←.•••←←,••••vale•a•dire•la•nostra•◀•difficil◀oltà•di•ricordare•••••••••[Delete]i•contenuti•••••••••de••◀i•ci•ò•che••risulta•diponibile•••←←←←←←←←←s[Ctrl+Right]←←••••dalle•ricerca••◀he•••in•rete.••••[Return]•••••NEl•suo•no◀uovo•••volume,•[Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Left]←←←e[Delete][Ctrl+Right]→→→→→→→→→→→→→→→→→→→→→•••••Minda◀•Change••(•••2015)•←,•la•Green••filed•←←←←←→[Delete]→l[Ctrl+Right]←←←•••••sostiene•che•le•tecnologie•digitali•stanno•alternado•in•profondità•il•modo•in•ciuo◀◀ui•◀◀◀◀ui•••••pensian◀mo•.[Ctrl+Left][Ctrl+Left]•[Ctrl+Right]←←◀→n[Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right]→→→→→→→→→→→→→→→→→→→→→→→→→[•15.132]LA•greenfield•si•sooferma•in•particolare•••[Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Left]→a[Delete]→G[Delete][Ctrl+Right][Ctrl+Right][Ctrl+Right]←←←←←←←[Delete]•f→•[Ctrl+Right][Ctrl+Right]→→→→←←←←←←←←←,→→→→→→→→→→→→→→→→,••••••sugli•effetti•del•social•••←←←←←←←←←◀i→→→→→→→→→•network,•••••••sul•modo•in•cui•apprendiamo••••dalla•rete••(•soprattutti••◀o•••attraveerso•le•immagini)••••••••in•confronto•con•[•14.305

][Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Right][Ctrl+Shift+Right]paragone•alle•strategie•di•apprendimento•da•••••◄l•testo•stampato•,•••[Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right]→••••••[Delete][Delete][Delete][Delete]←•e•••••su•l••••le•forme•di•apprendimento•••••veicolate•dai•••vi••deogame••.•[Delete][Delete]••[Ctrl+Left][Ctrl+Left]↑[Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Left][Ctrl+Left]••[▼][▲][Delete][Ctrl+Right][Ctrl+Right][Ctrl+Right]→[Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right][Ctrl+Right]←←←[•13.728]In•un•la◄◄◄o•studio•••••del••2015,•••••••←←•(Baron•2015)→→[•13.712]ho••sostenuto•che•••••il•passaggio•dalla••lettura•••••del•testo•stampato•••alla•lettura•dello•schermo•••••sta•••••••potensialmente•••ristrutturando•••••••••il•significato•stesso•de••lla•lattura•◄◄◄◄◄◄◄ettura.•[•12.199]Il•••tema•della••lettura•è•vitale•••per••◄◄◄◄•◄◄◄◄◄◄◄essensiale•••••per•investgare••◄◄◄◄◄◄•••◄◄◄dagare•il•••significato•della•conoscensa•••,••giacché•nelle•società•alfabetissate•••••la•maggior•parete•delle•◄◄◄◄◄◄◄◄◄◄te•delle•◄◄◄•nostro•sapere•proviene•••••••••dala•parola•scritta•.•••[Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Left][Ctrl+Shift+Right]•••[Ctrl+Left]••[Ctrl+Left]•è•veicolato•dalla•scrittiu◄ur◄ra•←←←←←◄[Ctrl+Right]←←←←←←tura•[Ctrl+Shift+Right][Ctrl+Shift+Right][Ctrl+Shift+Right][Ctrl+Shift+Right][Ctrl+Shift+Right][Delete]◄•[Ctrl+Right]••••[Return]•••↑↑↑↑↑↑→→→→→→→→→→→→→→→→→→

PT1 focuses on the following noun phrases:

"conoscenza dichiarativa" for 11 sec e *"procedurale"* for 1, 17 minute / *"Kaspersky Lab"* for 13 sec (see the source adopted, Contexto reverso) / *"terminologia condivisa"* for 13 sec / *"conoscenza* for 21 sec"/ *"pedagogia"* for 13 sec/ *"credenze"/ Sparrow* for 12 sec).

The lexical indecision concerns the best solution for "growth". She adopts "*diffusione"* rather than "*crescita",* differently from the students whose expressions remain unchanged.

Therefore, PT1 does not interrupt the continuous flow of production on the constructions that have created problems to the other students (see *"percorsi" / "cio'di cui si sa"/* "Greenfield focus*"),* doing a more appropriate reformulation.

Strictly speaking, the higher pauses between paragraphs contribute to reduce the number of pauses on single translation units: her log file includes few segments. In the end, PT1 is not satisfied with the final solution: she has to cut and invert, because in some cases she does not catch the main points for the difficult terms and long constructions.

e) PT2

Summarising briefly, the highest duration (41 minutes) and the higher processing time (155 sec) do not prevent PT2 from adopting microplanning: as can be seen in the linear view, PT2 produces more than 20 segments, separated by larger pauses ("*Baron*" 2.50 min.).

Figure 20. PT PT2's linear view in the abstract

[Start][•02:46.547]Sai•cosa?••••Lo•studio,•il•penssiero•ed•il•seper◄◄◄◄apere•nel◄◄◄i n•um•m◄◄◄n•mondo•digina◄◄tale.[Return]•Cosa•significa••••••••il•fatto•di•sapere•qual cosa••?•Il•filosofo•Gilbert•Ryle•(1949)••••••••distingueva•tra•il•sapere•••••"•come"•e•◄d•il•s apere••••"che".••••[▼][▲]•◄◄c•••[▼][▲]•←"••[▼][▲]"••[▼][▲]••[Delete]•[▼][▲]•••••••Gli•p sicologii•◄•[•10.469]s◄discutono•di•differenze•tra•la•memoria•[•27.750][▼][▲][•35.907]pe of◄◄◄rocedurale•e•la•memoria••••••••di•LS3tiva[•23.063]d◄•di•cià◄ò•che•si•con osce•(Zimmermann,•2014=◄).•••••••••Nell'accezione•co◄•◄comuni◄e,•si•parla•di•dati,•in formazione•e•sapere.•[•59.344]Se•ci•••manda•una•base•comune•di•terminologia,••••genee ◄ralmente•supponiamo•che•il•••fatto•di•sapere•c◄qualcosa•è•diverso•dalla•necessità•d i•cercal◄[•11.938]r••lo.[Return]••••••••[Return]◄L'espanzi◄◄sione•di•Internet•sta•co

mp◄◄◄abian◄◄◄b◄◄mbiando•si••a•••••••la•nostra••••••••••◄◄◄◄◄◄◄◄◄◄◄◄•il•nostro••••••••approccio•pe•dagoci◄◄gico•che•le•nostre•convinzioni•qu•••otidiane••••cird◄ca•il•valore•del•sapere•[•35.641]az◄cquisito.•••••••••La•ricerca•ocn◄◄◄condotta•di◄a•Betsy•Sparrow••e•di◄•i•suoi•collegni◄◄hi•(2011)••••••••[▼][▲]◄Come•indica•l••[▼][▲]◄,•siamo•più••propensi•••a•ricordare•una•ricerca•fatta•[•14.406][▼][▲]••[Delete]••percorso••di•••[▼][▲]su•Internet•piuttosto••che•i•risultati••h◄◄che•essa•genera.••••••[•13.625]In•un•documento•••••dk•◄◄i•K•aspersky•Lab•(•2015)•••si•parla•di•••••"amnesia•diginale•"••,••ossia•••dell••◄◄••• ◄i•incapacità•dir◄•ricordare•••il•contenuto•••••delle•rus◄◄isore◄se•disponibile◄i•tramite•una•ricerca•••fatta•online.•. ◄[Return]•••••Nel•suo•libro•"Mind•Change"••,•Susan•Greenfi•le•◄◄d•(2015=◄)•••••••asserisce•che•le•teco◄nologie•digina◄◄tali•••[•10.610]stanno•apportan•do•[•12.250]◄•c•ausando•maggiori•cambiamenti•nel••modo•di•pensare.•[•25.625]Greenfee◄◄ile◄◄eld•••••si•fi◄ocalizza•••••••su•questo•◄◄i•problemi••in••◄◄◄◄◄••qu•ali•effetti•••••di•[•53.954]◄◄••••••••el•fare•un◄◄rete•sociale••••••,[•13.766][▼]•••[▲]••••••••[Delete][Delete]•come[•39.485][▼][▲]•••il•modo•di•imparare•••••••••da••Internet••••(specialmente•dalle•immagini)•••••••••pij◄uttosto•che•sul••••••••◄◄◄dal•testo•scritto••,•[•49.157][▼][▲]alcumi•◄◄◄ni•••[▼][▲]◄,•••[▼][▲]gli•••[▼][▲]••••••••e•••••l[•01:05.954]◄••la•div•••ersità•••• ◄◄◄◄◄◄◄◄◄◄◄◄◄◄◄d•i•tipi•del•trasferm◄imento•del•sapere•••che•possono•generare•i•videogiochi.•••••Nel•••••••mio•lavoro•••personale•(Baron••◄,•201◄5◄15)••••••[▼][▲]In•uno•dei•miei•lavori•••••[Delete]••[▼][▲]••••••avevo•argomentat••o••come•il•passaggoi◄◄io•crescente•dalla•le•ttura••su•••[•54.578]supporti•cartacei••alla•lettura•su••schermo•digin◄tale•sta•••••rimodellando••••••••anche•il•mo•do•di•leggere.••••••La•questione•della•letter••• ◄◄ura•••ha•un'importanza•critica•••n••• ◄•nei•• ◄◄◄◄per•quanto•riguarda•••••••le•qua◄estione◄i•di◄el•sapere•,•[•01:42.485]in•que◄anto•[•23.297]in•una•società•alfabetizzata•cià◄ò•che•veniamo•a•d◄sapere•proviene•dall•a•parola•sx◄critta.•[Return][•23.375]Mentre•le•teco◄nologia◄e•digia•◄tali•••••[•16.172]in•p•◄◄◄◄sono•in•parte•••[•10.875]responsabili•del•passa••◄◄◄•••••••••◄◄[•30.141]◄la•comp◄◄◄◄◄◄◄◄•bam◄◄◄cambiamente◄o•della•comprensione•••del•significato,••••la•c◄pedago•gia•••••d••ell'istruzione•di•base•e•quella•superiore•sta••rafforzando•••il•passaggio••• ◄◄◄••gio•••••••••[•14.391][▼][▲][▼][▲]••••[▼][▲][▼][▲]•[▼][▲]◄◄◄◄mut••••[Delete]•••••••••[▼][▲]•••••••••d•••a••ll'enfatizzare•il•sep◄◄apere•••••••••intrinseco•di•un◄◄ogno◄uno•di•noi•al•vali◄orizzare•la•ricerca.•••Questa•presenzaz◄◄◄tazione••[•12.735]ha•lo•scopo•di•esp◄l◄plorare•la•natura•e•le•implicazioni•di•questo•cambiamento.[•01:46.047][▼][▲]◄c[•16.422][▼][▲][•02:01.984][▼][▲]••••••[▼][▲][▼][▲]•••illustrato•[•36.187][▼]••[▲][•19.953][▼][▲]•••[▼]••[▲]•k◄in•termini•[•18.203][▼][▲]di•j◄•••[▼][▲][•54.406][▼][▲][▼][▲]tem◄◄◄◄◄e◄◄e•tama◄◄◄eta◄◄matiche••[▼][▲][•36.969][▼][▲][▼][▲]•[Delete]••[▼][▲]c•◄→i•◄c[•11.531][▼][▲]••la•scienza•••[▼][▲]◄a[•28.235][▼][▲]•,[•01:

01.422][Stop]

PT2 starts focusing on the title and the following expressions, such as:

"conoscere" / "psicologia/ "terminologia condivisa"/ "pedagogia" / "approccio pedagogico" / "conoscenza interiore" "memoria diLS3tiva and procedurale" / "Greenfield" / "societa'letterarie" / "nel mio lavoro" / "In uno dei miei lavori" / "cambiamento/ "mutamento".

The translator pays attention to the following

- noun phrases: *"dichiarativa"* for 23 sec/ *"necessità di cercarlo"* for 11 sec/ *"ricerca fatta"* for 14 sec/ *"tecnologie digitali* for 10 sec" / *"effetti di"* for 53 sec / *"rete sociale* for 13 sec*" / "testo scritto"* for 49 sec / *"tecnologie digitali* for 16 sec*" / "passaggio"* for 14 sec*" / "presentazione"* for 12 sec / *tematiche"* for 36 sec*;*

-the verb phrases: *"sapere"* for 1.42/ *"genera"* for 13 sec.

-the prepositional phrases and conjunctions *"e*" for more than 1 minute/ *"come"* for 39 sec.

Considered in this perspective, the values reported in the following table (see the speed) are reduced, because of a structural re- arrangement. As a matter of fact, revision phase becomes even more accurate:

Table 24. Statistics in the abstract: PT PT2.

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT2	43 min	64	57	167 sec	2806	2503	208	95

Despite some problems with complex constructions, as pointed out in the questionnaire (the text seems to be a draft at times and would require more refinement), PT2 seems to be satisfied with the final solution.

6.2. An analysis of PTs' translation processes: the newspaper article

This paragraph is based on the reconstruction processes through the analysis of professional translators' log files.

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT4	24 minutes	149	114	4 sec	3704	2827	426	451
PT3	31 minutes	105	78	17 sec	3306	2465	187	654
PT5	35 minutes	80	67	14 sec	2878	2402	103	373
PT2	41 minutes	68	59	155 sec	2859	2479	184	196
PT1	39 minutes	122	63	163 sec	4850	2506	220	124

As already showed in reference to LSs, the second translation test is based on a newspaper article.

a) PT4

Starting from PT4, who records a lower duration and processing time, the lack of initial reading does not reduce the speed, as can be seen in the Statistics, without preventing the translator from recording the highest values in the following table:

Table 25. Statistics in the article: PT PT4

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT4	31 min	105	78	4 sec	3306	2465	187	654

As reproduced in the linear view, PT4 adopts a macroplanning approach, producing few (10) larger segments, delimited by shorter pauses:

Figure 21. PT PT4's linear view in the article

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During the revision phase, PT4 reads the text only once, focusing on few lexical items (see "*rannicchato*" / *"trascorso*" / "*in compagnia*" / "*Carolina*" for 15 and 41 sec in the linear view).

b) PT3

Moving to analyse another process log file, PT3's acytivity lasts 31 minutes Despite the lower processing time (17 sec), the speed increases, (differently from the abstract), as can be seen in the Statistics:

Table 26. Statistics in the article: PT PT3

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT3	31 min	105	78	17 sec	3306	2465	187	654

It can be acknowledged that PT3 produces a higher number of segments in the article and stops the process on the following

-noun phrases: “*Carolina*” for 44 sec / *“accolto come sopravvissuto”* for 14 sec see word reference *(“sopravvissuto”) / “soccorritori”* for 11 sec / *“mezzo con*” for 18 sec / *“due giorni”* for 11 sec / *“condizioni meteo”* for 11 sec;

- the verb phrase *“riferendosi al nipote”* for 13 sec.

The professional highlights the final product, adopting the classical top down approach, refining the whole text in the revision phase. Differently from her colleagues, PT3 does not use any kinds of sources, despite being at their level with a higher degree of expertise (more years of training taking into account that her mother is an Irish mother tongue). By consequence, PT3 is the only professional translator who has found the text easy, despite the formatting problems due to the use of software which interferes with the graphic matter (preventing her from cutting and pasting.)

The linear view contains a lower number of segments (13), separated by shorter pauses:

Figure 22. PT PT3’s linear view in the article

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c) PT5

The professional who records a lower value of processing time (14 minutes), differently from the abstract, is PT5. As already pointed out for the abstract, PT5

feels under pressure before the researcher and she has tried not to think about it. The different features of this genre, as outlined in the questionnaire may have affected the lower values reported in the Statistics, without influencing the duration (35 minutes) which is similar to that one recorded in the abstract:

Table 27. Statistics in the article: PT PT5

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT5	35 min	80	67	14 sec	2878	2402	103	373

In the article, PT5 focuses on the following expressions:

"*proveniente" for* 12 sec*;* the noun phrase "*Carolina"/ "Facebook"* for 10 sec/ *"venerdi'"* for 16 sec. During the revision phase, she analyses some phrases, such as "*preoccupazione per il fatto che"* for 22 sec.

PT5 writes the first components, as the other professionals and points out the temporal reformulation and lexical choices, transforming sone expressions through the aid of Word Reference (Craven and Ernul) (see the following examples from the linear view):

"ha detto" / "ha affermato" / "erano diventate" / "si erano intensificate".

As already mentioned above, unlike PT4, PT5 has found it easy to translate these texts. In the linear view, as can be guessed from the following representation, she produces few larger segments (excluding the revision phase), divided by shorter

pauses. The revision lasts 442 sec, during which she finds more information about "*Craven",* focusing on temporal and lexical reformulation *"preoccupazione per il fatto" "detto"/ "affermato".*

Figure 23. PT PT5's linear view in the article

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d) PT1 and PT2

Last but not least, despite the similar duration and higher values of processing time. PT1 and PT2 are in opposition for the different approaches adopted. PT1's duration lasts 39 minutes and the processing time lasts 163 seconds: genre's features reduce the number of the events, increasing the value of text elimination (as reported in the Statistics) for the higher number of vocabulary elements to search for:

Table 28. Statistics in the article: PT PT1

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT1	39 minutes	122	63	163 sec	4850	2506	220	124

The value of the processing confirms translator's tendency to prioritise macro- to micro-planning.

PT1 separates the first from secondary clause and adopts a temporal reformulation replacing the verb "to have*" ("avere") with* "to be*" ("essere")* and the verb *"sospendere"* with the noun *"sospensione"*. Despite having underlined the lack of satisfaction, when she had to cut and invert to be fluent in Italian she has given a different meaning to the following expressions "at hand*" ("a portata di mano"),* "hail" *("sopravvissuto"),* "as it turned out*," ("si rivelo'")* "imaginary*" ("fantastico")*, without any sources, differently from the students who rarely use sources to grasp information about the author and the context.

Figure 24. PT PT1's linear view in the article

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The log file is full of monitoring, containing few segments, separated by few longer pauses. As a matter of fact, PT1 focuses on the following phrases:

- the noun phrases "*temperatura" for 10 sec/,* "*a portata di mano"* for 18 sec / *"droni"* for 31 sec / *"giovedi'"* for 10 sec / *"venerdi"* for 1.22 minute/ *"corsi d'acqua"* for16 sec/ *"aiuto"* for 11 sec/ *"sceriffo"* for 51 sec/ *"condizioni climatiche"* for 1.18 / *"unita'cinofile"* for 15 sec*;*
- the verb phrases "*attraversare"* for 11sec / *"non fosse"* for 11 sec / *"racconta* for 12 sec" / *"sottolineando"* for 1.22 minutes*;*
- the adjective phrase "*possibile"* for 18 sec.

PT2, in the end, records the longest duration of 41 minutes and the processing time of 155 sec. This does not prevent the translator from adopting a microplanning approach:

Table 29. Statistics in the article: PT PT2

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT2	41 minutes	68	59	155 sec	2859	2479	184	196

The translator produces more than 18 segments, emboding a single- double phrases isolated from the whole production and recording longer pauses (more than 1 minute:

Figure 25. PT PT2's linear view in the article

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This professional focuses on the following verb phrases and expressions, such as: "*che si era smarrito*" / "*dato per disperso*" on the noun phrase "*contea"/ on the verb "ordinato*" transformed into *"dato ordine"/ "sospendere ricerche"/ "non inoltrarsi nella zona".*

The expression "responding to reports" ("*rispondere alle notizie*") has been completed after having grasped the whole sense, while the student focuses on the expressions incomplete during the revision phase. The translator selects the microplanning dividing the subject+ verb+ object from the rest of the clause.

During the revision, PT2 pays attention to the following lexical items:

"2 giorni" in the title;

the expression *"redivivo"* replaced with *"sopravvissuto"/* "at hand*" ("a portata di mano")* for 47 sec 7 *"utile" for 28 sec/ "avverano"* for 10 sec/.

