

Terminology and Interpreting in LSP Conferences: A Computer-aided vs. Empirical-based Approach

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ABSTRACT

Conference interpreters are called to work in highly technical communicative events, therefore they need to acquire specialized knowledge in terms of terminology (LSP), in order to produce adequate target texts. The goal of the study is to compare two different methodologies for the creation of glossaries to be used during simultaneous interpreting in the medical domain; one is more empirical and represents the most frequently adopted approach among conference interpreters; the second is supported by WordSmith Tools for the selection of contexts of use. The glossaries created with WordSmith Tools will be compared with those created manually, and both will be tested in the translation booth for completeness, clarity, and adequacy.

1. INTRODUCTION

Conference interpreters working with LSP (Language for Special Purposes) need to acquire specialized knowledge in a rather short time, in terms of terminology and ontological structures before events, in order for interpreting to proceed smoothly. Due to the special conditions of simultaneous interpreting (SI), time constraints and cognitive load (Gerver 1969, reprinted in Pöchhacker and Shlesinger 2002: 54), terminological preparation has to be carried out prior to an event since the interpretation process cannot be interrupted (Will 2007). The focus of this preliminary study is on a selection of medical terms, among the most problematic ones in terms of complexity and syntactic structures: those that are more likely to cause cognitive stress and saturate processing capacity (Gile 1999, 2005) during interpreting, such as multi-term words or Premodified Noun Phrases (PNPs). PNPs account for a particular phenomenon, which is not exclusive to LSP but which is rather typical and recurrent as demonstrated by several authors (among others Gotti 1991, 2008) and confirmed by our study. Drawing on Gile's Effort Models (1995), the assumption is that in SI all "the fundamental components such as Listening, Analysis (L), Production of the Source Speech (P), and short-term Memory Effort (M), along with a Coordination component C" (*ibid.*: 2) have some specific requirements in terms of processing capacity and at every moment the processing capacity "available for each Effort should be sufficient to cope with the task at hand" (*ibid.*: 2).

We postulate that the SI process will be smoother if an adequate terminological preparation has been carried out. PNPs can create difficulties for the work of simultaneous interpreters during all the phases highlighted by Gile (1995) of Listening and Analysis (L), Production of the Source Speech (P), short-term Memory Effort (M) and Coordination (C), if they are not detected and analysed in advance, largely due to their frequency and complexity (Gotti 1991, 2008). Our intention is to anticipate these difficulties, normally encountered when interpreting from English into Italian, by drawing on the interpreting theories of directionality (among others Setton 2002; Gile 2005; Monti *et al.* 2005).

In this preliminary study, an analysis is carried out on written texts provided by conference organizers before the event, in order to analyse the frequency and the structure of PNPs, in terms of complexity and ambiguity, in the English-Italian language pair. The LSP sub-genre chosen for investigation is veterinary medicine. The overall corpus includes 10 dermatology texts and 15 physiology of reproduction texts, for a total of 31,372 tokens. Two methods are used to detect PNPs. One is more empirical and the most widely adopted by interpreters: a manual search for specific terminology and its relevant linguistic equivalent. The second is supported by an IT Tool – WordSmith Tools – for terminology extraction and analysis of the relevant contexts for knowledge acquisition.

2. INTERPRETING AND KNOWLEDGE ACQUISITION THROUGH TERMINOLOGICAL WORK

Interpreting is an act of communication and as such cannot happen in a social vacuum (Garcia-Landa 1995).