The process highlights the context and the style (see the temporal reformulation *"fossero adatti" "diedero ordine" se l'è cavata")*, as can be seen in the following

- noun phrases *"Carolina" for* 35 sec *"soccorritori"* for 45 sec / *"amico" for* 12 sec/ *"miracoli"* for 10 sec/ *"Emul"* for 14 sec/ *"le condizioni" for 12 sec/" causa" for* 17 sec" / *"cinofile"* for 20 sec"/ *"autorita'"* for 13 sec/ *"acqua alta"* for 10 sec*;*

- verb phrases *"inizio' la ricerca*" for 14 sec/ *"si era scoperto"* for 56 sec/ *"fermare ricerche"* for 11 sec*".*

Summarizing briefly, we can deduce that a part from PT2 and PT3, who still adopt the microplanning, the other professional translators adopt the macroplanning, trying to grasp the meaning from the whole.

Chapter 7
Comparing processes

7.1. A comparison among LSs in the abstract

From the reconstruction of linear view and the data contained in the statistics tool we can deduce that LS2 differentiates from the other students for the macroplanning adopted. As can be shown in her log file, LS2 is the only student who works with long sentences reading aloud while translating: she produces less segments containing more translation units.

As can be seen in the following table:

Table 30. A comparison among the LS in the abstract

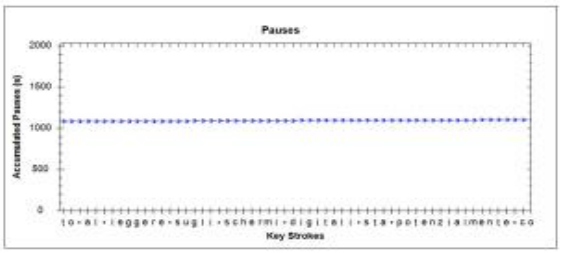
Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS2	34.35 minutes	98	81	32 sec	3397	2827	470	100
LS1	34.34 minutes	89	69	58 sec	3061	2388	239	434
LS3	33 minutes	88	76.32	12 sec	2952	2562	325	65
LS4	27 minutes	87	82	67 sec	2411	2273	103	35
LS5	50 minutes	57	46	13 sec	2908	2374	280	254

Despite the similar duration, LS2 records the highest values among LSs, excluding miscellaneous (influenced by the microplanning). However, the lack of initial reading related to the lower processing time of 30 seconds forces the translator to interrupt the process on single translation units, as students who adopt the microplanning.

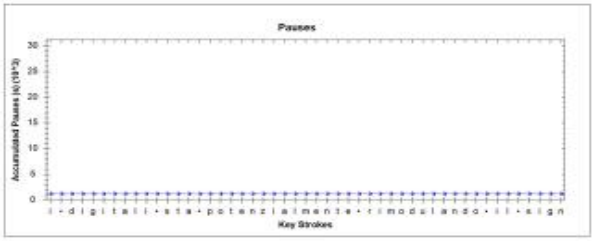
In the following comparison, obtained though the pause plot (see chapter 3) it emerges that both of them focus on the same mixed segment: LS2 stops the process for 12 sec and LS4 for 16 sec on the same noun phrase "*schemi digitali"*.

Figure 26. A comparison between LS LS2 and LS LS4 pause plot in the abstract

Marila



Valeria

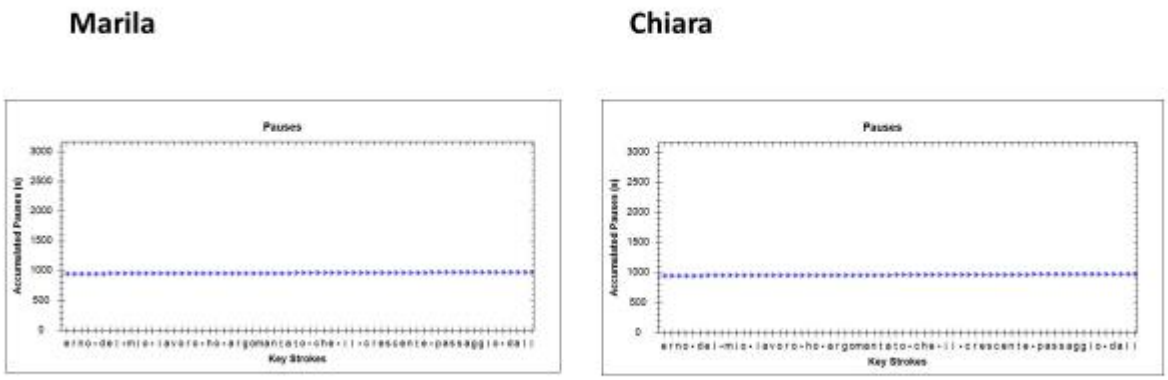


Despite the similar duration, LS3 adopts a different approach from the newspaper article. The log file is full of expressions which remain unchanged.

The data included in the statistical tool show how the microplanning and the lower processing time reduces the speed and increases text production and elimination.

As LS2, she admits to find it difficult to deal with some constructions which create problems also to the other students, as can be seen in the following pause plot:

Figure 27. A comparison between LS LS2 and LS LS3 pause plot in the abstract



As a matter of fact, despite the different approach, the most interesting aspect concerns the linearity when focusing on this mixed segment ("*crescente passaggio*") producing a pause of 16 sec on the same construction.

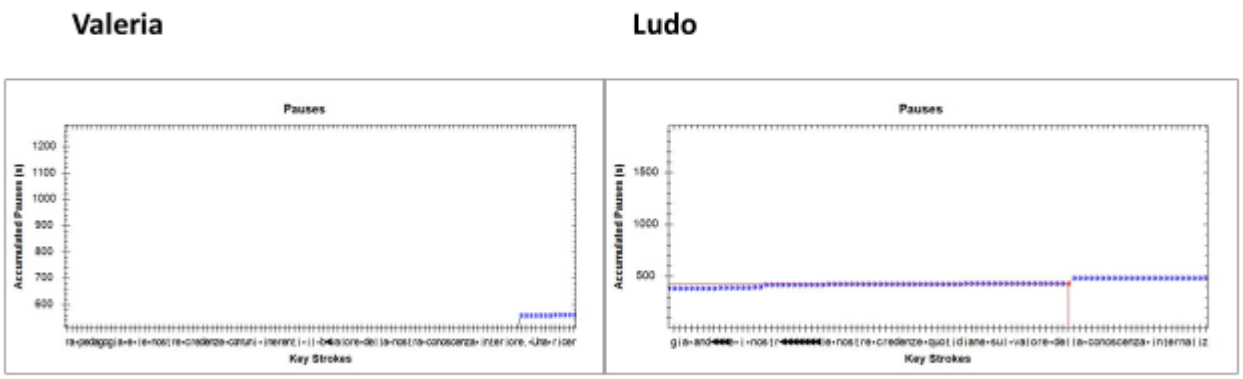
Moving on with the comparison, LS5 and LS4's processes tend to be similar in the different genres, recording the lowest values. The log files contain a huge number of segments, containing single units, delimited by longer pauses. LS4 differentiates from LS5 for the longer processing time which increases the speed. LS5, on the other hand, differs for the highest duration: the lack of initial reading reduces the speed, while the philosophical background, as admitted in the questionnaire, increases the number of text elimination and miscellaneous, making the process more extensive. Substantially, the main difference does not lie on the

duration but on the way the time is spent: as a matter of fact, despite the longest processing time LS1 adopts the microplanning, producing a higher number of segments, divided by longer pauses. The tendency to focus on single lexical items is clear in the lower speed and in the higher miscellaneous events. Last but not least, LS1 tends to split the discourse as the students who adopt the microplanning.

Despite the longest processing time. she reduces the speed on single constructions, recording higher number of miscellaneous, as LS5 who makes the process more extensive.

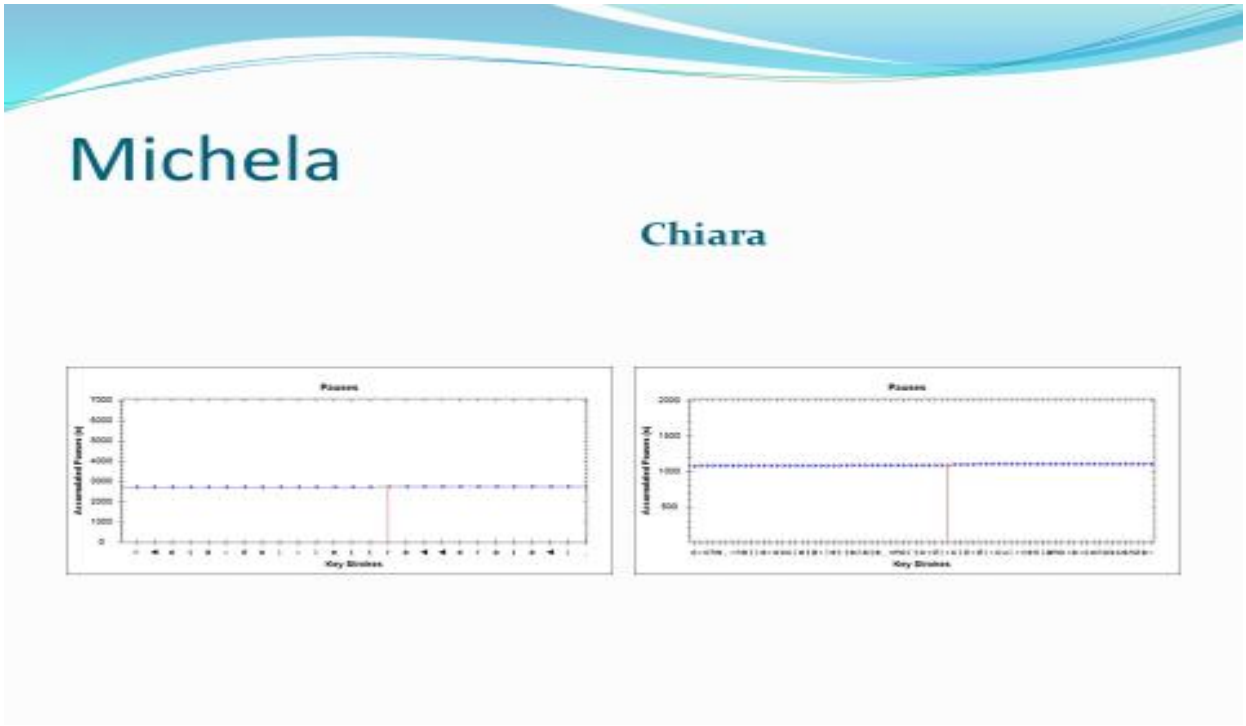
From the pause plot comparison we can deduce that the students who adopt the microplanning show lexical uncertainty on the translation of this noun phrase: *"conoscenza interiore*" LS4 for 12 sec and LS1 for 24 sec.

Figure 28. A comparison between LS LS4 and LS LS1 pause plot in the abstract



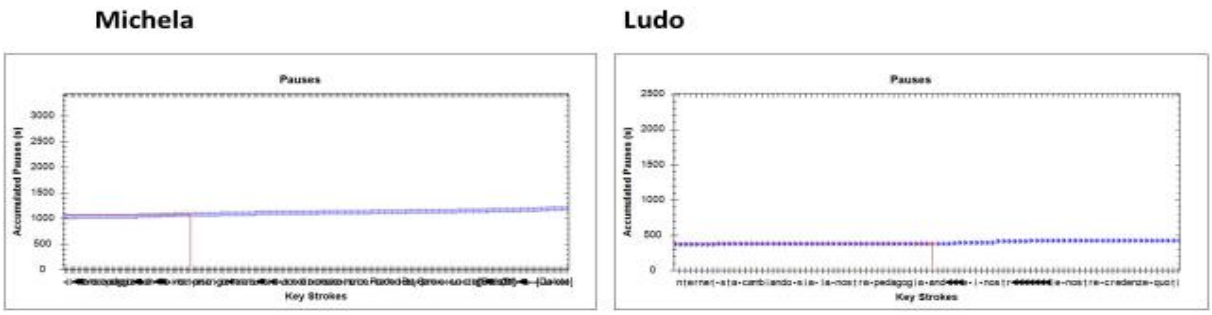
In the next linear view both focus on the same noun phrase "*società dei letterati"* for 10 and 52 sec.

Figure 29. A comparison between LS LS5 and LS LS3 pause plot in the abstract.



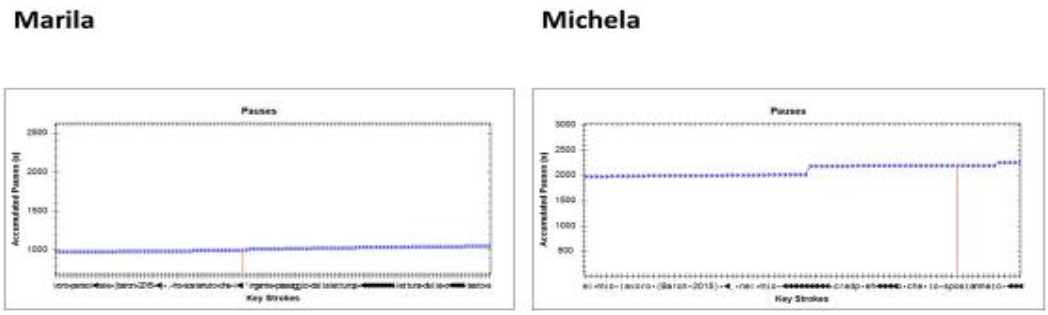
In the following graphic representation, LS1 stops the process for 24 sec, while LS5 stops the process for 16 sec, on the same noun phrase "*pedagogia*".

Figure 30. A comparison between LS LS5 and LS LS1 pause plot in the abstract



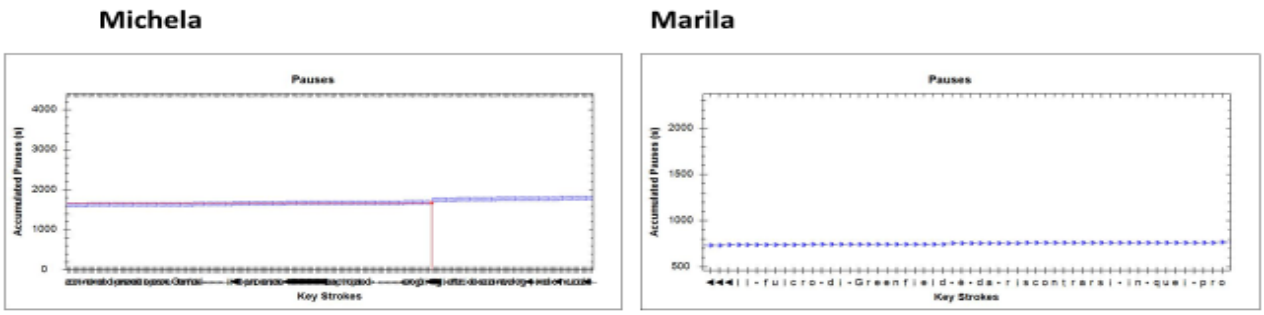
On the other hand, in the comparison between two students who adopt a different approach, a possible deduction can be that LS5 divides the process in more segments (microplanning) opposing to the macroplanning in LS2: LS2 stops the process for 10 sec and LS5 for 1. 13 minutes, on the noun phrase "*Baron"*

Figure 31. A comparison between LS LS2 and LS LS5 pause plot in the abstract



The same is in the following pause plot, where LS2 stops the process for 14 sec while LS5 for 2, 50 on the noun phrase “Greenfield focus”.

Figure 32. A comparison between LS LS5 and LS LS2 pause plot in the abstract



7.2. A comparison among the LSs in the article

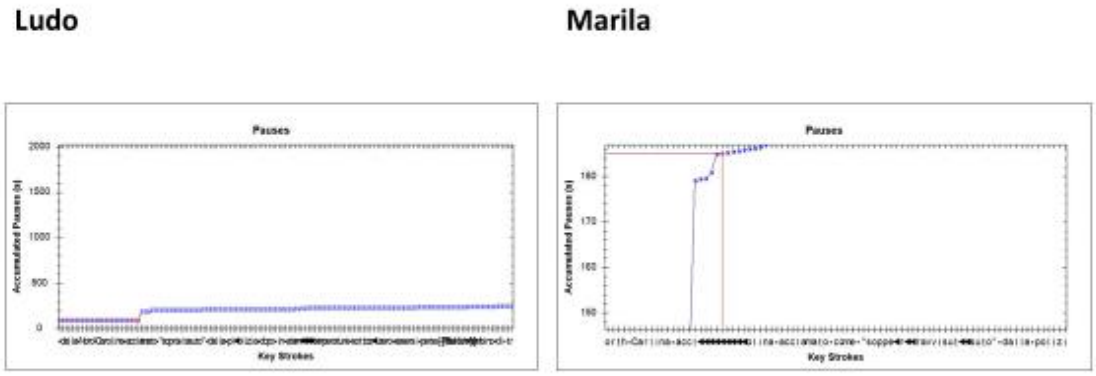
Starting from the students who adopt the microplanning, can be deduced that, despite the highest duration and processing time, LS4 records the lowest values. Her log file contains the highest number of segments, including single translation units.

Despite the longer processing time, the student who adopts the macroplanning (see LS2), tends to produce more segments and lower values than in the abstract, as a closer inspection of the following table shows. The different values can be related to the type of genre which requires a more careful vocabulary search.

Table 32. A comparison among the LSs in the article

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS4	50 minutes	47	42	87 sec	2387	2127	165	95
LS2	31 minutes	92	78	51 sec	2939	2501	335	103
LS3	29 minutes	101	85	14 sec	3021	2544	376	101
LS1	28 minutes	108	87	10 sec	3075	2460	293	322
LS5	24 minutes	92	86	37 sec	2234	2083	124	27

Figure 33. A comparison between LS1 and LS2 in the article



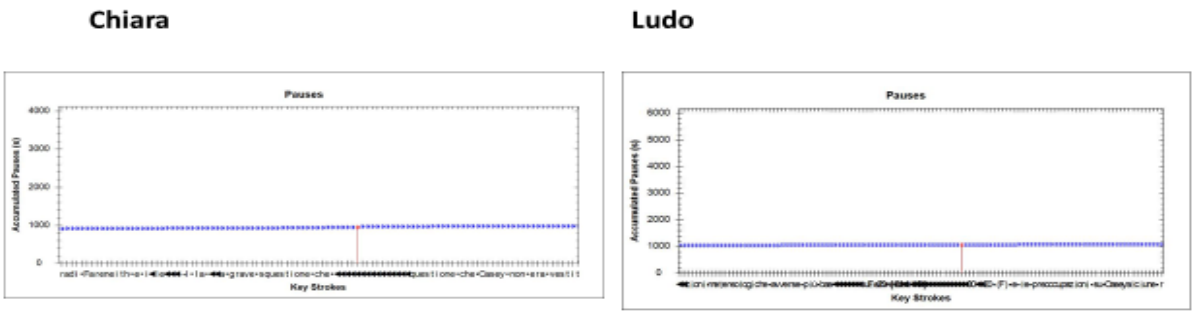
It can be acknowledged that, despite the similar approach, LS1 continues to produce pauses longer than one minute on the noun phrase ("*Carolina")*.

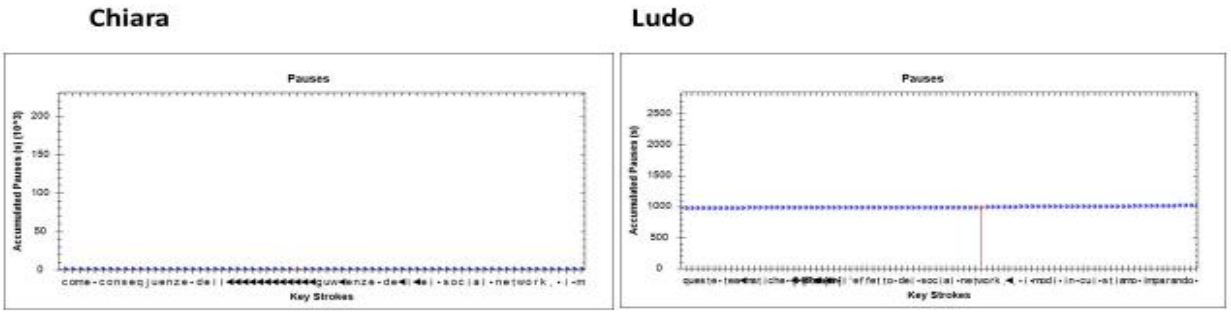
Moving on with LS3 and LS1, can be assumed that the approach changes. The students record higher values in the statistical tool (see the speed, the text

production and the text elimination) and despite the shorter processing time and the macroplanning adopted, the linear view embodies more segments

LS3 and LS1, in the two following graphs, stop the process on the following noun phrase recording a similar pause of 15/ 30seconds on the same constructions ("*preoccupazioni.* social networks*").*

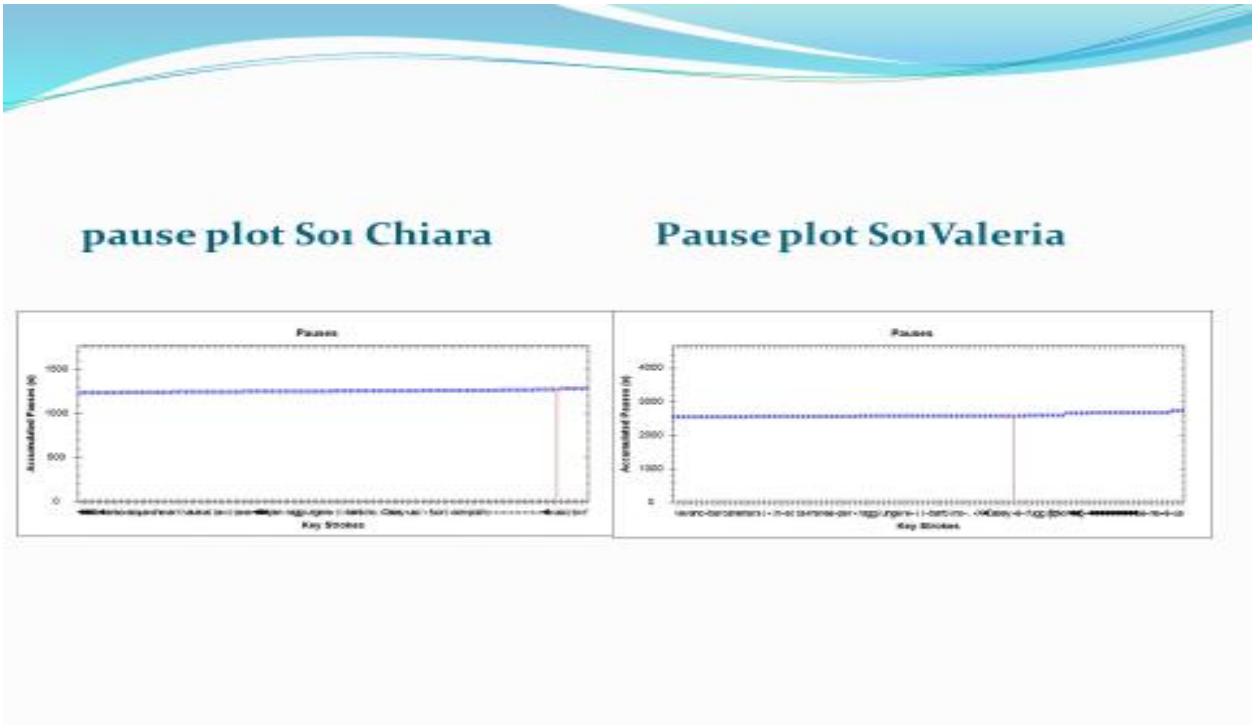
Figure 34-35. A comparison between LS LS3 and LS LS1 pause plot in the article





From the comparison of these two students who adopt a different approach it emerges that both of them focus on the same verb phrase (escaped with): while LS4 stops the process for 1 minute, LS3 records a lower pause.

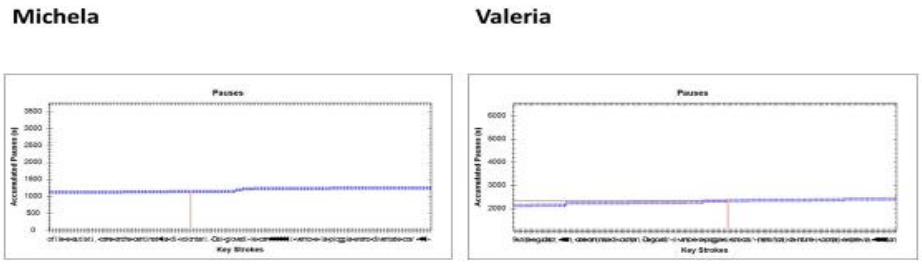
Figure 36. A comparison between LS LS3 and LS LS4 pause plot in the article



Last but not least, the typological features of the genre increase the speed in LS5's log file. The shortest processing time and duration are in line with the lowest values recorded in the statistics. The log file is characterised by the occurrence a huge number of segments (see table n) with single units.

As can be seen in the following graphic representation, whereboth of the students who adopt microplanning produce a pause of \14 than 40 sec on the verb phrase ("*equipaggiato/*to be dressed for*")*.

Figure 37. A comparison between LS4 and LS5 in the article



7.3. A comparison among the PTs in the abstract

Starting from the professionals who adopt macroplanning, we can deduce that:

PT5 records the lowest number of segments which include complex articulated sentences. The higher processing time increases the speed and the events, differently from the article. PT5 writes the title, after having grasped the whole sense.

As can be seen from the following table, which contains the statistical tool, PT5 records higher values than PT2 who adopts the microplanning.

Table 32. A comparison among the PTs in the abstract.

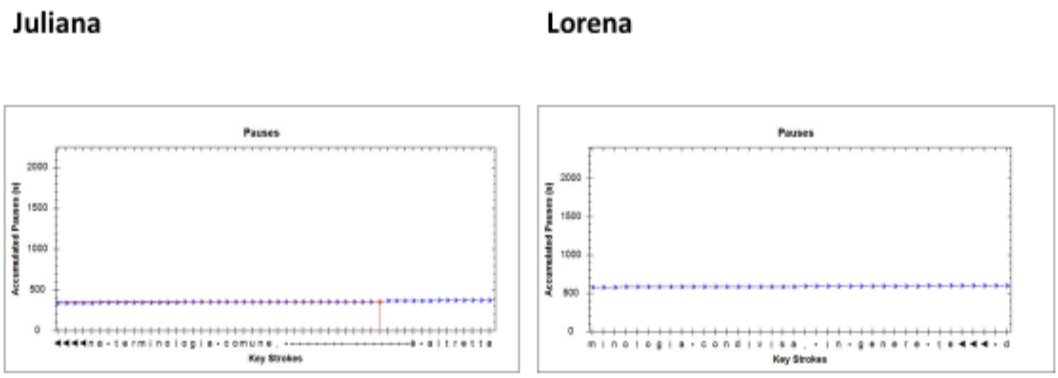
Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT2	43 minutes	64	57	167 sec	2806	2503	208	95
PT1	36 minutes	192	170	208 sec	4893	2615	199	2079
PT3	42 minutes	89	64	30 sec	3859	2784	376	699
PT5	32 minutes	99	80	90 sec	3222	2632	216	374
PT4	22minutes	137	117	4 sec	3067	2619	253	195

Moving on to another professional who adopts the macroplanning, can be assumed that PT4 records more segments than in the article. The approach is similar to that one adopted in the article (see the lowest values of processing time and duration). As shown in the following table, Julians records lower values than in the article and higher events than PT5, who produces a higher number of segments (see table n.

The professional who records the highest values is PT1: the lower text elimination is related to the top down approach which prevents the translator from focusing on single lexical items, while the lowest number of segments is connected with the macroplanning adopted.

Moreover, PT3 opposes to PT5 for the highest number of segments, differently from the article. Despite the highest duration, the lower processing time reduces the speed and she obviously records less events than PT1 who adopts the macroplanning.

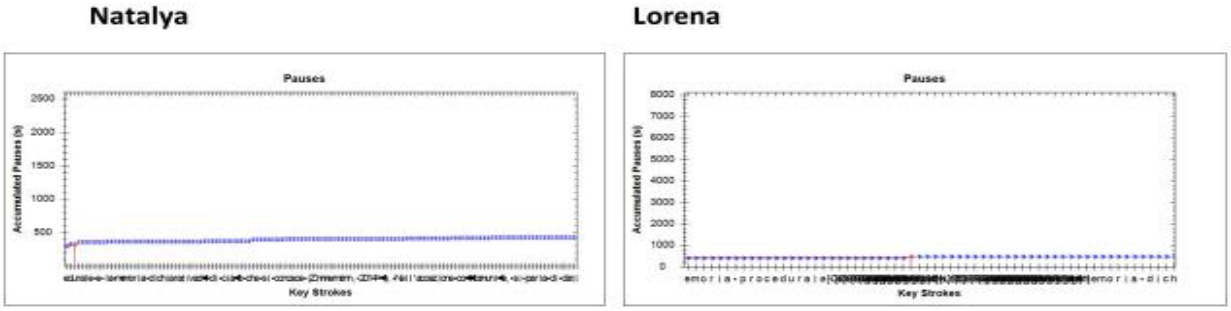
Figure 38. A comparison between PT PT4 and PT PT1 pause plot in the abstract



The similar approach is manifested in the same pause duration of 15 and 20 sec. on the same noun phrase *"terminologia condivisa*" The data collected assess a more extensive approach: PT2 records higher values than PT5 who adopts the macroplanning.

Last but not least, despite the highest processing time and the similar duration recorded in all professionals, PT2 adopts the microplanning, producing the lowest values and the highest number of segments. Text production increasing is related to the structure re- arrangements attempts.

Figure 39. A comparison between PT PT2 and PT PT1 pause plot in the abstract



Despite the different approach, PT1 stops at the 442 sec for 23 and PT2 for 12 sec on the same noun phrase, "*memoria procedurale*" trying to fit the best solution for the context, as required by the genre.

7.4. A comparison among the PTSs in the article

Despite the lowest duration and the lower processing time, PT4 records the highest values among professionals, producing a lower number of segments (4/5) containing higher complex sentences, related with the macroplanning adopted.

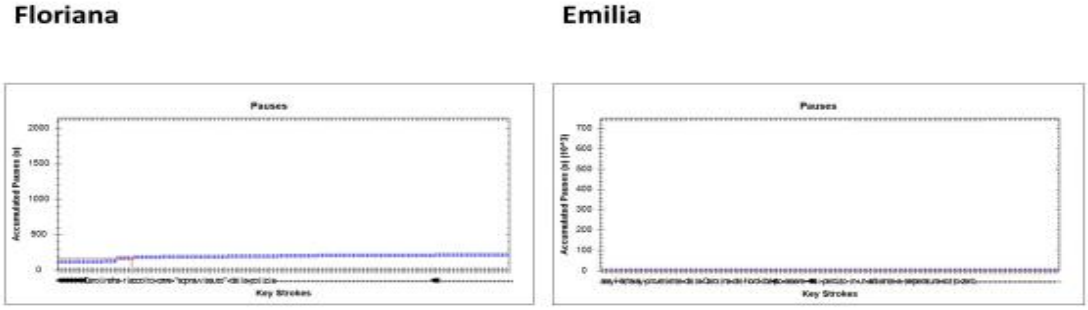
The process seems to be more in line with PT5, as can be seen from the statistical tool. The only difference can be found in the data which tends to be lower in PT5, excluding the miscellaneous, probably forthe process more extensive.

Table 33. A comparison among the PTs in the article

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT2	41 minutes	68	59	155 sec	2859	2479	184	196
PT1	39 minutes	122	63	163 sec	4850	2506	220	124
PT3	31 minutes	105	78	17 sec	3306	2465	187	654
PT5	35 minutes	80	67	14 sec	2878	2402	103	373
PT4	24 minutes	149	114	4 sec	3704	2827	426	451

The macroplanning adopted in PT5 is represented by the shorter pause on the noun phrase of 17 sec, which opposes to the longer pause recorded by PT2 who adopts the microplanning and produces a longer pause of 35 sec on the expression ("*attraversare acqua alta")*.

Figure 40. A comparison between PT PT3 and PT PT5 pause plot in the article



A further example is shown in the following pause plot where PT3 records a higher pause of 42 sec than PT5, who stops the process for 12 sec on the noun phrase "*Carolina"*.

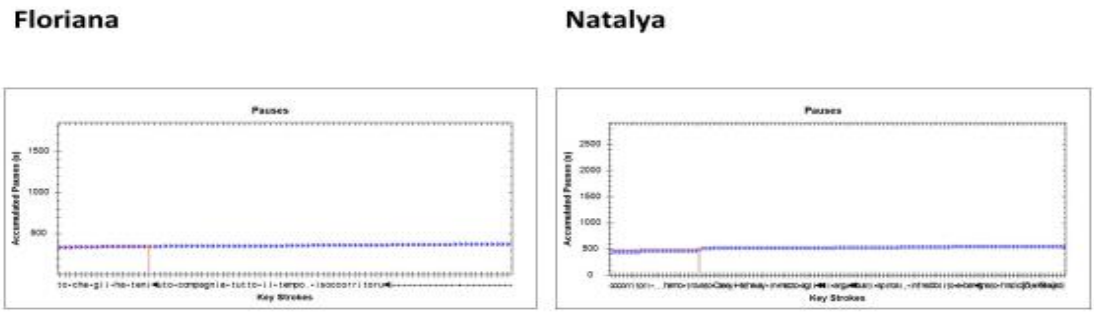
Moving on to PT3, another focal point concerns the processing time: in spite of producing the shorter processing time and the lower duration, PT3 records higher speed and events than in the abstract: the values are supposed to be more in line with the macroplanning. Differently, from the abstract, and despite the lack of sources adopted, PT3's log file contains few segments with complex articulated sentences. This professional records a lower pause (15 sec) than PT2 (24 sec), as can be seen in the following pause plot representation.

They oppose for the approach adopted: PT2 adopts the microplanning, producing more segments, focusing on single phrases and longer pauses.

The longer processing time does not prevent PT2 from stopping the process to rearrange the structure and recording the lowest values, the miscellaneous excluded,

which are lower in PT1. The professionals (a part from PT3) prioritise the background. In the following graph the professionals focus on the noun phrase "*soccorritori"* for 15/20 sec.

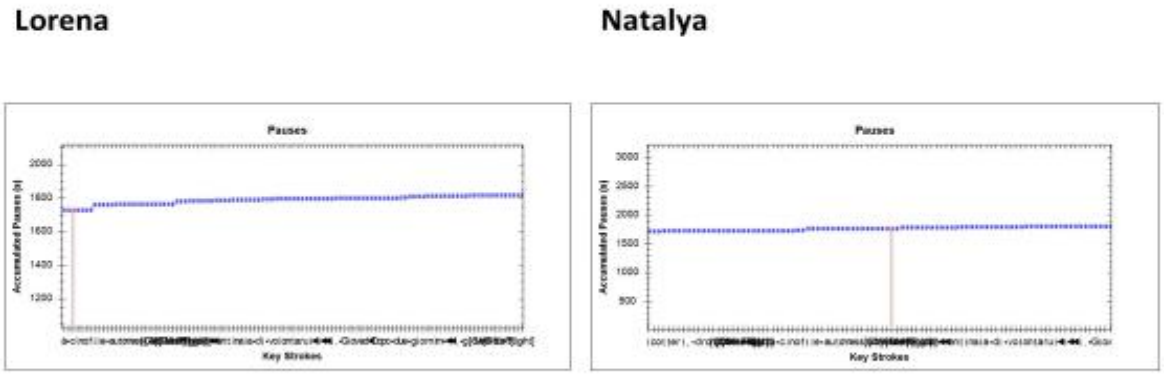
Figure 41. A comparison between PT PT3 and PT PT2 pause plot in the article



As a matter of fact, PT1 and PT2 record a similar pause of 23 and 11 seconds on the noun phrase "drone*"* to search for background information.

The same tendency is confirmed in the following pause plot:

Figure 42. A comparison between PT PT2 and PT PT1 pause plot in the article



Despite the different approach, the professionals show uncertainties on these lexical items stopping the process for 15 and 20 sec.

PT1's logfile is more in line with PT4 for the macroplanning adopted, related with the highest processing time and the lowest number of segments. The data reported in the statistical tool tend to be higher, excluding the text production per minute and the miscellaneous events, (being related to the macroplanning) Differently from other genres, PT1 stops the process to search for lexical vocabulary, as can be shown from the higher value of text elimination, which testify the tendency to stop the process.

Chapter 8

Comparing Professional Translators'processes and Language Students' Processes

8.1. A comparison between PTs and LSs' log files: the abstract

Starting from PT1, the professional who divides the text in macro units and selects the macroplanning, it would be mantained that she differentiates from the other students for the higher monitoring, as shown in the linear view (see the Alt control activities).

Despite the macroplanning and similar duration in LS2, it is clear that the lower processing time, adopted by the student, facilitates the focus on single constructions, increasing the keyboard activities in particular the text production and the text elimination.

As a matter of fact, the students who adopt the microplanning (see LS3 and LS1), produce higher text elimination:

Table 34. Statistics: a comparison between PT PT1 and LSs in the abstract

Name	Total time	User events per min	Text production per min	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT1	36 min	192	170	208 sec	4893	2615	199	*2079*
LS2	34 min	98	81	32 sec	3397	2827	470	100
LS3	33 min	88	76	12 sec	2952	*2562*	325	65
LS1	34 min	89	69	58 sec	3061	2388	239	434
LS4	27 min	87	82	67	2411	2273	103	35
LS5	50 min	57	46	13	2908	2374	280	254

Moving on to another professional, the debate is that, contrary to the presumable expectations, the lower processing time does not prevent the PT PT4 from adopting macroplanning. Differently from the students (see LS2's values in the statistics), the PT reduces the number of total user events, including text production and elimination. This result can be influenced by a top - down approach, which affects the keyboard activities on single constructions. This aspect motivates the higher miscellaneous in the students who adopt microplanning are in line with a more extensive process.

Table 35. Statistics: a comparison between PT PT4 and LSs in the abstract

Name	**Total time**	**User events per min**	**Text production per min**	**Processing time by start**	**Total user events**	**Text production**	**Text elimination**	**Miscellaneous events**
PT4	27 min	137	117	4 sec	3067	2619	253	195
LS2	34 min	98	81	32 sec	3397	2827	470	100
LS3	33 min	88	76	12 sec	2952	*2562*	325	65
LS1	34 min	89	69	58 sec	3061	2388	239	434
LS4	27 min	87	82	67	2411	2273	103	35
LS5	50 min	57	46	13	2908	2374	280	254

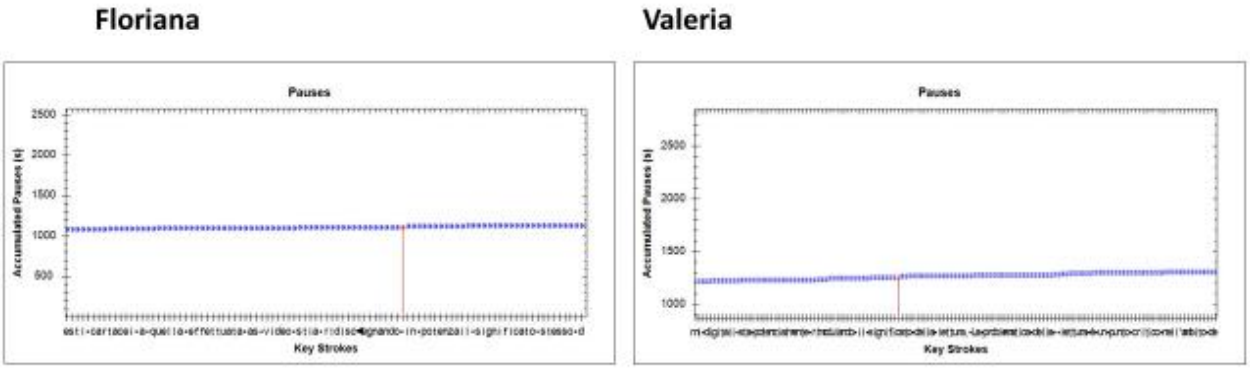
Moving the point of discussion to a professional who adopts a different approach, microplanning, like PT3, the conclusion would be that, despite a similar duration, the professional PT3 differentiates from the student LS2 who adopts macroplanning for the following reason: the type of process adopted by the student (the macroplanning) confirms the higher values (see the speed) in LS2 and events (see the miscellaneous) in PT3. Last but not least, the lack of initial reading and the lower values of processing time affect the speed reduction.