In conference interpreting the interpreter is not a participant in her/his own right: s/he is only a co-speaker “who has to imitate and transfer the immediate interpretant of the source text into the target text”. (Dressler 1994: 104-105)

The interpreter is never the producer of the message but an interface or an impartial filter. Therefore, it is important to adopt the same communication code as the sender of the message in order to convey the message with efficacy so that “the information received incites a mental state in the recipient which is exactly the state intended by the originator” (Sager *et al.* 1980: 314). This target-oriented approach will make it possible for the interpreter to acquire the same “world views” as the sender of the message and be perceived as part of the community he/she is working for, thus becoming a “co-speaker” (Dressler 1994). In Sager we read:

The user-oriented or pragmatic approach requires investigation both of the circumstances under which individuals use languages, and the potential or functions of the language they use. In both there are socially determined elements, but also limited freedom of choice. In his choice of means of expression the individual is influenced by the subject he is talking about, his place in society and his geographical location. (Sager *et al.* 1980: 6)

According to Wilhelm von Humboldt and his linguistic relativity thesis, the way we think is “limited and determined by one’s native language” and “the variety of languages is not merely a variety of sounds and signs, but in fact a variety of world views” (Wilhelm von Humboldt 1830, quoted in Coetzee 1992: 181). Therefore, using this example as a metaphor, if interpreting means stepping into other “language worlds”, we postulate that it is through the analysis of the syntactic structures of LSP that we can go beyond lexical contrasts to the scrutiny of what Whorf sees as something that is “more fundamentally determinative of the structures of thinking” (Coetzee 1992: 184). Hence the importance of focusing not only on linguistic equivalencies but also on contexts and the most problematic *syntactic structures* to better understand the macro structure of the discourse (van Dijk 1997) and to give cohesion to the interpreted text. Due to the particular way interpreters work, it is generally acknowledged in the literature that information about terminology has to be acquired before a conference takes place (Will 2007: 3). Knowledge acquisition through terminological preparation becomes important above all when interpreters work into their B language, as we read in Gile (2005: 6):

However, when determining which interpreting direction is “best”, it makes sense to refer to overall performance, which depends not only on language mastery, but also on familiarity with the topic, on the interpreter’s cognitive abilities most relevant to interpreting, and in particular, on his/her working memory capacity (see for instance Padilla, 1995 and Liu, 2001), both language-dependent and language-independent, and possibly on his/her motivation, state of health, professionalism, etc.

The terminological work carried out by the interpreter creates a conceptual system, in which the terms are structured and organized by order of appearance in the discourse. Interpreters commonly extract terms manually, creating individual conceptual structures or “conceptual maps” (Meyer *et al.* 1997: 104-105). These conceptual maps are regarded by all interpreters as essential tools in order to convey specialized knowledge to non specialist end-users. Von Humboldt (1820, quoted in Coetzee 1992: 182) speaks of language as a “circle, a closed system, from which one can exit only by entering another closed system”. The interpreter during translation leaves his/her own “closed system” to enter the target language system, by moving back and forth through different syntactic structures and world views.

3. LSP

Specialized vocabulary is the access key to specialized discourse in any given professional field [...] and it represents an essential component in a translator’s competence. (Garzone 2006: 13)

Within each single “special language” there is a wide scope for variation in terms of degree of specialization or technicality, depending on a number of factors, among which the participation framework of a given communicative event and its purpose are paramount (Garzone 2003: 26).

There is a time and place for everything and le mot juste for every time and place, particularly in special languages, a restricted area of human activity. (Sager *et al.* 1980:4)

LSP differs from ordinary language in several ways, most importantly in linguistic and semantic terms. Language for specific or (special) purposes or domain-specific languages are contextual-functional varieties of the ordinary language (Garzone 2006) and they are characterized by specific morpho-syntactic forms and by some discursive and pragmatic features. According to the domain, LSP is characterized by the tendency to prefer certain morpho-syntactic forms to others, which are used with unusual frequency. Along the same lines, the sociolinguist Berruto (1974) emphasizes the notion according to which specialized lexicon has its own specific vocabulary, and this makes a language less accessible for those who do not have an adequate knowledge in the field. Though during

pre-conference preparation a certain degree of arbitrariness is allowed, our assumption is that it is by focusing on the most problematic syntactic features in LSP that the interpreter can take a step into other “language worlds” and alleviate the cognitive load required during SI, by better controlling the processing capacity requirements in comprehension and production, working from B into A language (cf. Gile 2005).