Table 36. Statistics: a comparison between PT PT3 and LSs in the abstract

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT3	42	89	64	4 sec	3859	2784	376	699
LS2	34 min	98	81	32 sec	3397	2827	470	100
LS3	33min	88	76	12 sec	2952	*2562*	325	65
LS1	34min	89	69	58 sec	3061	2388	239	434
LS4	27	87	82	67	2411	2273	103	35
LS5	50	57	46	13	2908	2374	280	254

Similarly, other students who adopt the microplanning, as PT3 record a lower speed (see LS3, LS1, LS4 and LS5). These assumptions are confirmed in the pause plot representation, where LS4 and PT3 stop the process on the same construction the verb phrase *"ridisegnando*" and the noun phrase "*significato"* for 15 and 11 sec:

Figure 43. A comparison between PT PT3 and LS LS4 pause plot in the abstract



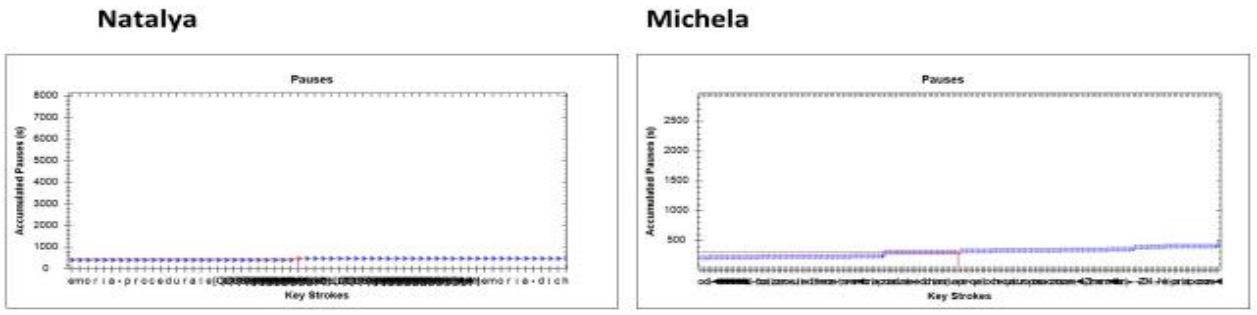
The most striking observation to emerge from this comparison is the correlation between the student and then professional who focus on the same construction.

The same is for PT2, another professional who adopts the microplanning: despite the higher processing time and the similar duration, PT2 produces lower values than the post graduate language students, as reported in the following statistics (with the exception of LS4 and LS3 miscellaneous, and LS5's speed). As this case clearly demonstrates., the lower values of LS can be influenced by the microplanning adopted.

Table 37. A comparison between PT PT2 and LSs in the abstract.

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT2	43 min	64	57	167	2806	2503	208	95
LS2	34 min	98	81	32 sec	3397	2827	470	100
LS3	33min	88	76	12 sec	2952	*2562*	325	65
LS1	34min	89	69	58 sec	3061	2388	239	434
LS4	27 min	87	82	67 sec	2411	2273	103	35
LS5	50 min	57	46	13 sec	2908	2374	280	254

Figure 44. A comparison between PT PT2 and LS LS5 pause plot in the abstract



This pause plot underlines a similar pause of 23 and 26 sec, recorded at the same time, on the noun phrase *"memoria procedurale*" by two members of different categories who adopt a similar approach (the microplanning).

Moving on to another professional, can be assumed that PT5, who adopts a macroplanning approach, produces higher events and processing time, as shown in the following table:

Table 38. A comparison between PT PT5 and LSs in the abstract

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
PT5 PT	32 min	99	80	90 sec	3222	2632	216	374
LS1	34.34 min	89	69	58 sec	3061	2388	239	434
LS3	33 min	88	76.32	12 sec	2952	2562	325	65
LS4	27 min	87	82	67 sec	2411	2273	103	35
LS5	50 min	57	46	13 sec	2908	2374	280	254
PT5 PT	32 min	99	80	90 sec	3222	2632	216	374
LS2	34.35 min	98	81	32 sec	3397	2827	470	100

8.2. A comparison between PTs and LSs' processes: the newspaper article

Starting from the professionals PT4 and PT5, who adopt the same approach, recording a lower processing time and similar duration, can be observed that the professionals differentiate from the students for the following features.

Table 39. A comparison between PTs and LSs in the newspaper article.

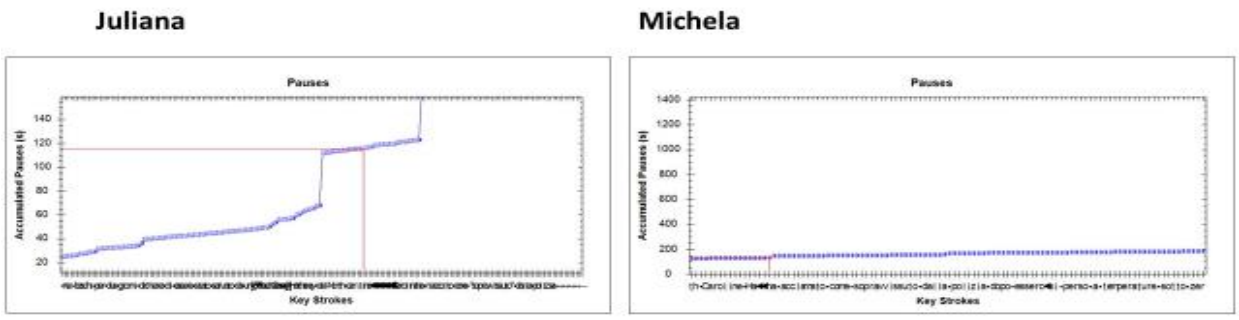
Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS4	50 minutes	47	42	87 sec	2387	2127	165	95
LS2	31 minutes	92	78	51 sec	2939	2501	335	103
LS3	29 minutes	101	85	14 sec	3021	2544	376	101
LS1	28 minutes	108	87	10 sec	3075	2460	293	322
LS5	24 minutes	92	86	37 sec	2234	2083	124	27
PT5 PT	35 minutes	80	67	14 sec	2878	2404	103	373
PT4 PT	31 minutes	105	78	4 sec	3306	2465	187	654

PT5 produces lower values than the students who choose the macroplanning, and higher values than the students who adopt the microplanning, a part from the miscellaneous, which outline the translator's tendency to re- organise the process.

PT4, on the other hand, records the highest values, excluding text production and elimination which are higher in the students whose process is full of lexical uncertainties. From the following pause plot, an opposition is brought up between

the professional and student who adopt a different approach and stop the process on the following noun phrase (for 41 and 15 sec):

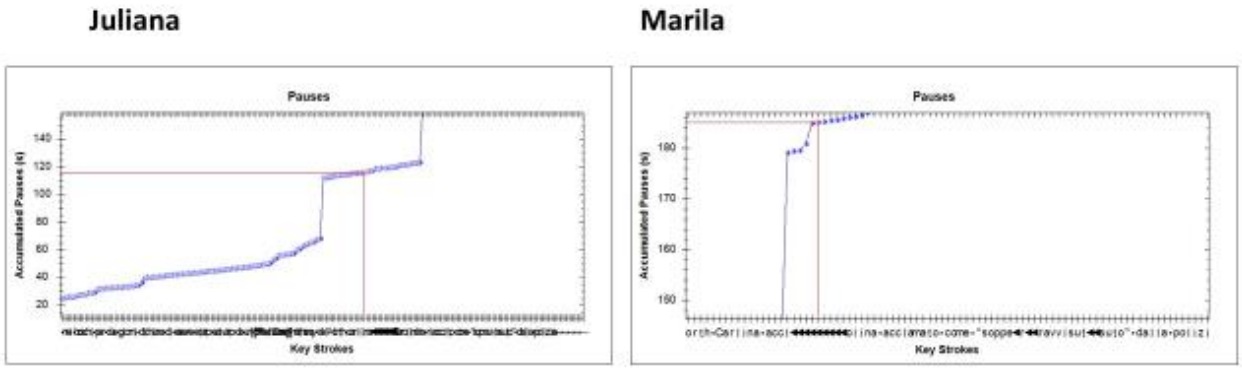
Figure 45. A comparison between PT PT4 and LS LS5 pause plot in the article



The lack of linearity in PT4 symbolises the higher number of miscellaneous, as outlined in the statistics.

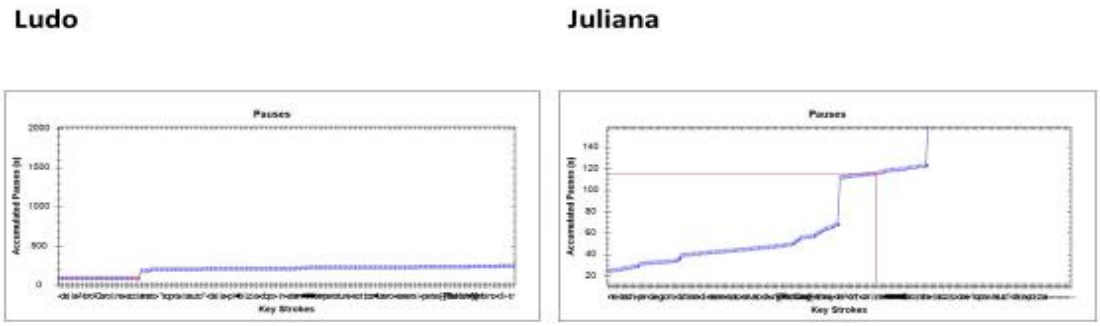
In the following representation, the student and the professional who adopt a similar approach, split the discourse on the previous construction for 10 and 20 sec:

Figure 46. A comparison between PT PT4 and LS LS2 pause plot in the article



As already stated with PT5, LS1's pause is longer than one minute, differently from the professional who records a lower pause, on the construction "*sopravvissuto"*:

Figure 47. A comparison between LS LS1 and PT PT4 pause plot in the article



Moving on to another professional, can be acknowledged that PT3 is more in line with the students. This could lead to the production of shorter processing time than the students, who adopt the microplanning. Despite recording higher values than the ones reported in the abstract, can be a noticed a decrease in values, in the professional, compared to students.

Table 40. A comparison between PT PT3 and LSs in the article

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS4	50 minutes	47	42	87 sec	2387	2127	165	95
LS2	31 minutes	92	78	51 sec	2939	2501	335	103
LS3	29 minutes	101	85	14 sec	3021	2544	376	101
LS1	28 minutes	108	87	10 sec	3075	2460	293	322
LS5	24 minutes	92	86	37 sec	2234	2083	124	27
PT3	31	105	78	17 sec	3306	2465	187	654

As can be seen from the data, which are set out in the 2 following pause plots, the professional translator records a higher pause of more than 50 seconds, while the post graduate language students LS5 and LS3 stop the process for 15 / 13 sec on the same noun phrase "*Carolina"*:

Figure 48. A comparison between PT PT3 and LS LS5 pause plot in the article

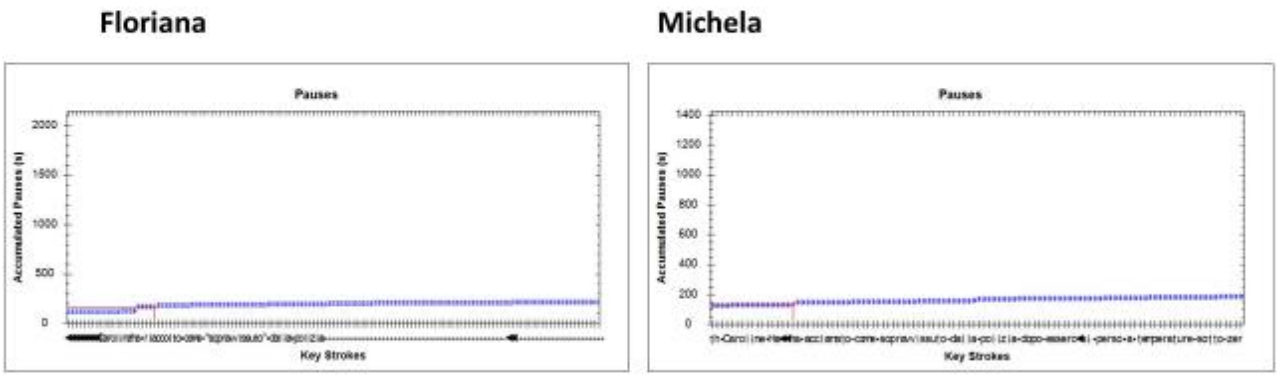
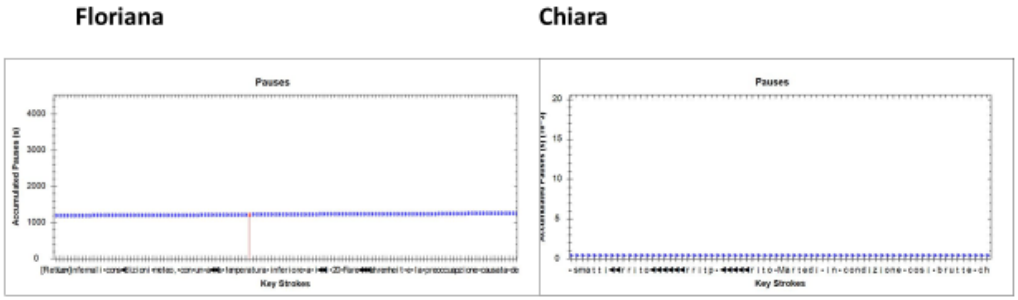
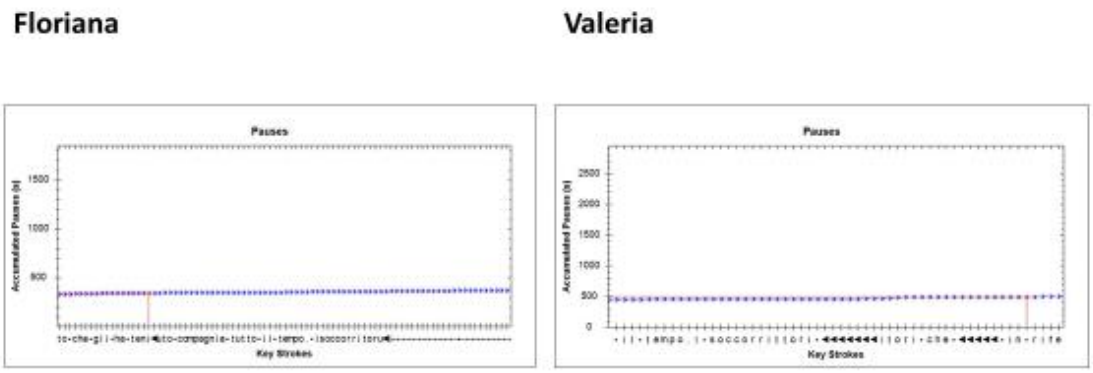


Figure 49. A comparison between PT PT3 and LS LS3 plot in the article



On the contrary, the student LS4 records a longer pause (more than 1 minute) on the same noun phrase: "*soccorritori"* (on the 500 sec), differently from the professional who stops the process for 50 sec.

Figure 50. A comparison between PT PT3 and LS LS4 pause plot in the article



Moving on to another professional translator, is evident that the longest processing time in PT1 affects the macroplanning.

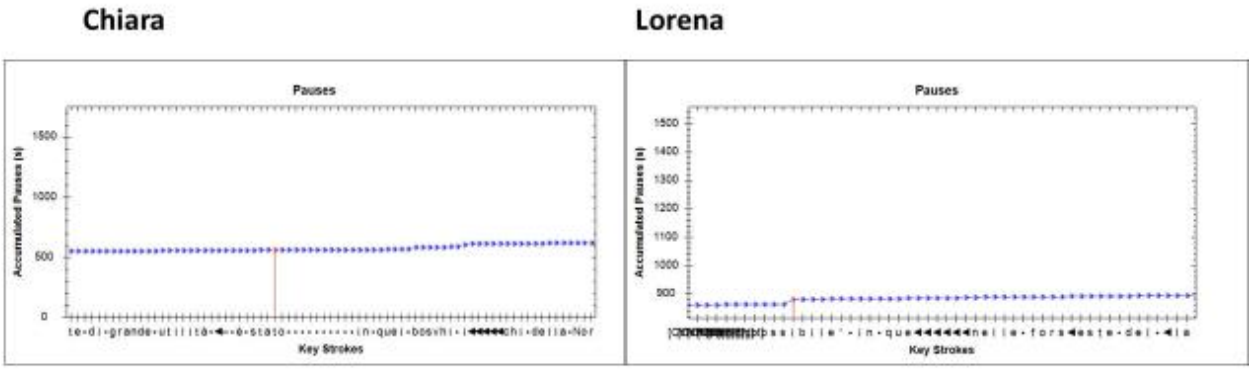
Table 41. A comparison between PT PT1 and LSs in the article

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS4	50 minutes	47	42	87 sec	2387	2127	165	95
LS2	31 min	92	78	51 sec	2939	2501	335	103
LS3	29 min	101	85	14 sec	3021	2544	376	101
LS1	28 min	108	87	10 sec	3075	2460	293	322
LS5	24 min	92	86	37 sec	2234	2083	124	27
PT1	39 min	122	63	163 sec	4850	2506	220	124

All in all, despite some differences concerning other variables outlined in the table, the post graduate language students who adopt a macroplanning approach record higher values than the professionals

From the comparison between LSs and PTs who adopt the macroplanning, can be assumed that:

Figure 51. A comparison between LS LS3 and PT PT1 pause plot in the article

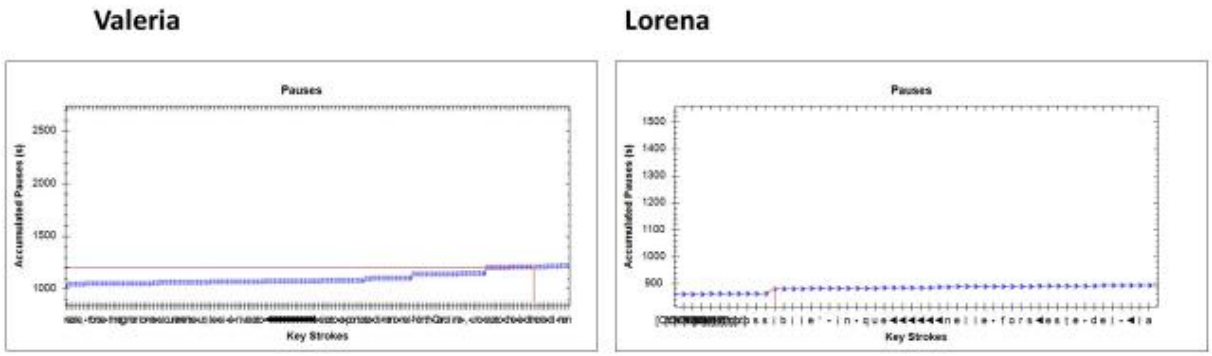


Both of them stop the process, showing uncertainties when translating the phrasal verb (*"*at hand*")*. But while the students goes on and does not complete this part, trying to grasp the meaning from the context, the professional solves her problem immediately. The same approach adopted by the student and the professional influences the pause length duration (of 24 and 18 seconds). On the other hand, when the approach is different, the rising of the curve in LS4 opposes to the linearity of professional, who does not focus on single lexical items.