4. THE NOUN PHRASE IN LSP

A more ambitious area of inquiry, going beyond lexical contrasts in order to investigate what is “more fundamentally determinative of structures of thinking”. (Coetzee 1992: 184)

Recourse to Noun Phrases is very common in specialized English, as they enable nominal elements to be “assembled” into a complex phrase: this is highly functional to economy of expression, a criterion much cherished in scientific and technical texts. The linguistic principle of space economy is the main reason for the widespread use of Premodified Noun Phrases (PNPs) in scientific English (Carriò Pastor 2008: 30). The possibility of combining nominal elements into noun phrases, thanks to the use of nouns as premodifiers, is an exclusive trait of Germanic languages. PNPs are regarded as one the most problematic structures of medical English, and due to their complexity and frequency (Gotti 1991, 2008) they can create difficulties for simultaneous interpreters. This finding is also confirmed by the quantitative analysis carried out in our study. As we read in Garzone (2006: 32):

[...] in some cases it could be difficult to understand the correct relation between the components of a noun string; this can be particularly problematic when a text is being interpreted with a view to translating it into a language – like Italian.

In the literature there are many definitions of PNPs. We refer to Politzer (1972: 130) who defines them as “the process of creating new words from elements which by themselves are also independent words”. Gotti (2008: 73) defines them as “an elliptical form offering a high degree of compactness”. In any case, they are widely adopted in specialized texts as they satisfy the highly appreciated criterion of economy rendering sentences denser with a higher semantic weight (*ibid.*: 74), resulting in compact, elliptical structures that must be decoded and reformulated into the target language. This brings us back to our initial assumption, postulating the need to investigate highly complex syntactic structures as a means of controlling and preserving the processing requirements that are necessary during SI. Hence, the importance of terminological preparation that does not include all medical terms but only the most complex.

5. DECODING PNPs: AMBIGUITY AND SYNTACTIC COMPLEXITY

Disambiguating and translating complex PNPs can be very demanding for simultaneous interpreters, due to their structural complexity and frequency of occurrence (Gotti 1991, 2008). PNPs are highly demanding in SI because they require not only specialized knowledge, but also a very well trained short-term memory. The major difficulty derives from the fact that Italian relies on left-to-right construction, whereas in English the right-to-left pattern is very common in LSP, which shortens sentences and makes the noun phrase especially dense (Gotti 1991: 73). Another element of difficulty is related to Italian requiring explicitation of the logical and semantic relations between nominal elements by means of prepositions (Garzone 2006: 32): a process that entails specialized knowledge and an efficient processing capacity in the comprehension phase. The difficulty is increased when the noun string contains multiple heads: i.e. the noun pre-modifier is itself pre-modified by another noun (or adjective) which in turn may be preceded by a pre-modifier and sometimes the premodifier consists of a complex prepositional phrase (*ibid.*: 31-32), as in the following example taken from the corpus described below:

- (1) early postpartum dominant follicle development = *sviluppo del follicolo dominante nel primo periodo dopo il parto*

In example 1 the head of the whole phrase “development”, has a premodifier “dominant follicle”, preceded by “early postpartum” which acts as a premodifier for the whole complex phrase. This is an obscure structure, due to its “radical reduction in explicitness” (*ibid.*: 32). Garzone states that these structures “represent a real challenge for the translator, as the switch to Italian requires complete explicitation of the complex relations between the different noun groups assembled into an intricate and densely packed lexical chain” (*ibid.*: 33). The complexity is greater for simultaneous interpreters, due to the special working conditions, time constraints and cognitive load (Gile 2005). Some authors (Salager-Meyer 1983; Navarro 1995; Dikken & Singhapreecha 2004) are aware of this difficulty and they claim that there is no single explanation concerning the equivalence of English PNP structures in other languages. The lack of verbs and prepositions in pre-modified noun phrases adds another element of complexity and this requires more background knowledge from the reader (Dubois 1982: 154). “The addressee is forced to identify the semantic-syntactic links” (Gotti 1991: 74) and these relations are sometimes obscured by the length of pre-modification (Carriò Pastor 2008: 29). Moreover, the “number of the internal constituents can be infinite” (*ibid.*: 28), although we know from Miller (1967, quoted in Gotti 2008: 74) that due to the human mind’s limited capacity for short-term memorization, the maximum number of unrelated items recalled is six. This is also confirmed in our study, where the number of PNPs with a number of items higher than 5 is extremely rare. There are indeed various cases in which noun compounds may