PT1 stops the process for 28 sec, while LS4's pause lasts 10 sec, on the prepositional phrase ("*dove vivono").*

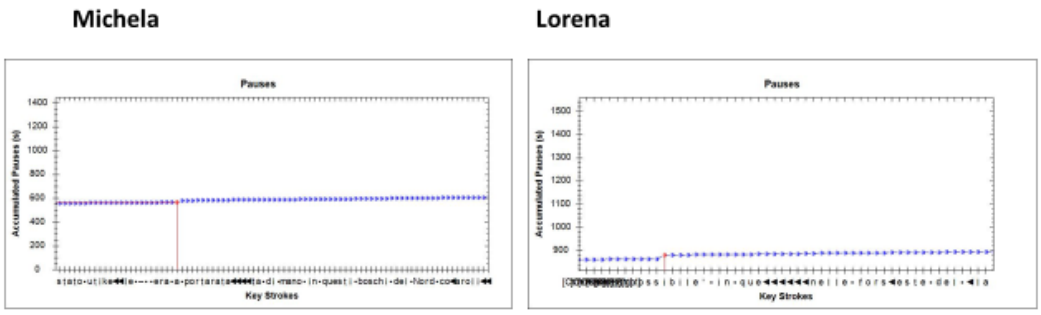
The same is for another construction on which the professional and the student pay attention to:(the construction "at hand").

Figure 52. A comparison between LS LS4 and PT PT1 pause plot in the article



While the professional is more linear, the student comes back and deletes: LS4 stops the process for 28 sec and PT1 for 18 sec.

Figure 53. A comparison between LS LS5 and PT PT1 pause plot in the article



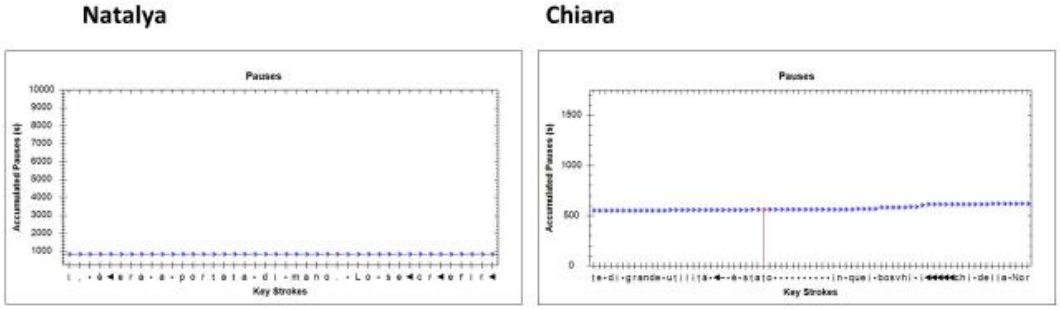
PT1 stops the process for 18 sec and LS5 for 15 sec.

Last but not least, another step includes the reconstruction of PT2's process. It must be outlined that that despite the higher values of processing time, PT2 adopts a microplanning strategy and records fewer events than the students who adopt macroplanning. As can be seen from the miscellaneous events, her process is more extensive because the professional stops the process to rearrange the structure.

Table 42. A comparison between PT PT2 and LSs in the article

Name	Total time	User events per minute	Text production per minute	Processing time by start	Total user events	Text production	Text elimination	Miscellaneous events
LS4	50 minutes	47	42	87 sec	2387	2127	165	95
LS2	31 minutes	92	78	51 sec	2939	2501	335	103
LS3	29 minutes	101	85	14 sec	3021	2544	376	101
LS1	28 minutes	108	87	10 sec	3075	2460	293	322
PT2	41 minutes	68	59	155 sec	2859	2479	184	196
LS5	24 minutes	92	86	37 sec	2234	2083	124	27

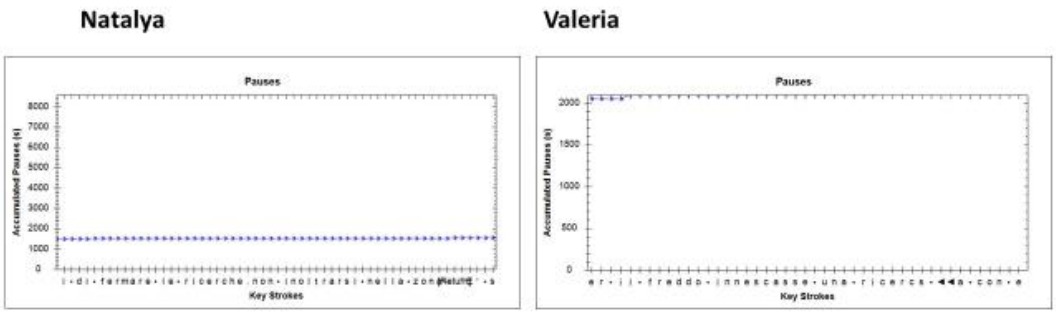
Figure 54. A comparison between PT PT2 and LS LS3 pause plot in the article



LS3 stops the process for 14 sec, differently from the professional who stops analyses this construction "at hand*"* during the revision.

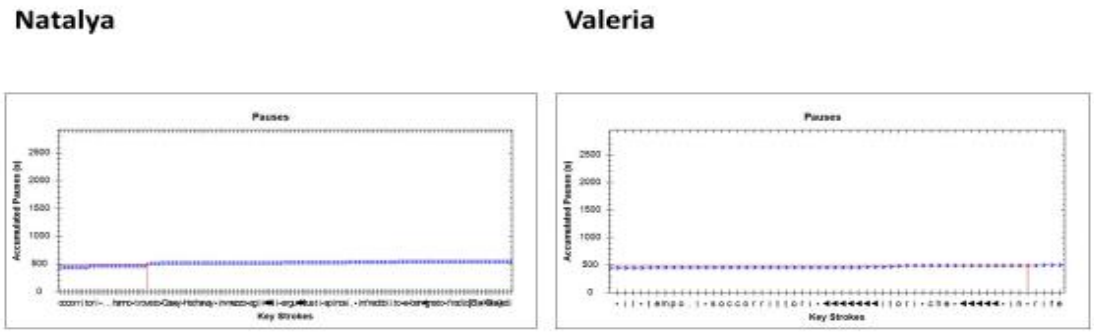
In the following graphic representation, the student LS4, records a pause of (1,38minutes, which is longer) than the professional PT2 (14 sec) on the expression *"equipaggiato per il freddo"*.

Figure 55. A comparison between PT PT2 and LS LS4 pause plot in the article



On the other hand, the reconstruction of the following pause plot shows a longer pause of 45 sec / 1 minute recorded by the professional and the student who adopt the same approach, on the noun phrase *"soccorritori":*

Figure 56. A comparison between PT PT2 and LS LS4 pause plot in the article



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8.3. Analysis of LSs' log files from a product perspective: the newspaper article

A professional translator has been asked to evaluate the products, that is to say the actual texts produced by LSs and PTs, according to the parameters of evaluation used by the AITI to admit new members to the association. The grid features misunderstanding (MU) as the worst mistake, and Grammar (G), Structure (S) and Terminology (L) as relevant mistakes, even if not comparable to mistakes about meanings. Mistranslation (MT), intended as an improper language formulation of a concept, along with Omission (OM) and Orthography/Punctuation (OP) are

nonetheless types of mistakes, but they have a lower impact on the final formulation. Undertranslation (UT) and Overtranslation (OT) might be seen as slight mistakes, as the translator cuts or adds some details to improve target fluency. Their respective values are reported in each table.

Table 43. Evaluation of LSs' texts: the newspaper article

Name	MU (5)	G (3)	S (3)	T (3)	MT (2)	OM (1)	OP (1)	UT (1)	OT (1)	Total Score
LS3	30	3		3	22	4	4			66
LS2	10	3			14	2				29
LS1	20	9			20	3				52
LS5	45	3		3	26	4				81
LS4	10	12	3		14					39

Starting from LS1, can be assumed that the macroplanning does not prevent the translator from omissions and misunderstandings. The shorter duration and processing time deeply affect the bad performance: the marks reflect the difficulty related to the vocabulary, as shown in the questionnaire.

The values recorded in LS2's statistics show the unawareness of text complexity (she finds the text easy in the questionnaire).

The macroplanning and the higher processing time do not reduce mistranslations and misunderstanding.

As far as LS5 is concerned, the approach corresponds to the target text rendition: the lowest processing time and the lack of final revision does not give the chance to read and grasp the meaning of the context, as shown in the linear view where she

isolates the single segments. As a result, the product is full of pauses, omissions, misunderstandings and mistranslations that reflect the lack of cognitive strategies. Last but not least, the high speed testifies the unawareness of the problems (she finds the text easy in the questionnaire).

In LS3's analysis, the macroplanning and the top down approach does not prevent the student from getting bad marks. The shorter processing time and the higher speed do not enhance to reach a whole comprehension, increasing the omissions, the mistranslations and misunderstanding. As the other students, LS3 has not considered the real difficulties of the genre, as admitted in the questionnaire.

In conclusion, the microplanning adopted in LS4 reflects the bad performance in the product: the highest duration and process time do not improve the performance. The text is full of mistranslations, misunderstandings, probably related to the lack of problem solving strategies.

All in all, can be assumed that all the students are unaware of the difficulties of the genre, thus getting low marks.

8.4. Analysis of LSs' log files from a product perspective: the abstract

Starting with LS3, the higher number of mistranslation is connected to the approach adopted, to the lack of initial reading and to the shorter processing time. The awareness of difficulties and the revision phase reduce the mistakes which are higher in the newspaper article.

The same motivations improve the performance in LS1 where the higher number of miscellaneous and processing time recorded in the statistic show a higher monitoring, despite the approach adopted.

In LS4, differently from the newspaper article, the processing time, the number of mistranslation and misunderstanding excluded, the product reflects the process. She makes a lot of mistranslations and misunderstandings, probably because she finds the text difficult (see the questionnaire)

In LS5, the microplanning reproduces product evaluation (as in the article). Omissions and mistranslations correspond to the units left unchanged, as she finds the text difficult (see the Questionnaire in Appendix).

Concluding with LS2, despite the macroplanning adopted, she seems to be unaware of the difficulties and makes more mistakes than the students who adopt the microplanning (see LS1 and LS3), differently from the newspaper article where the process corresponds to the product.

The higher number of keyboard activities reflect the mistranslations and misunderstandings, probably related to the lower processing time, to the lack of revision and comprehension, as can be seen in the questionnaire, where she finds the sense a bit convoluted.

All in all, the resulting conclusion is that the students got the lowest values, as in the article, but the process plays a relevant role because the students who revise the text reduce their number of mistakes, despite the microplanning adopted see LS3 and LS1).

Table 44. An analysis of the LSs products in the abstract.

Name	MU (5)	G (3)	S (3)	T (3)	MT (2)	OM (1)	OP (1)	UT (1)	OT (1)	Total Score
LS3	15		6	3	22					46
LS2	40				22	3				65
LS1	10	3	9	3	12	3				40
LS5	35	12	9		26	4				86
LS4	40	6	3		30	2				81

8.5. Translation from a product perspective: the PTs in the article

As can be seen from the following table, PT5 partially reflects the approach adopted: the lower values recorded in the statistics (see the processing time) affect the final target text rendition. PT5 makes more mistakes than the student who adopt the macroplanning (see LS2), tending to overtranslate, as the other professionals. On the other hand, there is a higher correspondence in PT1's process and product: the macroplanning, the value of the processing time and the text elimination reduce the mistakes which are better in the students. The same is for PT4: as a matter of fact the mistranslations are lower than the other participants. As for the process, PT3 is the professional, who tends to be more similar to the students for the lack of sources adopted and the unawareness of the problems. The number of mistranslations, undertranslations and misunderstandings increases for the lower processing time, being influenced by the text division in a huge number of segments. Last but not least, PT2 reflects the approach adopted: despite making less mistakes than the students (she records the same score of the student who adopts the macroplanning), recording more events in the statistical tool, than in the

abstract, we can assume that the misunderstandings and mistranslations are connected to the microplanning adopted. Finally, what mentioned above leads to the assessment that the professionals make less mistakes than the students (excluding PT5).

Table 45. An analysis of the PTs products in the article

Name	MU (5)	G (3)	S (3)	T (3)	MT (2)	OM (1)	OP (1)	UT (1)	OT (1)	Total Score
PT1	5	3			8	3		1	1	21
PT2	5		6		14	1		2	1	29
PT5	15	3	6		6	2	1		1	34
PT3	5	9		3	10	2	5		1	35
PT4					2	3			7	12

8.6. Translation from a product perspective: the PTs in the abstract

Table 46. An analysis of the PTs products in the abstract

Name	MU (5)	G (3)	S (3)	T (3)	MT (2)	OM (1)	OP (1)	UT (1)	OT (1)	Total Score
PT1	15				12	3			1	31
PT2	10	6			24				1	41
PT5	10				18		1		1	30
PT3	25				20	2			3	50
PT4	10				18	1			2	31

Starting with PT4, as can be seen in the table above, she reflects the macroplanning, making less mistakes than the students, which are than in the article, where she records the highest values in the statistical tool. The shorter processing time and the higher speed reduces the cognitive processes, increasing the mistranslation. As PT4, PT1 reflects the approach adopted, making more mistakes than in the article, probably due to the difficult constructions (see the questionnaire). The higher number of events recorded in the abstract deeply affect PT5's final target text rendition: the processing time facilitates the macroplanning and problem solving during the revision phase, reducing the mistakes, which increase in the students. On the other hand, PT3 reflects the approach adopted, making more mistakes than in the article. The microplanning increases the mistranslation, due to the lack of planning and initial reading. The process is reflected in the number of mistakes, higher than the students who adopt the same approach (see LS3 and LS1). The same is for PT2 who records more mistakes than in the article, where she records higher values in the statistical tool. The highest processing time does not prevent her from mistranslating. Her mistakes are similar to the students who adopt the same approach. All in all we can deduce that differently from the students, the professionals make more mistakes in the abstract (excluding PT3).

Chapter 9

Products and processes: results and concluding remarks

9.1. Does the process affect the product?

As shown in the following table, the process and product can be considered as two aspects of the same coin. Starting with the students in the article, we can assume that the macroplanning in LS2 reduces the number of mistakes, while the microplanning adopted in LS5 increases the mistakes in the target text.

As for the process, the genre makes the difference. In the abstract, excluding the macroplanning adopted, the difficulties related to the text typologies increase the number of mistakes in LS2, improving the performance in LS3 and LS1. In this case, the text division in a huge number of segments delimited by longer pauses increases the cognitive activities where the translators pay attention to the segments left unchanged in the linear view, trying to grasp the meaning from the context during the revision phase (see LS3).

Table 47. A comparison between the LSs products and processes in the abstract

Name	**Process (approach)**	**Product evalutation score**
LS2	Macroplanning	65
LS3	Microplanning	46
LS1	Microplanning	40

Table 48. A comparison between the LSs products and processes in the article

Name	**Process (approach)**	**Product evalutation score**
LS2	Macroplanning	29
LS5	Microplanning	81

As far as the professionals are concerned, starting with the article, we can assume that they almost tend to make less mistakes than students, but they share the same low values in the evaluation scale (apart from PT5, who makes more mistakes than LS2, as can be seen from the data). All in all, as can be outlined from the following table, there is a higher correspondence between process and product in the professionals than in the students.

Table 49. A comparison between the PTs products and processes in the article.

Name	Approach (process)	Total score (product)
PT4	Macroplanning	12
PT2	Microplanning	39

The same is true for the abstract, where the process tends to be in line with the final score of product evaluation.

Table 50. A comparison between the PTs products and processes in the abstract.

Name	Approach (process)	Total score (product)
PT4	Macroplanning	31
PT3	Microplanning	50

9.2. Do professionals assume a novice like behaviour?

One of the goals of this work lies on the investigation of translation process trying to understand if professionals are able to bind chunks into a continuous flow of production.

From the analysis of the segments above, it would be mantained that professionals who adopt macroplanning do not assume novice like behaviour: PT1 PT5 and PT4 (in the abstract and in the article) produce few (4/5) larger segments containing from 7 to 16 words, recording lower pauses than students and professional who adopt microplanning (see PT2).

On the other hand, professionals who adopt microplanning, as PT2 and PT3 produce more than 18 segments containing even a single- double micro unit isolated from the whole production recording longer pauses (more than 1 minute).

The resulting conclusion leads to the assumption that professionals commonly adopt we can conclude by assuming that professionals, involved in this study, commonly adopt the same approach in different genres, apart from PT3 who records a lower number of segments in the newspaper article, where she shows, higher monitoring as PT1 and produces shorter pauses, differently from the abstract, where the log files include big pauses separated by larger segments containing more than 15 words.

Finally, the professionals (see PT2) who adopt the microplanning tend to be more in line with the student (LS5) who chooses the same approach, especially in the abstract where she records more than 20 segments, containing few words delimited by larger pauses.

LS3 adopts a different approach in the article, as shown previously: she produces more than 10 segments and incorporates more than 7 units, divided by shorter pauses, differently from the abstract where she tends to reduce the speed isolating the single lexical items.

Similarly, LS1 tends to isolate the single phrases in the abstract and LS2 who produces more than 10 segments, separated by shorter pauses, (containing more than 7 words*).*

Last but not least, LS4 tends to be more in line with LS5, producing big pauses and more than 20 segments, with few words. Therefore, the students who tend to produce higher number of segments (in particular LS5), record the highest pause

duration, interrupting the continuous flow of production for lexical uncertainties, temporal reformulation and problem solving strategies.

9.3. Segmentation: genre and different categories

The main body of this paragraph focuses on the main category here taken in consideration: segmentation, which sheds the light on translation process. It is included in Translog linear view component, giving important remarks on the units included in each segment, the pause duration and the type of approach adopted from the two different categories in three different genres.

As can be seen from the examples analysed (see chapter 5), the students who adopt the microplanning (LS4, LS3 and LS1), focus on the following phrases:

The above data give way to the assumption that the professionals who adopt microplanning (see PT3) tend to be in line with LS4 who produces more segments while solving her problems related to lexical uncertainties. On the other hand, PT1, the professional who pays attention to the form, is more in line with LS3, the only student who pays attention to the specialized discourse constraints.

PT5, as the other professionals, pays attention to the genre, the synonyms, grammar and temporal reformulation, as shown in the revision where segments are accurately revised.

Thus, the different approaches adopted by the two categories in the different genres:

Table 51. Translation process: LSs in the abstract

Name	Number of segments	Translation units	Pause duration	Approach adopted
LS5	20 segments	2 /3 units	Longer pause	Microplanning
LS3	20segments	1/3 units	Shorter pause	Microplanning
LS1	20segments	¾ mixed single phrases	Longer pause	Microplanning
LS4	30segments	1/3 units	Longer pause	Microplanning
LS2	Less than 20segments	More than 8 units	Shorter pause	Macroplanning

Table 52. Translation process: PTs in the abstract

Name	Number of segments	Translation units	Pause duration	Approach
PT1	10 segments	7 to 16 units	Longer pause	Macroplanning
PT4	Not more than 10 segments	7 units	Shorter pause	Macroplanning
PT3	20 segments	Single double micro units	Longer pause pause	Microplanning
PT5	5/6 segments	More than 10 units	Shorter pause	Macroplanning
PT2	More than 20segments	Single unit	Longer pause	Microplanning

From the comparison of the following tables, it emerges that the lexical density affects the number of segments and the microplanning is inevitably connected with the higher number of segments, containing less translation units, delimited by higher pauses as shown in LS4 / LS5 / PT2 log files.

However, in the research article, despite the similar approach, the segments increase in then professional and decrease in the students for the specificity of terms required.

Table 53. Translation process: LSs and PT in the research article

Name	Number of segments	Number of units	Pause duration	Approach
LS5	More than 7 segments	Single unit	Longer pause	Microplanning
LS3	¾ segments	More than 7 units	Shorter pause	Macroplanning
LS1	More than 10 segments	Single unit	Higher pause	Microplanning
LS4	10 segments	Single unit	Longer pause	Microplanning
LS2	5/6 segments	More than 7 units	Shorter pause	Macroplanning
PT1	12 segments	More than 7 units	longerpause	Macro planning

Despite the similar number of segments and units recorded for the vocab related to the genre, LS3, LS1 and PT3 change their approach when dealing with different genres (see newspaper article students' and professionals' tables).

Table 54. Translation process: LSs in the article

Name	Number of segments	Translation units	Pause duration	Approach adopted
LS5	28 segments	2 /3 units	Longer pause	Microplanning
LS3	17 segments	More than 7 units	Shorter pause	Macroplanning
LS1	20 segments	2/3 units	Shorter pause	Macroplanning
LS4	20 segments	2 units	Longer pause	Microplanning
LS2	Less tan 20 segments	More than 10 units	Shorter pause	Macroplanning

Table 54. Translation process: PTs in the article.

Name	**Number of segments**	**Translation units**	**Pause duration**	**Approach**
PT1	10 segments	10 units	Longer pause	macroplanning
PT4	4/5 segments	7/ 16 units	Shorter pause	macroplanning
PT3	14 segments	More than 7 units	Shorter pause	Macroplanning
PT5	10 segments	More than 10 units	Shorter pause	Macroplanning
PT2	20 segments	Single – doubled unit	Longer pause	Microplanning

The most striking observation to emerge from the analysis of professionals' and students' log files is the incredible variation determined by the genre which involves the procedural categories chosen in my analysis (such as the number of segments, the target units, the processing time the pause duration) which are correlated with the movements on the keyboard and the final product, producing a variation in fluency, as can be deduced from the final target text.

From the comparison of the data reported in the tables above, can be logically deducted that the shift from micro planning in the abstract to the macroplanning in

the article determines an increasing of values (see LS3's miscellaneous/ PT3's LS3's and LS1's speed).

As far as the newspaper article is concerned, LS3' s values tend to be in line with the approach adopted and the lower miscellaneous are related with the unawareness of the problem solving strategies, influenced by the genre.

As far as the abstract is concerned, in relation to the research questions, we can assume that the professionals who adopt macroplanning as PT4, PT1 and PT5 manage to construe a continuous flow of production: PT5, in fact writes the title only after having grasped the whole meaning.

The main difference between these two groups of students and professionals lies on the intralingual reformulation, the management of cognitive abilities (the level of monitoring the text) and word order.

Contrary to the expectations, there are not so striking differences concerning the uses of sources, the duration and processing time (with the exception of PT1). The main differences can be seen in the way in which the units are processed, in the type of segmentation and pause length.

The only student more in line with the professional is LS2, who, thanks to the reading aloud technique, assumes a more professional behaviour, and adopts it in the three different specialized texts, being similar to the professionals who adopt the macroplanning. As a result, she manages to grasp the whole sense without producing longer pauses on single lexical items, as already shown in the linear view.

The speed in which the units are processed is reduced in the students who adopt microplanning as recorded in LS1 statistics. In relation to this, with

response to the second research question of my project, we can assume that the translator who assumes a novice like behaviour is PT3, for the lack of sources adopted, the type of segmention and longer pauses (see the abstract).

As a matter of fact, the pause length is related with the number of units processed in each segments: the professionals PT2 and PT3 and the students LS5 and LS4 who adopt the microplanning produce higher pauses between two shorter segments which contain few target units. For instance, the student LS3, for the lack of the whole comprehension focuses on single units, leaving some segments unchanged.

On the other hand, PT1, PT5 PT4 and LS2, produce a continuous flow of production, without many interruptions.

All in all, the data obtained from the analysis of the abstract process must be interpreted with caution, but (with respect to what already mentioned by other scholars) we may support Dragted (2005a) hypothesis, according to which participants with few pauses produce larger chunks as, it is evident in LS2' s log file, where each segment includes almost 5/ 10 target words in few minutes. In response to the correlation between text production per minute and the pause length no significant evidence was able to sustain Dragsted (2005a) assumption which states that professional translators process target units more quickly without influencing the pausing time: as matter of fact the professional PT2 who adopts the microplanning reduces the speed of text production per minute recording higher pauses as can be seen in the linear view.

The same is for the article, but the striking difference lies on the shift from micro to macroplanning which involves two students (LS1 and LS3) and one professional PT3).

Even if the keyboard activities are not relevant for my research because they are influenced by translator' s ability on the keyboard; we may assume that their variation is more connected with the genre: PT1 PT5 and LS2 produce higher events in the abstract rather than in the article.

On the other hand, despite the microplanning adopted which reduces the speed, LS4 and PT3 tend to produce more events in the abstract.

The opposite tendency is recorded in LS5, who finds it difficult to deal with this type of text as can be deduced from the tap protocols

On the other hand, PT4 PT2 and LS3 tend to produce more events in the article. Last but not least, as far as the research article is concerned, we can deduce that:

If we compare the professional log file with the participant whose duration is similar, it can be seen that:

the number of events are doubled in PT1's logfile. She spends more time inserting characters as it has been assumed by (Carl 2009).

The professional does not focus on single lexical items: it is evident a *parallel processing* (measured through the extent to which she engages in literal translation). PT1 works with larger sentences, processed as a unit (see Dimitrova 2005) and overuses *Alt Control* showing how closely the translator was monitoring his typing (Hansen2006/Dimitrova 2005) All in all, it can be seen that in

PT1 log file the data are equally distributed, the professional focuses on larger segments /mixed phrases like noun, prepositional phrase and conjunctions, while language students show a higher tendency to divide main from secondary clause, separating even noun from preposition.

There are some language students like LS1 who focuses on single verb prepositional and adjective phrases, which opposes to LS3 and LS2 who are able to produce larger segments quickly. We can assume that, if we have a closer look at the translator's degree of expertise, it must be interpreted with caution, because no significant evidence was able to sustain the hypothesis that professional translators always process target units more quickly without influencing the pausing time.

All in all, LS1 is the most fluent among these post-graduates recording the highest number of miscellaneous and user events per minute.

As far as the second group of participants is concerned, we can deduce that:

LS2, produces the highest number of miscellaneous events (337 in 38 minutes) and her process is more extensive: this can be due her lack of awareness of problem solving strategies. (see Bernardini 2001), while LS4 produces the lowest number of text elimination (135) and miscellaneous events (58).

Summing up, with respect to Dragted (2005a) hypothesis, the data may confirm that participants with few pauses produce larger chunks as, it is evident in LS3 log file, where each segment includes almost 5/ 10 target words in few minutes. In response to my research questions, no significant evidence was able to sustain Dragsted (2005a) assumption which states that professional translators process target units more quickly without influencing the pausing time.

Substantially, the processing time and the degree of expertise of the translators do not play a relevant role, contrary to what we could expect. As a matter of fact, in relation to the question n. 1 the variable which mostly affect translation process is the genre, in fact the highest number of segments are recorded in the newspaper article, by professionals and language students for the highest vocabulary to search for.

With respect to the question n. 2, any specific categories distinguish the two groups involved in this study, a part from the attention given to the word order in professionals and the metacognitive strategies (reading aloud while translating) adopted by the student LS2, the only one who adopts the macroplanning in the three different strategies

Going back to question n.1 there is no specific correlation between the categories and the degree of expertise of the participants, but the pause duration is related with the approach adopted.

Finally, this study does not detect any evidence for the relevance of the expertise: some of the issues relate specifically to the genre and to the connection among procedural categories.

9.4. Some reflections on methodology

The findings which were collected at this present investigation support the validity of the software which enhances the objectivity when collecting and interpreting the data. The first set of considerations has to do with participants which took part at the investigation. Their homogeneity concerning their background and biodata could be integrated with other subgroups recruited according to their degree of experience. An obvious remark to be made concerns

the size of the text which should not be too long to be analysed carefully. The selections of the source text is an available aspect because the patterns of variations of a different genre affect the results and variation in translation's process. Supplementary instruments could be associated to the Translog. The eye eyetracking can be integrated to measure the cognitive effort when reading the source text to point out where the translator pays attention to Summing up, supplementary dataset such as the interviews and tap protocols enhance the comprehension of translation's behaviour.

As already assessed by Palumbo (2008), in the contexts where translation competence must be assessed, the need to categorise according to the degree of difficulty is evident, but no universal accepted parameters have been established. Seen in this perspective, this present investigation could be expanded to other categories, being a small brick for further investigations, concerning the translation process and its possible interaction with the product.

This present study sets out to investigate translation as a process in a specialised text, prioritising the process rather than the final product, differently from the old classical religious tradition (Baker 1988). The difficulty linked with the technical aspects of the software may have influenced part of researches in the past (Carl2009/Munoz2010) which tend to distinguish the writing tools from cognitive procedural categories. The main point of references are the type of source texts selected, which cause problems to the translators.

9.5. Concluding remarks

As already assessed in the previous sections, the present study sets out with the aim of shedding light on one particular aspect, the assessment of a possible

interaction between discourse specialised constraints and translators' degree of expertise.

Choosing to focus on the following variables such as the procedural, metacognitive strategies, discourse expertise and genre constraints, this project has tried to show howthe degree of expertise has played a far marginal role, excluding the capability to prioritise word order in the target text elaboration. Despite the limited number of participants, the analysis and the segments have helped to understand the difficulty to assess precise boundaries between professionals and language students, who tend to stop the process on the same segments in the three different genres. Previous considerations bring to the assumptions that the genre makes the difference and affects the type of the approach, the number of segments, the pause duration and the final target text rendition: as a matter of fact the students and professionals who adopt a top down approach tend to make more mistakes when dealing with different genre constraints, being unaware of the main difficulties. All in all, this perspective should be given more attention than it has received so far because it could have implications for areas involving translator's training and evaluation such as the PACTE group (2000) who focuses on the translator's competences, being interested in assessing and defining the translator's degree of proficiency in translation.

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Appendix: 1 Source texts used for the study

Source text 1

Dry weather induces outbreaks of human West Nile Virus infections.

Abstract

Background. Since its first occurrence in the New York City area during 1999, West Nile Virus (WNV) has spread rapidly across North America and has become a major public health concern in North America. By 2002 WNV was reported in 40 States and District of Columbia with 4,156 human and 14, 539 equine cases of infection. Mississipi had the highest human incidence rate of WNV during the 2002 epidemic in the USA. Epidemics of WNV can impose enormous impacts on local economies. Therefore, it is advantageous to predict human WNV risks for cost- effective controls of the disease and optical allocations of limited resources. Understanding relationships between precipitation and WNV transmission is crucial for predicting the risk of the human WNV disease outbreaks under predicted global climate change scenarios.

Methods: We analysed data on the human WNV incidences in the 82 counties of Mississipi in 2002, using standard morbidity ratio (SMR) and Bayesian hierarchical models, to determine relationships between precipitation and human WNV risks. We also entertained spatial autocorrelations of human WNV risks with conditional auto correlative (Car Models) implem ented in Win Bugs 1.43.

Results We observed an inverse relationship between county level human WNV incidence risk and total annual rainfall during the previous year. Parameters representing spatial heterogeneity in the risk of human exposure to WNV improved model fit. Annual precipitation of the previous year was a predictor of spatial variation of Wnv risk

Conclusions. Our results have broad implications for risk assessment of WNV and forecasting WNV outbreaks. Assessing risk of vector-born infectious diseases will require understanding of complex ecological relationships. Based on climatologically

characteristic drought occurrence in the past andon climate model predictions for climate change and potentially greater drought occurrence in the future, we suggest that the frequency and the relative risk of WNV outbreaks could increase.

Source: https://www.ncbi.nlm.nih.gov/pubmed/20181272 2010 Feb 24

Number of words: 315

Lexical density: 0.7

Source text 2

Know what? Learning, thinking and knowing in a digital world.

What does it mean to know something? The philosopher Gilbert Ryle (1949) distinguished between knowing how and knowing that. Psychologists talk about differences between procedural and declarative memory for that which one knows (Zimmermann 2014). In common parlance, we speak of data, information and knowledge. While lacking a shared set of terminology, we generally assume that to know something is different than having to look it up.

Growth of the internet is changing both our pedagogy and our everyday beliefs about the value of internalized knowledge. Research by BetsySparrow and her colleagues (2011) indicates we are more likely to remember internet search paths than the findings they yield. Work reported by Kaspersky Lab (2015) speaks of" digital amnesia", that is, our failure to remember the content of what is availablethrough an online search.

In her new book Mind Change, Susan Greenfield (2015) argues that digital technologies are bringing about major alterations in the ways people think. Greenfield's focus is on such issues as the effects of social networking, the ways in which we are learning from the internet (especially from images) rather than from text on paper, and the kinds of learning transfer that video games can produce. In my own work (Baron 2015), I have argued that the rising shift from reading in print to reading on digital screens is potentially reshaping what it means to read. The issue of reading is critical to questions of knowledge, since in literate societies, much of what we come to know is through the written word.

While digital technology is partially responsible for shifts in our understanding of what it means to know, pedagogy in both lower and higher education is reinforcing the change from emphasizing knowledge within our heads to valuing search. This presentation explores the nature and implications of this change.

Source: http://www.clavier.unimore.it/site/home/conferences/articolo29283.html

International Conference Clavier 2015

Number of words: 314

Lexical density: 0.59

Source text 3

Casey Hathway from North Carolina hailed a "survivor" by police after becoming lost in sub-zero temperatures

A three-year -old boy who survived two nights alone in the woods in freezing conditions has told police and family he was helped out by a friendly bear that was with him the whole time.

Rescuers responding to reports of a baby crying found Casey Hathaway tangled up in a thorny bushes,cold and soaked but safe on Thursday night. He had gone missing on Tuesday in conditions so bad the subsequent search had to be called off.

As it turned out, help- perhaps real, perhaps imaginary but certainly useful - was at hand in those woods in North Carolina, a state that is home to plenty of black bears. Craven county sheriff Chipp Hughes said Casey " did say that he had a friend in the woods that was a bear that was with him".

The claim was reportedly repeated by the boy's aunt Breanna Hathaway. "He said he hung out with a bear for two days," Hathway wrote in a Facebook post."Miracles do happen".

Hughes said the boy had been playing with two other children in his grandmother's backyard in Ernul on Tuesday, but did not come inside with them.

Brutal weather conditions in the low 20s(Fahrenheit) and concerns Casey wasn't dressed for the cold sparked a search that involved helicopters, drones, K-9 units and drivers, as well as hundreds of volunteers. By Thursday the wind and rain had become so bad authorities urged volunteers to stay away.

"He's a survivor", said Hughes on Friday, pointing out that rescuers had to wade through waist-high water to reach the boy. Casey escaped with just a few scrapes and simply wanted some water and his mother, he said.

Source: The Guardian January 28 https://www.theguardian.com/us-news/2019/jan/28/three-year-old-boy-missing-in-woods-for-two-days-says-friendly-bear-kept-him-safe

Number of words: 299

Lexical density: 0.61

Target texts

Post- graduate language students: abstracts

LS1

Sapete cosa? Imparare, pensare e conoscere in un mondo digitale. Cosa significa conoscere qualcosa? Il filosofo Gylbert Ryle (1949) faceva distinzione tra sapere come e sapere quello. Gli psicologi parlano di differenze tra memoria procedurale e dichiarativa in base a quello che si conosce (Zimmermann 2014). Nel linguaggio comune parliamo di dati, informazioni e conoscenza. Nonostante ci sia carenza di terminologia, in genere si assume che conoscere qualcosa sia diverso dal doverlo cercare. L'espansione di Internet sta cambiando sia la nostra pedagogia e le nostre convinzioni quotidiane sul valore della conoscenza internalizzata. Alcune ricerche di Betsy Sparrow e i suoi colleghi indicano che sia piu' probabile ricordare gli step delle ricerche su Internet che i risultati che esse producono. Il lavoro di Kaspersky Lab parla di "amnesia digitale" che essenzialmente è il nostro fallimento nel ricordare i contenuti di cio' che è disponibile in una ricerca online. Nel suo nuovo libro Mind Change, Susan Greenfield (2015) sostiene che le tecnologie digitali stanno facendo emergere particolari alterazioni nei modi in cui pensano le persone. L'attenzione di Greenfield su alcune tematiche come le conseguenze dei social network, i modi in cui stiamo apprendendo da Internet (soprattutto dalle immagini) piuttosto che dai testi cartacei e sui vari tipi di meccanismo di apprendimento che i videogiochi possono produrre. Nel mio lavoro (Baron 2015) ho sostenuto che l'aumento del cambio dal leggere su carta al leggere sugli schermi digitali sta potenzialmente rimodellando cosa significhi leggere. La questione del leggere è critica agli argomenti sulla conoscenza, dato

che, nelle societa' letterate, molto di quello che si sa è attraverso la parola scritta. Mentre la tecnologia digitale è in parte responsabile dei cambiamenti per capire cosa significhi sapere, la pedagogia sta rinforzando il cambio nell' empatizzare la conoscenza delle nostre teste alla valutazione della ricerca, sia nella bassa che nella alta formazione all' interno delle nostre teste. Questa presentazione esplora la natura le implicazioni di questo cambio.

LS2

Sapere cosa? Imparare, pensare e conoscere in un mondo digitale. Che cosa vuoldire conoscere qualcosa? Il filosofo Gilbert Ryle (1949) ha optato per una distinzione tra sapere cosa e che. Gli psicologi parlano di differenze tra memoria dichiarativa e procedurale in riferimento a cio' che uno sa. Zimmermann 2014. Nel linguaggio comune, parliamo di dati, informazioni e conoscenza. Mentre in mancanza di un insieme di terminologie condivise, generalmente presupponiamo che conoscere qualcosa sia diverso dal doverla controllare. La crescita di internet sta cambiando sia la nostra pedagogia che le credenze di ogni giorno sul valore della conoscenza interiorizzata. La ricerca condotta da Betsy Sparrow e dai suoi colleghi (2011) ci mostra che siamo piu' propensi a ricordare percorsi di ricerca su Internet che i risultati che questi ultimi producono. Il lavoro riportato da Kaspersky Lab (2015) parla di "amnesia digitale" ossia il nostro fallimento nel ricordare il contenuto di cio' che è disponibile attraverso una ricerca online.Nel suo nuovo libro Mind Change Susan Greenfield (2015) asserisce che le tecnologie digitali stanno apportando un maggior numero di alterazioni nei modi di pensare delle persone.Il fulcro di Greenfield è da riscontrarsi in quelle questioni come gli effetti dei social network, i modi attraverso i quali apprendiamo da internet (specialmente dalle immagini) piuttosto che da un testo su carta e le tipologie di

trasferimento dell' apprendimento che i videogiochi possono produrre. Nel mio lavoro personale (Baron 2015), ho sostenuto che l'ingente passaggio dal leggere il testo stampato al leggere sugli schermi digitali sta potenzialmente conferendo un significato a cio' che significa leggere. Il problema di leggere è critico per cio' che concerne le questioni sulla conoscenza, sin dal tempo delle societa' letterarie parte di cio' che conosciamo lo otteniamo attraverso la parola scritta. Mentre la tecnologia digitale risulta essere parzialmente responsabile nella nostra comprensione di cio' che significa conoscere, la pedagogia in entrambi i campi dell'educazione inferiore e superiore sta corroborando il passaggio dalla conoscenza enfatizzata nelle nostre menti alla valorizzazione della ricerca. Questa presentazione esplora la natura e le implicazioni di questo cambiamento.