be interpreted in different ways and thus linguistic competence alone is not sufficient and has to be integrated by specialized knowledge of the topic (Gotti 1991: 75). Therefore, it seems that “ambiguity is only apparent and poses a challenge only to non specialists” (Gotti 2008: 75).

6. PNPs AND GILE’S “TIGHTROPE HYPOTHESIS”

When it comes to SI there are several factors that may have an impact on the interpreter’s performance. Drawing on Gile’s cognitive analysis of directionality in interpreting (2005: 2), the fundamental components in SI are the following: Listening and Analysis (L), Production of the Source Speech (P), Short-Term Memory Effort and Coordination (M). According to Gile’s theory, in order to attain a smooth interpreting process, “two conditions must be met”:

Firstly, the sum of requirements from the three Efforts, plus the coordination component, should not exceed the total available processing capacity.

$$L + P + M + \text{Coordination of Efforts} \leq \text{Available Resources}$$

and:

Secondly, at every moment, the processing capacity available for each Effort should be sufficient to cope with the task at hand, i.e. comprehension of a particular speech segment, storage and/or retrieval of required pieces of information from the incoming speech, and retrieval from long-term memory and production of the correct lexical units and grammatical structures to express whatever needs to be verbalized at that time in the target speech. (Gile 2005: 2)

When these conditions are not met, errors and omissions may occur and the interpreting performance deteriorates (Gile 1999, 2005). According to our assumption, the complexity and ambiguity of the structure of PNPs saturates the processing capacity of the interpreter, leaving little or no resources for neighbouring segments. Mazza (2001) reports similar findings applied to the case of numbers in SI. According to Mazza errors and omissions in interpreting numbers are due to saturation of the processing capacity (2001: 3). As far as the processing capacity requirements in speech comprehension and speech production when translating PNPs are concerned, there are language-specific factors that come into play. For the purpose of this study, the directionality is from B (English) into A (Italian), and apart from the dispute over the issue of whether it is better to translate into one’s own A language or not, some linguistic and syntactic differences should be taken into account. When translating PNPs from English into Italian, the processing capacity is overloaded in the production phase, due to the complex and ambiguous syntactic structure of the PNPs. This situation is apparent in the following example:

(2) Periparturient transition period = *periodo di transizione del periparto*

In the example above, the major difficulties for the interpreter are the following: the target-language speech segment in A language is longer than the source-language: the Italian is less concise and requires the addition of the articles. If the assumption put forward by Gile (1995, 2005) is true, according to which interpreting from more concise to less concise languages “presumably requires more processing capacity than working from less concise to more concise languages [...] if only because pronouncing a larger number of words takes more time, which may contribute to working memory load” (Gile 2005: 6), the processing capacity requirements can be easily saturated in the speech segments containing PNPs, above all in those where the items are more than 3. The processing requirements in the production phase involve not only translation, but also determining the exact logical-semantic position of each item. Even though we know that there are some guidelines for the disambiguation of PNPs, these rules do not always apply. This confirms our initial assumption, according to which concentrating on the most difficult syntactic structures in LSP before a simultaneous interpretation can be a strategy that enables difficulties to be anticipated and alleviates the cognitive load during the interpreting activity. The complexity and ambiguity of PNPs is not only due to the number of items used but also to the direction of the syntactic construction. In English, as mentioned, PNPs have a right-to-left construction, as opposed to Italian and the interpreter must comprehend the segment, store and retrieve the necessary information to reconstruct the logical-semantic links in the right sequence. The interpreter’s cognitive load is perilously close to the saturation point, resulting in a higher risk of errors and omissions in the target-language speech segments. Another element of complexity is the high frequency of PNPs. We know from Gotti (1991) that in LSP the frequency of PNPs is very high. This means that after the interpreter has understood, recognized, decoded and reconstructed a PNP, reaching a saturation point in terms of processing capacity, other PNPs may well occur in the neighbouring speech segments. According to Gile and his Tightrope Hypothesis, postulated in 1999, interpreters tend to make mistakes and repeat them in different speech segments, due to “imbalances” in the cognitive load. Gile describes the comprehension cognitive load and the production cognitive load. According to Gile’s hypothesis, the comprehension cognitive load required to translate from B language into A language is normally higher than the comprehension cognitive load required to translate from A into B language “because it often involves a deliberate effort to avoid linguistic interference from the source language, both in retrieving lexical items and in constructing syntactically acceptable target-language sentences” (Gile 2005: 3; Déjean le Féal 2003: 69). In the case of English PNPs the problem of language interference does not seem to pose particular problems in terms of the cognitive load and processing capacity, since no or little interference is reported when interpreting from English into Italian, though more research in this field

is needed. In medical English the major difficulty is lexical density, which poses the problem of “retrieving lexical items” and rearranging them into a syntactically correct target language. In line with our experience and intuitions, our preliminary study supports Gile’s hypothesis, according to which, “production requires more attention” (Gile 2005: 3), when interpreting PNPs from English into Italian in LSP conferences. This claim is also supported by Tanaka (1991: 102, quoted in Gile 2005: 3) who states that “comprehension takes up 30% of processing capacity requirements, and production 70%”. The first tentative conclusion, which brings us back to the initial assumption, is that detecting and analysing syntactically complex structures in LSP may contribute to alleviating the cognitive load and the capacity requirements during the production phase. This is a hypothesis still to be demonstrated by quantitative data, but corroborated so far by the literature and intuitions derived from professional practice, also shared by many professional interpreters.

7. CORPUS DESCRIPTION AND METHOD

The corpus used in this study is composed of written texts provided by conference organizers for the interpreter. The material consists of 25 veterinary texts referring, respectively, to clinical immunology and dermatology (10 texts) and breeding (15 texts), comprising a total of 31,372 tokens. The average length of the articles ranges from 1,549 to 2,973 words. The analysis has been conducted on the written texts divided into four stages. During the first stage, PNPs were extracted with WordSmith Tools and classified into 4 different clusters formed by 2, 3, 4 or 5 elements. Nouns were more frequent than adjectives but NPs with adjectives were not discarded, as a demonstration that the longer the NPs, the more difficult it is to translate them (Carriò Pastor 2008). In our corpus the following were treated as NPs with premodifications: items made up of at least two individual lexical constituents separated by a space or by a hyphen. NPs made up of two or more heads were counted as individual, as in “clinical symptoms and diseases”. Post modification was not included in the corpus. A quantitative analysis was carried out in order to quantify PNPs and gain a general understanding of their occurrence in Veterinary Medical English. The data are summarized in the table below. Most occurrences, above all four and five-element occurrences, were composed of nouns and the elements of the pre-modification were no more than 5, so only 5 categories of PNPs were drawn up. Table 1 contains the quantitative information for each category:

Categories of PNP	Occurrences	%
Two-element	3,748	5.34
Three-element	667	1
Four-element	279	0.35
Five-element	111	0.14
Total	4,805	6.83

TABLE 1. PNP occurrences in the different categories

In the second stage of this study, an analysis was conducted to identify the most frequent interpreting pattern for each group of cluster. The procedure adopted was to number the items within each PNP and compare their position in the target-speech segment containing the same PNP¹.