LS3

Sai cosa? Imparare pensare e conoscere in un mondo digitale

Cosa significa conoscere qualcosa? Il filosofo Gilbert Ryle fece una distinzione tra conoscere come e sapere che. Gli psicologi parlano di differenze tra la memoria procedurale e dichiarativa per quello che si conosce. Comunemente parliamo di dati informazione e conoscenza. Mentre ci manca un insieme condiviso di termine, generalmente consideriamo che conoscere qualcosa sia diverso da dover ricercarla. Lo sviluppo di Internet sta cambiando sia la nostra pedagogia e le nostre convinzioni quotidiane sul valore della conoscenza internalizzata. Una ricerca fatta da Betsy Sparrow e i suoi colleghi indica che siamo piu' inclini a ricordare i campi di ricerca su Internet piuttosto che i risultati che ci forniscono. Un lavoro svolto da KASPERSKY Lab parla di "amnesia digitale" vale a dire la nostra incapacita' di ricordare il contenuto di cio' che è

disponibile attraverso una ricerca online. Nel suo nuovo libro Mind Change Susan Greenfield sostiene che le tecnologie digitali stanno apportando maggiori alterazioni nelle modalita' in cui le persone pensano. L' attenzione di Greenfield si concentra su questioni come le conseguenze dell'attività dei social network, le modalita' in cui stiamo apprendendo da internet (in particolar modo dalle immagini) piuttosto che dai testi cartacei e le tipologie di trasferimento della conoscenza che i videogiochi possono produrre. All'interno del mio lavoro ho argomentato che il crescente passaggio dalla lettura su stampato alla lettura su schemi digitali sta potenzialmente rimodellando cio' che significa leggere. La questione della lettura è critica alla questione della conoscenza, dal momento che nelle societa' letterate molto di cio' di cui veniamo a conoscenza è attraverso la parola scritta. Mentre la tecnologia digitale è in parte responsabile per cambiamenti nella nostra comprensione di cio' che significa conoscere la pedagogoia sia nell' istruzione inferiore che superiore sta rafforzando il cambiamento da evidenziare una conoscenza all' interno delle nostre teste alla ricerca di valori. Questa presentazione indaga sulla natura e sulle implicazioni di questo cambiamento.

LS4

Conoscere cosa? Apprendere, pensare e conoscere in un mondo digitale. Che significa conoscere qualcosa? Il filosofo Gilbert Ryle (1964) ha distinto tra modalita' di conoscenza. Gli psicologi parlano di differenze tra memoria procedurale e dichiarativa che tutti conoscono (Zimmermann 2014. Nel gergo comune, si parla di dati, informazioni e conoscenza. Poichè siamo privi di un buon bagaglio tecnologico, possiamo ipotizzare che conoscere qualcosa è diverso dal cercarlo. La nascita di Internet ha cambiato la nostra pedagogia e le nostre

credenze comuni inerenti il valore della nostra conoscenza interiore. Una ricerca di Betsy Sparrow e i suoi colleghi indica che noi siamo piu' predisposti a ricordare i vari step di ricerca su Internet che le informazioni che raccolgono. Il lavoro riportato da Kaspersky Lab 2011 è inerente "amnesia digitale" che rappresenta il nostro fallimento nel ricordare il contenuto delle informazioni disponibili attraverso una ricerca online. Nel suo nuovo libro Mind Change, Susan Greenfield afferma che le tecnologie digitali stanno portando varie alterazioni nel modo in cui la gente parla. Greenfield si focalizza su tali problemi provocati dagli effetti dei social network, i modi in cui stiamo imparando da Internet (in particolare dalle immagini), rispetto al testo su carta e dai tipi di cambiamento nell'apprendimento provocato dai videogames. Nella mia ricerca (Baron 2015) ho mostrato come il cambiamento emergente dalla lettura stampata agli schemi digitali sta potenzialmente rimodulando il significato della lettura. La problematica della lettura è un punto critico nell' ambito della conoscenza, dal momento che nelle societa' letterarie, tutto cio' che abbiamo scoperto lo dobbiamo alla scrittura. Mentre la tecnologia digitale è parzialmente responsabile dei cambiamenti nel nostro modo di capire cio' che ci apprestiamo a conoscere, la pedagogia nei livelli bassi e alti di istruzione sta rinforzando il cambiamento nell' enfatizzare, passando dalla conoscenza nella mente alla ricerca dei valori. Questa presentazione esplora la natura e le implicazioni di questo cambiamento.

LS5

Conoscere cosa? Imparare pensare e conoscere nel mondo digitale. Cosa significa conoscere qualcosa? Il filosofo Gilbert Ryle (1949) distinse tra il modo di conoscere qualcosa e l'oggetto della conoscenza. I psicologi si focalizzeranno sulle differenze tra memoria procedurale e dichiarativa per quello che qualcuno possa conoscere 2014. Nel parlato comune parliamo di data, informazione e conoscenza. Con la perdita di una terminologia condivisa generalmente supponiamo che conoscere qualcosa è diverso dal cercarla. La crescita del web sta cambiando sia la nostra pedagogia che i nostri pensieri giornalieri sul valore della conoscenza interiore. La ricerca di Besty Sparrow e i suoi colleghi indica che noi siamo piu' propensi a ricordare le ricerche su internet che i risultati raccolti. L'opera di Kaspersky Lab (2015) parla di "amnesia digitale", cioè del nostro fallimento a ricordare il contenuto di cio' che si trova attraverso la ricerca online. Nel suo nuovo libro Mind, Susan Greenfield (2015) dice che le tecnologie digitali stanno portando maggiori alterazioni nel modo di pensare delle persone. Il tema principale di Greenfield sono gli effetti del social networking cioè dei modi in cui impariamo da Internet (specialmente dalle immagini) piuttosto che dai testi scritti, e le modalita' di trasferimento dell'imparare che possono produrre i videogiochi. Nel mio lavoro (Baron 2015) credo che il passaggio dal leggere in stampa a leggere in digitale stanno modificando il senso della lettura. Il problema di leggere è critico come le domande della conoscenza fin dalle societa' dei letterati la maggior parte delle cose che sappiamo sono sul testo scritto. Mentre la tecnologia digitale è parzialmente responsabile per i cambiamenti della nostra comprensione, pedagogia, sia a livelli dell'educazione primaria che secondaria sta rinforzando il

cambiamento dalla conoscenza mentale all' interno di noi stessi. Questa presentazione si focalizza sulla natura e le implicazioni di questo cambiamento.

Post- graduate language students: articles

LS1

Bambino di 3 anni scomparso nel bosco da 2 giorni afferma che un tenero orso l'ha protetto. Casey Hathway dal Nord Carolina acclamato "sopravvissuto" dalla polizia dopo essersi persoin temperature sotto lo zero. Un bambino di 3 anni che è sopravvissuto due notti solo nei boschi su un post Facebookchi in condizioni di gelo ha detto alla polizia e alla famiglia che è stato aiutato da un orso amichevole che è stato con lui per tutto il tempo. I soccorritori indagavano su una denuncia di un bambino in lacrime che ha trovato Casey Hathway avvolto da cespugli spinosi infreddolito e fradicio ma salvo nella notte di giovedi'. Era disperso da martedi' in terribili condizioni metereologiche che la conseguente ricerca era stata sospesa. Come si è scoperto, l'aiuto forse vero forse immaginario ma certamente utile è stato imminente in quei boschi nel North Carolina, uno stato che è dimora di molti orsi bruni. Lo sceriffo della contea di Craven, Chipp Hughes ha sostenuto che Casey ha affermato di avere un orso amico nei boschi che è stato con lui. L'affermazione è stata ripetuta dalla zia del bambino Breanna Hathaway ha sostenuto di essere andata in giro con un orso per 2 giorni. Hathway scrisse su un post Facebook. I miracoli succedono davvero Hughes ha asserito che il bambino stesse giocando con altri 2 bambini nel cortile della nonna in Ernul il martedi, ma non, droni, unita' del k9 e conducenti ma anche centinaia di volontari. Da giovedi' il vento e la pioggia erano diventati cosi' terribili che le autorita' hanno intimato i volontari ad allontanarsi. E'un sopravvissuto, ha affermato Hughes di venerdi'

sottolineando come i soccorritori abbiano dovuto farsi strada tra l'acqua che arrivava a livello della vita per cercare il ragazzo. Casey è stato ritrovato soltanto con dei graffi ed era semplicemente in cerca di acqua e di sua madre, ha detto.

LS2

Bambino di 3 anni disperso nei boschi per 2 giorni rivela che un orso gentile lo ha tenuto in salvo. Casey Hathaway dal North Carolina acclamato come "sopravvissuto" dalla polizia dopo essersi perso con temperature al di sotto dello zero-Un bambino di 3 anni che è sopravvissuto da solo 2 notti nei boschi in condizioni di gelo ha dichiarato alla polizia e dalla famiglia di essere stato aiutato da un orso amichevole che è rimasto con lui per tutto il tempo. I soccorritori che rispondevano alle segnalazioni di un pianto di un bambino hanno trovato Casey Hathaway aggrovigliato tra cespugli spinosi giovedi'sera. Si era perso martedi' in condizioni atmosferiche cosi' rigide che la ricerca dovette essere sospesa. Come è noto, il soccorso forse reale, forse immaginario ma di certo utile era a portata di mano in quei boschi del North Carolina, uno stato che è dimora di un gran numero di orsi bruni. Lo sceriffo della Contea di Craven, Chip Hughes ha dichiarato che "aveva un amico nei boschiche era un orso e che era rimasto con lui". L' affermazione è stata riportata dalla zia del bambino Breanna Hathaway, ha detto di aver trascorso il tempo con un orso per 2 giorni ha scritto Hathaway in un post Facebook: "I miracoli accadono".Hughes ha asserito che il bambino stava giocando con altri 2 bimbi nel cortile di sua nonna ad Ernul di martedi, ma non è rientrato con loro. Le rigide condizioni atmosferiche al di sotto dei 20 gradi (FAHRENEIT) ed il fatto che Casey non fosse ben equipaggiato per affrontare il freddo ha dato il via ad una ricerca che ha coinvolto elicotteri, droni, unita' k9 e sommozzatori oltre ad un centinaio di volontari. Il giovedi' il vento e la pioggia

erano diventati cosi' fitti che le autorita' hanno imposto ai volontari di stare alla larga "è un sopravvissuto", ha dichiarato Hughes venerdi', facendo luce sul fatto che i soccorritori hanno dovuto attraversare con molta difficolta' l'acqua alta fino alla vita per raggiungere il bambino. Casey se l'è cavata con qualche graffio e voleva semplicemente dell'acqua e sua madre, ha detto.

LS3

Ragazzino di tre anni smarrito nei boschi per 2 giorni dice che un orso amico l'ha tenuto al sicuro. Casey Hathway del Nord Carolina è diventato un sopravvissuto dopo essersi perso a temperature sotto zero. Un bimbo di tre anni che è sopravvissuto per due notti solo nei boschi in condizioni di freddo glaciale ha raccontato alla famiglia ed alla polizia di essere stato aiutato da un socievole orso che è stato con lui per tutto il tempo. I soccorritori che hanno risposto alla chiamata di un bambino in lacrime hanno trovato Casey Hathaway attorcigliato in cespugli, infreddolito e bagnato, ma al sicuro. Giovedi' notte, lui si era smarrito martedi' in condizione cosi' brutte che le ricerche successive hanno dovuto allertate. Da quanto è risultato, l'aiuto, forse immaginario ma sicuramente di grande utilita'è stato a portata di mano in quei boschi della North Carolina uno stato che è casa di molti orsi neri. Lo sceriffo della contea di Craven Chipp Hughes disse che Casey "ha detto di avere un amico nei boschi che era un orso ed era con lui". L' affermazione è stata testualmente ripetuta dalla zia del bambino Breanna Hathaway. "Lui ha detto di essere stato in compagnia di un orso per due giorni", scrisse Hathaway in un post su Facebook. I miracoli succedono. "Hughes disse che il ragazzo stava giocando con altri bambini nel cortile della nonna a Ernul Martedi', ma non è rientrato con loro. Le terribili condizioni metereologiche al di sotto dei 20 gradi Freneit la grave questione che Casey non era vestito

adeguatamente per il freddo ha dato l'avvio ad una ricerca che ha visto coinvolti elicotteri, droni , unita' k9 e autisti cosi' come centinaia di volontari. Nella giornata di giovedi' vento e pioggia erano diventati cosi' pericolosi che le autorita' hanno dovuto sollecitare i volontari ad allontanarsi. "Lui è un sopravvissuto", disse Hughes sottolineando che i ricercatori sono dovuti passare attraverso acqua che arrivava alla vita e per raggiungere il bambino. Casey è uscito fuori con poche manovre e dall' acqua sua madre disse.

LS4

Un bambino di 3 anni perso nel bosco per 2 giorni ha riferito che un tenero orso l'ha tenuto al sicuro. Casey Hathway dal North Carolina ha acclamato un superstite dalla polizia dopo essersi perso al gelo. Un bambino di 3 anni, sopravvissuto due notti solo nei boschi al gelo ha riferito alla polizia e alla famiglia che è stato aiutato da un orso tenero che era con lui tutto il tempo. I soccorritori in riferimento alle notizie di un bambino che piangeva hanno trovato Casey Hathaway aggrovigliato in cespugli spinosi, al freddo e bagnato, ma sano e salvo giovedi notte. Si era perso martedi' in condizioni terribili che la successiva ricerca doveva essere annullata. Come vuolesi dimostrare l'aiuto forse reale, forse immaginario ma sicuramente utile è stato a portata di manonel North Carolina, uno stato che è dimora di numerosi orsi neri. Il vile sceriffo della contea Chip Hughes ha detto a Casey che aveva un amico nei boschi, che un orso era con lui. La notizia fu riportata dalla zia del fanciullo Breanna Hathaway il bimbo ha detto di essere stato con un orso per 2 giorni. Hathaway ha scritto su un post Facebook I miracoli possono accadere. Hughes ha detto che il ragazzo stava giocando con altri bambini nel giardino della nonna in Ernul martedi', ma non è entrato dentro con loro. Le terribili condizioni atmosferiche con una temperatura bassa di 20

Fahrenheit e riguarda il problema che Casey non fesso adeguatamente equipaggiato per il freddo non innescasse una ricerca con elicotteri, droni, k9 unita' e guidatori come centinaia di volontari. Da giovedi' il vento e la pioggia sono cosi' intensificati da indurre i volontari a interrompere le ricerche. E'un sopravvissuto, ha riferito Hughes venerdi' ribadendo che i soccorritori dovevano barcamenarsi in alta marea per raggiungere il bambino Casey se ne è uscito solo con qualche graffio e voleva semplicemente sua madre e dell'acqua, ha detto.

LS5

Un bambino di 3 anni si è perso nei boschi per due giorni e dice che un orso lo ha salvato. Casey Hathway dal North Caroline ha acclamato come sopravvissuto dalla polizia dopo essersi perso a temperature sotto zero, Un bambino di tre anni che è sopravvissuto due notti da solo nei boschi in condizioni di freddo gelido ha detto alla polizia e alla famiglia di essere stato aiutato da un amico orso che è stato con lui tutto il tempo. I soccorritori rispondono alla notizia del bambino. Casey Hathaway che piange attorcigliato in cespugli spinosi, al freddo e bagnato ma salvo il giovedi' notte. Si era perso martedi' in condizioni metereologiche talmente brutte che i soccorritori hanno dovuto rimandare le ricerche. Come volevasi dimostrare, l'aiuto reale, forse immaginario è stato a portato di mano in quei boschi del Nord Carolina, uno stato che è dimora degli orsi bruni. Lo sceriffo della contea di Chipp Hughes, disse che Casey aveva un amico nei boschi che era l'orso che era con lui. La notizia fu riportata dallo zio del ragazzino Breanna Hathaway. Lui disse che era stato due giorni con un orso, Hathaway scrisse su un post Facebook. I miracoli possono accadere. Hughes disse che il ragazzino stava giocando con altri due bambini nel cortile di casa della nonna a ernul il martedi' , ma non ritorno' indietro con loro. Le cattive condizioni del tempo con meno di 20

gradi Fahreneit e il fatto che non fosse equipaggiato al freddo avvio' una ricerca che coinvolse gli elicotteri, i droni, unita' cinofile e autisti, come anche centinaia di volontari. Dal giovedi' il vento e la pioggia erano diventate cos brutte da costringere i volontari a fermare le ricerche. Lui è un sopravvissuto, disse Hughes il venerdi', sottolineando che i soccorritori dovevano attraversare l'acqua fino alla vita per raggiungere il ragazzino. Casey se ne è uscito solo con qualche graffio e semplicemente voleva dell'acqua da sua madre, disse.

Professional translators: abstracts

PT1

Sapere cosa? Apprendimento pensiero e conoscenza. Cosa significa sapere. Il filosofo Gilbert Ryle distingueva tra filosofia della conoscenza e conoscenza dei fatti. In psicologia si parla di una differenza tra memoria procedurale e diLS3tiva in riferimento alle proprie conoscenze (Simmermann 2014). Nel linguaggio quotidiano parliamo di dati, informazioni e sapere. Pur non disponendo di una terminologia condivisa, in genere diamo per scontato che esista una differenza tra una conoscenza acquisita e da acquisire. La diffusione di Internet sta trasformando sia le nostre convinzioni pedagogiche sia le nostre convinzioni circa il valore della conoscenza acquisita. I lavori della Sparrow mostrano che siamo piu' inclini a ricordare il percorso di ricerca in rete piuttosto che i risultati della ricerca stessa. Secondo alcuni studi riportati dal Kaspersky Lab siamo di fronte a casi di "amnesia digitale", vale a dire la nostra difficolta' di ricordare i contenuti di cio' che risulta disponibile dalle ricerche in rete. Nel suo volume Mind Change (2015) la Greenfield sostiene che le tecnologie digitali stanno alterando in modo profondo il modo in cui pensiamo. La Greenfield si sofferma in particolare sugli effetti dei social network, sul modo in cui apprendiamo dalla rete (soprattutto attraverso le immagini) in paragone alle strategie di apprendimento dal testo stampato e sulle forme di apprendimento veicolate dai videogame. In uno studio del 2015 (Baron 2015) ho sostenuto che il passaggio dalla lettura del tempo stampato alla lettura dello schermo sta potenzialmente ristrutturando il significato stesso della lettura. Il tema della lettura è essenziale per indagare il significato della conoscensa, giacchè nelle societa' alfabetizzate la maggior parte del nostro sapere è veicolato dalla parola scritta. Laddove la nostra comprensione circa la

natura del sapere dipenda in parte dalle tecnologie digitali, la pedagogia nei segmenti dell'istruzione primaria e secondaria sta esplorando il cambiamento che intercorre tra una conoscenza mentale e una conoscenza basata su strategia di ricerca. Questa presentazione si propone di analizzare la natura e le conseguenze di tale trasformazione.

PT2

Sai cosa? Lo studio il pensiero e il sapere in un mondo digitale. Cosa significa il fatto di sapere qualcosa? Il filosofo Gilbert Ryle 1949 distingueva tra il sapere come e il sapere che.

Gli psicologi discutono di differenze tra la memoria procedurale e la memoria dichiarativa di cio' che si conosce. Nell'accezione comune, si parla di dati, informazioni e sapere. Se ci manca una base comune di terminologia generalmente supponiamo che il fatto di sapere qualcosa è diverso dallA NECESSITA' di cercarlo. L'espansione di Internet sta cambiando sia la nostra scienza pedagogica che le nostre convinzioni quotidiane circa il valore del sapere acquisito. Come indica la ricerca condotta da Betsy Sparrow ed i suoi colleghi

(2011) siamo piu' propensi a ricordare un percorso di ricerca fatto su internet piuttosto che i risultati che essa genera. In un documento di Kaspersky Lab (2015) si parla di amnesia digitale ossia dell'incapacita' di ricordare il contenuto delle risorse disponibili tramite una ricerca fatta online. Nel suo libro Mind Change, Susan Greenfield asserisce che le tecnologie digitali stanno causando maggiori cambiamenti nel modo di pensare.Greenfield si focalizza su alcune tematiche , come gli effetti del fare rete sociale il modo di imparare da internet

(specialmente dalle immagini) piuttosto che dal testo scritto ed i tipi del trasferimento del sapere che possono generare i videogiochi. In uno dei miei lavori, (Baron 2015) avevo illustrato come il passaggio crescente dalla lettura su supporti cartacei alla lettura su schermo digitale sta rimodellando anche il modo di leggere. La questione della lettura ha un'importanza critica in termini del sapere in quanto in una societa'alfabetizzata cio' che veniamo a sapere proviene dalla parola scritta. Mentre le tecnologie digitali sono in parte responsabili del mutamento dela comprensione del significato, la pedagogia dell'istruzione di base e quella superiore sta rafforzando il passaggio dall' enfatizzare il sapere intrinseco di ognuno di noi al valorizzare la ricerca. Questa presentazione ha lo scopo di esplorare la natura e le implicazioni di questo cambiamento.

PT3

Ma che vuol dire conoscere qualcosa? Il filosofo Gilbert Ryle (1984) faceva differenza tra sapere come e sapere che cosa. Gli psicologi descrivono le differenze esistenti tra memoria dichiarativa e procedurale di cio' che uno sa. (Zimmermann 2014). Nel parlare comune si parla di dati informazioni e conoscenza. Se non possediamo un set di terminologia condivisa, diamo di solito per scontato che conoscere qualcosa sia diverso dal doverlo cercare in un testo. La crescita della rete sta mutando sia la nostra pedagogia che le nostre convinzioni quotidiane riguardanti il valore della conoscenza interiorizzata.Uno studio condotto da BETSY Sparrow e dai suoi colleghi (2011) ci indica che è piu' facile ricordare i percorsi di ricerca sulla rete che i risultati raggiunti.Un lavoro riportato da Kaspersky (2015) parla di "amnesia digitale" cioè la nostra incapacita' di ricordare i contenuti di cio' che troviamo disponibile attraverso una ricerca online.Nel suo nuovo lavoro dal titolo "Mind Change", Susan Greenfield (2015)

argomenta che le tecnologie digitali stanno incominciando ad alterare il modo di pensare delle persone. Il focus del pensiero di Greenfield è su temi riguardanti gli effetti del networking sociale, il modo in cui si impara dalla rete (specialmente tramite immagini visuali), piuttosto che da testi cartacei e il tipo di apprendimenti prodotti dall' interazione con i videogames. Nella mia ricerca (Baron 2015) asserisco che il progressivo abbandono della lettura effettuata tramite consultazione di testi cartacei a favore di quella a video stia ridisegnando in potenza il significato stesso di lettura In effetti, la stessa azione di leggere è un punto critico per la formazione della conoscenza stessa, dato che nelle societa'piu' avanzate e scolarizzate la maggior parte delle nostre acquisizioni avviene attraverso la parola scritta. Di contro, mentre la tecnologia digitale è parzialmente responsabile per la trasformazione dalla conoscenza in comprensione, la pedagogia sia nella scuola primaria che secondaria sta incoraggiando la trasformazione che dall' enfatizzazione del sapere al contenuto all' interno del nostro cervello in forma di nozioni, a conferire il giusto valore dell'acquisizione mediante ricerca. Tale presentazione esplora la natura e le implicazioni del suddetto cambiamento.

PT4

Il sapere? Imparare, pensare e conoscere in un mondo digitale.

Che significa conoscere qualcosa? Il filosofo Gilbert Ryle (1949) distingueva tra la conoscenza di processi e la conoscenza di contenuti.

Gli psicologi descrivono le differenze tra la memoria procedurale dichiarativa in relazione a cio' che si sa (Zimmermann 2014). Nel linguaggio comune parliamo di dati, di informazione e di conoscenza. Se è vero che non disponiamo di una

terminologia comune, è altrettanto vero che in genere si da' per scontato che conoscere qualcosa è diverso dal dover svolgere delle ricerche per capire di cosa si tratti.

L' evoluzione di Internet sta modificando sia il nostro approccio pedagogico sia le nostre conoscenze condivise sul valore della conoscenza interiorizzata. Dalle ricerche di Betsy Sparrow e colleghi (2011) emerge che ci risulta piu' facile ricordare I percorsi di ricerca su Internet che I risultati delle nostre ricerche. In un lavoro riportato dal. Kasperly Lab (2015), si menzional''amnesia digitale', ossia la nostra incapacita' di ricordare il contenuto di cio' che risulta disponibile da una ricerca online.

Nella sua recente pubblicazione Mind Change, Susan Greenfield (2015) sostiene che le tecnologie digitali stanno modificando in misura significativa il modo di pensare delle persone. Greenfield si concentra su temi quali gli effetti dei social network, il modo in cui impariamo da Internet (in particulare dalle immagini) rispetto ai test cartacei , e la tipologia di trasferimento delle conoscenze prodotta dai videogiochi .Nella mia ricerca (Baron 2015), sostengo che la tesi secondo cui il passaggio sempre piu' accentuate dalla lettura su carta alla lettura su schemi digitali puo' contribuire a ridefinire il significato della lettura stessa..Il tema della lettura è critico per quanto concerne la conoscenza dal momento che nelle societa' basate sulla conoscenza , molto di cio' che apprendiamo è veicolato dalla parola scritta..

Mentre la tecnologia digitale è in parte responsabile di un mutamento nella nostra comprensione della conoscenza gli approcci pedagogici nell' istruzione inferiore e superiore sottolineano il cambiamento in atto, evidenziando l' importanza delle

conoscenze pregresse nel valutare I risultati delle ricerche.. La presentazione in oggetto esplora la natura e le implicazioni di tali mutamento.

PT5

Lo sapevate? Apprendere, pensare ed acquisire conoscenza in un mondo digitale.

Che significa conoscere qualcosa? Il filosofo Gilbert Ryle (1949) ha fatto una distinzione tra conoscere il processo del 'come' e il 'cosa'. Gli psicologi parlano di differenze tra la memoria procedurale dichiarativa relativamente a cio' che si sa (Zimmermann 2014). Nel linguaggio comune si parla di dati di informazioni e di conoscenza. Se anche manca un insieme di terminologia condivisa, di solito assumiamo che conoscere qualcosa sia diverso dal doverla cercare.

L 'espansione di Internet sta cambiando sia la nostra pedagogia che le nostre opinioni quotidiane riguardo alla conoscenza interiorizzata. Una ricerca condotta da Betsy Sparrow e dai suoi colleghi (2011) indica che è piu' probabile che noi ricordiamo I percorsi di ricerca online piuttosto che I risultati che ci vengono forniti. Kasperly Lab (2015), parla nel suo lavoro della cosiddetta 'amnesia digitale', espressione con cui si intende la nostra incapacita' di ricordare il contenuto di cio' che è disponibile attraverso una ricerca effettuata sul web.

Nel suo ultimo libro Mind Change, Susan Greenfield (2015) sostiene che le tecnologie digitali stanno mettendo in campo importanti modifiche nel modo in cui si pensa. Greenfield si concentra su tematiche quali l'effetto dei social network, I modi in cui apprendiamo da Internet (in particular modo dalle immagini) piuttosto che dai test cartacei e sui tipi di trasferimento della conoscenza prodotti dai videogames. Nel mio saggio (Baron 2015), ho evidenziato che il mutamento in crescita dalla lettura su testi stampati alla lettura

su schemi digitali sta potenzialmente cambiando il concetto di lettura. La lettura costituisce un argomento critico per quel che riguarda gli interrogativi relativi all' acquisizione della conoscenza dal momento che nelle societa' caratterizzate dalla cultura, molto di cio' che apprendiamo viene recepito tramite la parola scritta. Mentre la tecnologia digitale è parzialmente responsabile dei mutamenti nella nostra comprensione di cio' che significa conoscere, la pedagogia sia nell' istruzione inferior che in quella di livello superiore sta rafforzando il mutamento dall' enfatizzare la conoscenza nell' ambito della nostra mente al dare valore alla ricerca. Questa presentazione esplora la natura e le implicazioni di questo mutamento.

Professional translators: newspaper articles

PT1

Un bambino disperso nel bosco per due giorni racconta che un orso amico lo ha salvato. Casey Hathaway (Carolina del Nord) è stato accolto come un "sopravvissuto" dopo essersi smarrito nel bosco a temperature sotto zero. Un bambino di 3 anni sopravvissuto da solo per 2 notti nel bosco a temperature glaciali ha raccontato alla polizia e alla famiglia di essere stato aiutato da un orso amico. I soccorritori intervenuti giovedi' notte in seguito a segnalazioni, hanno ritrovato Casey Hathaway intrappolato tra i cespugli, infreddolito e bagnato, ma salvo. Era stato dato per smarrito da martedi', in condizioni climatiche cosi' avverse da causare una sospensione delle ricerche. A quanto pare, l'aiuto da parte dell'orso, non si sa quanto attendibile era possibile nelle foreste della Carolina del Nord , dove vivono numerosi esemplari di orso nero. Lo sceriffo della Contea di Craven, Chipp Hughes ha riferito che Casey diceva di avere un amico nel bosco,

un orso nero, che è stato sempre accanto a lui. Secondo i media la storia è stata riferita anche dalla zia del bambino Breanna Hathaway che ha scritto in un post Facebook che suo nipote è stato in compagnia di un orso per 2 giorni talvolta i miracoli accadono. Lo sceriffo ha diLS3to che martedi' il bambino stava giocando con due amichetti nel cortile della casa di sua nonna ad Ernul. Le condizioni climatiche con temperature sotto zero e la preoccupazione che Casey non fosse adeguatamente vestito hanno fatto scattare le ricerche cui hanno partecipato elicotteri, droni e unita' cinofile automessi e centinaia di volontari. Dopo due giorni, giovedi' vento e pioggia erano cosi' forti da costringere la polizia a una sospensione delle ricerche da parte dei volontari. E'un sopravvissuto ha dichiarato lo sceriffo venerdi' sottolineando che i soccorritori sono stati costretti ad attraversare corsi d' acqua alta fino alla vita per raggiungere il bambino Casey si è salvato riportando soltanto pochi graffi, e chiedendo l'acqua e sua mamma ha poi aggiunto.

PT2

Un bambino di 3 anni, per due giorni dato per disperso in un bosco, dice di essere stato salvato da un orso amichevole.

Casey Hathway, dello stato Carolina Nord, è stato dichiarato un sopravvissuto dalla polizia, dopo che si era perso dal gelo. Un bambino di 3 anni, sopravvissuto da solo alle temperature sotto zero in un bosco, ha raccontato alla polizia e alla famiglia di essewre stato aiutato da un orso buono che gli avrebbe fatto compagnia per tutto il tempo. Giovedì sera i soccorritori che hanno risposto alla chiamata che parlava di un bambino che piangeva, hanno trovato Casey Hathaway in mezzo agli arbusti spinosi, infreddolito e bagnato fradicio. Martedì il bambino

era scomparso, ma le condizioni meteo avverse hanno impedito di proseguire le ricerche. Si è scoperto che l'aiuto, reale o immaginario che fosse, ma senza dubbio utile, in quelle foreste della Carolina del Nord, uno stato che ospita numerosi orsi neri, era a portata di mano. A detta dello sceriffo nella contea di Craven, Chipp Hughes, Casey "ha raccontato di aver avuto vicino a lui un orso per amico". La testimonianza è stata confermata dalla zia del bambino, Breanna Hathaway. "Ha detto che in quei due giorni un orso gli ha tenuto compagnia". Scrisse la Hathway in un post facebook. "[…]. I miracoli succedono".

Hughes aveva detto che martedì il bambino stava giocando coin altri due bambini nel cortile della nonna ad Ernul ma non è rientrato a casa con loro. Le condizioni meteorologiche particolarmente avverse e le preoccupazioni che gli indumenti di Casey non fossero adatti per il freddo, fecero si che iniziò una ricerca che coinvolse elicotteri, droni, unità cinofile e guidatori di veicoli, oltre alle centinaia di volontari. Verso giovedì il vento e la pioggia peggiorarono talmente, che le autorità diedero ordine ai volontari di non inoltrarsi nella zona. "E'stato fortunato ad essere sopravissuto" dichiarò Hughes venerdì, aggiungendo che per trovare il bambino, i soccoritori hanno dovuto vagare in acque altissime. Casey che se l'è cavata con giusto qualche graffio, ha chiesto da bere e voleva sua mamma vicino".

PT3

Bimbo di 3 anni disperso nei boschi per due giorni dichiarato di essere stato salvato da un orso Casey Hathaway del North Carolina riaccolto come "sopravvissuto" dalla polizia dopo essersi smarrito in temperature inferiori allo zero grado. Un bimbo di 3 anni che è sopravvissuto per 2 notti da solo nei boschi in condizioni di assideramento ha dichiarato alla polizia e ai familiari di essere stato soccorso da un orso mansueto che gli ha tenuto compagnia tutto il tempo. I soccorritori accorsi nella notte di giovedi' alla chiamata di intervento che riportava La presenza di un infante che piangeva, hanno trovato Casey Hathaway avviluppato dai rovi mezzo congelatoma salvo. Il ragazzino era scomparso martedi' in condizioni atmosferiche cosi' difficili che la ricerca era dovuta essere interrotta. Come si è poi visto l'aiuto, forse reale o forse immaginario, ma sicuramente efficace era a portata di mano nei boschi di quella regione del North Carolina uno stato che tradizionalmente ospita numerosi orsi bruni. Lo sceriffo della contea di Craven Chip Hughes dichiaro' che Casey sosteneva di avere un amico orso che gli aveva fatto compagnia nei boschi. Il racconto fu ripetuto anche dalla zia del minore Breanna Hathaway che ha detto di essere andato in giro con un orso per due giorni. Nella sua pagina Facebook infatti, la signora dichiaro' in un post (riferendosi al nipote). I miracoli avvengono. Hughes disse che il bambino stava giocando con due coetaneinel cortile di casa della nonna ad Ernul il martedi' della scomparsa, ma che non rientro' insieme a loro. Le infernali condizioni meteo con una temperatura inferiore ai 20 Fahrenheit e la preoccupazione causata dal fatto Casey non fosse vestito adeguatamente per tale freddo diede luogo ad un'operazione di ricerca mediante l'utilizzo massiccio di elicotteri, droni, unita'K 9 e centinaia di volontari. Il giovedi'il vento e la pioggia erano peggiorati a tal

punto che le autorita' chiesero ai volontari di sospendere le operazioni. E'un sopravvissuto disse Hughes venerdi' puntualizzando che i soccorritori avevano dovuto guadare acque profonde fino alla cintola per raggiungere il piccolo. Casey se l'è cavata con pochi graffi ed escoriazioni ed ha solo chiesto dell'acqua da bere e la sua mamma.

PT4

La vicenda di Casey Hathaway del North Carolina, che si era perso a temperature polari. Per la polizia il piccolo è un "sopravvissuto"

Un bambino di 3 anni sopravvissuto due notti da solo nella foresta a temperature inferiori allo zero ha riferito agli agenti di polizia e ai suoi genitori di essere stato aiutato da un orso che non lo ha perso di vista per tutto il tempo. I soccorritori, allertati da segnalazioni di un pianto di un bimbo, hanno trovato Casey Hathaway rannicchiato tra arbusti spinosi bagnato e in ipotermia ma sano e salvo. La denuncia della scomparsa del piccolo era scattata martedi', ma le circostanze erano cosi' avverse che le successive ricerche erano state sospese. Come ha poi riferito il bambino, nelle foreste della North Carolina (uno staro USA che ospita numerosi orsi neri). ha potuto contare su un plantigrade come amico. Lo sceriffo della contea di Craven Chip Hughes ha dichiarato che Casey avrebbe rivelato di aver trovato in un orso che era nei paraggi un amico fidato. Lo stesso racconto è stato poi ripetuto dal bambino anche dalla zia del bambino, Breanna Hathaway che ha detto che ha trascorso due giorni insieme a un orso, ha scritto la signora Hathaway in un post su Facebook.I miracoli esistono. Lo sceriffo Hughes ha specificato che il bimbo stava giocando con due amichetti nel cortile della casa della nonna a Ernul, ma che non era poi rientrato nella casa assieme a loro. A

causa delle condizioni atmosferiche decisamente avverse con temperature inferiori allo zero e i timori dovuti al fatto che l'abbigliamento di Casey non era adatto al clima rigido, è stata avviata una ricerca con dispiegamento di elicotteri, droni, unita' cinofile e automezzi, nonché centinaia di volontari. Giovedi' il vento e la pioggia si erano accentuati a tal punto che le autorita' hanno chiesto ai volontari di rinunciare alle ricerche. E'un sopravvissuto, ha concluso Hughes venerdi' sottolineando che i soccorritori hanno dovuto guadare acque alte fino alla cintola per raggiungere il piccolo. Casey se l'è cavata con pochi graffi e due sole richieste: un po' d'acqua e sua mamma.

PT5

Un bambino di 3 anni che si era smarrito nella foresta dice di essere stato tenuto in salvo da un orso amico. Casey Hathaway proveniente dalla Carolina del Nord è stato salutato come un "sopravvissuto" dalla polizia. Un bimbo di 3 anni che è sopravvissuto a 2 notti di solitudine nella foresta in condizioni di gelo ha raccontato alla polizia e alla famiglia di essere stato aiutato da un orso amico che è rimasto con lui tutto il tempo. I soccorritori che hanno risposto alle urla hanno trovato Casey Hathaway impigliato in cespugli spinosi, infreddolito e inzuppato d'acqua ma in buone condizioni di salute giovedi' sera. Era scomparso martedi' in condizioni cosi' negative che è stata necessaria attivare una successiva ricerca. Come si è scoperto l'aiuto, forse reale, forse immaginario, ma certamente utile è stato disponibile in quei boschi della Carolina del Nord, uno stato dove vivono numerosi orsi neri. Lo sceriffo della contea di Craven, Chip Hughes, ha riferito che Casey ha detto che "Casey ha avuto un amico nella foresta in un orso che è rimasto con lui." La dichiarazione è stata ripetuta dalla zia del bambino Breanna Hathaway in un post su Facebook. "I miracoli accadono ". Hughes ha riferito che

il ragazzino stava giocando con altri 2 bambini nel cortile posteriore di casa della nonna ad Ernul martedi' ma non è rientrato insieme a loro. Le terribili condizioni di bassa temperatura circa 20 gradi di Fahrenheit e la preoccupazione il fatto che Casey non fosse vestito in modo adeguato per il freddo ha richiesto che si avviasse una ricerca che coinvolgesse elicotteri, droni, unita' k9 e autisti oltre a centinaia di volontari. Giovedi' il vento e la pioggia erano intensificati cosi' tanto che le autorita' hanno ordinato ai volontari di ritirarsi. E'un sopravvissuto, ha dichiarato Hughes il venerdi, sottolineando come i soccorritori avessero dovuto muoversi attraverso acqua alta fino alla vita per raggiungere il ragazzo. Casey è sfuggito riportando solo pochi graffi e ha chiesto semplicemente di avere un po' d' acqua e la mamma, ha detto.

Appendix 2: Questionnaire to post-graduate language students and professional translators

Bio notes

1)Name :

2)Surname :

3) Age:

4)Grade:

5) Gender:

6)Training Job:

7)City:

8)University:

9) L1:

10) L2:

11)Which other languages do you know?

12)Underline the languages you speak at home

Dialect…. standard … both

13)If any other languages, which?

14)How many years have you studied English?

15)How old were you when you started to learn English?

16) How many months have you spent in an English speaking country?

Self-assessment

How do you assess your competence in English? Tick the relevant box

	A2	B1	B2	C1	C2
Listening					
Reading					
Speaking					
Writing					

Short TAP Abstract

1)Write down the terms that create problems for you

2)What were your priorities when solving them?

3)Are you satisfied with the solution?

Yes No why?

4) How difficult do you think this text is to translate?

Very difficult difficult easy very easy (motivate your answer very briefly)

Short TAP Article

1)Write down the terms that create problems for you

2)What were your priorities when solving them?

3)Are you satisfied with the solution?

Yes No why?

4)How difficult do you think this text is to translate?

Very difficult difficult easy very easy (motivate your answer very briefly)