8. PRELIMINARY RESULTS

4,805 PNPs were identified and recorded in our veterinary English corpus, by means of WordSmith Tools. As shown in Table 1 the number of PNPs varies in the different categories and the percentages were calculated on the total. The most frequent category of PNPs is the two-element category (3,748) and the least frequent is in the five-element category (111). In order to serve the purpose of our study, which was to detect as many PNPs as possible and determine the most frequent interpreting pattern in order to alleviate the cognitive load during SI, we proceeded as follows. For each category of PNP we numbered each element within the English PNP and compared the sequence with the standard translated version of the Italian PNP. This was done in order to determine whether it is possible to identify the most frequent interpreting pattern for each category of PNP and detect any changes in the order of each element within PNPs in both languages. Table 2 illustrates a few examples of the process adopted:

¹ We applied the same method adopted by Carriò Pastor (2008: 33) to analyse the most frequent translation patterns in the language combination English-Spanish in a study investigating cluster interpretation in Spanish-speaking learners of English. In our literature review, it seems that no studies exist on cluster interpretation pattern in SI in the English-Italian language combination.

English PNPs	Italian interpreting pattern
(1) Dry period 1 2	<i>Periodo dell'asciutta</i> 2 add. 1
(2) Negative energy balance 1 2 3	<i>Bilancio energetico negativo</i> 3 2 1
(3) Insulin-like growth factor 1 2 3 4	<i>Fattore di crescita insulino simile</i> 4 add. 3 1 2
(4) Peroxisome proliferator- 1 2 activated receptors 3 4	<i>Recettori attivati dai proliferatori perossisomiali</i> 4 3 add. 2 1
(5) First post-partum ovarian follicle wave 1 2 3 4 5 6	<i>Prima ondata follicolare ovarica post-parto</i> 1 6 5 4 2 3

TABLE 2. Interpreting pattern of PNPs

The most frequent English to Italian interpreting pattern for the three-element category is to proceed from the head of the noun leftwards, with a linear reverse sequence, as in:

(2) Negative energy balance = *bilancio energetico negativo*
1 2 3 3 2 1

In LSP, many PNPs after a certain period of time are transformed into acronyms (Gotti 1991: 72) as in the following:

(2) Negative energy balance = NEBAL

or:

(4) Peroxisome proliferator-activated receptor = *recettori PPAR*

The English PNP is frequently used as an acronym both in English and in Italian. In Italian the acronym is not “translated” but remains in English. This facilitates the interpreter working into A language (Italian) in terms of cognitive load and energy requirement (Gile 2005: 9). As for the four-element group, one might expect the same linear reverse interpreting pattern to be followed from right leftwards starting from the headnoun, but some exceptions to the rule must be noted as in the following:

(3) Insulin-like growth factor = *fattore di crescita insulino-simile*
1 2 3 4 4 add. 3 1 2

In the Italian interpreting pattern there is also the addition of the article. This is not a common practice in scientific English. This degree of variability is also evident in the following example:

(6) First post-partum ovarian follicle wave = *prima ondata follicolare ovarica nel post-parto*
 1 2 3 4 5 6 1 6 5 4 add. 2 3

From the above examples it emerges very clearly that “there are indeed various cases in which noun compounds may be interpreted in different ways [...] and linguistic competence alone is not sufficient and has to be integrated by specialist knowledge of the topic” (Gotti 1991: 75). As a general conclusion, there is a great variability of element combinations (Carriò Pastor 2008: 35) and no general guidelines can be outlined as far as the interpreting pattern of English PNPs is concerned. Some general principles remain valid for each category of PNP, although only a deep specialized knowledge can help to disambiguate these complex and ambiguous structures:

In order to disambiguate PNPs the end user has to be familiar with the linguistic structures, as well as possessing in-depth knowledge of the semantic structures of each individual item of the NP and this knowledge derives from the specialized knowledge. As a matter of fact there are several cases in which the Noun Phrase can give rise to ambiguity and in this case only a specialized competence can help the interpreter to disambiguate the NP and find the exact logical semantic structure. (Gotti 1991: 73)²

In the third stage, a manual search was carried out, in order to identify PNPs. The clusters thus identified were subdivided into categories, using the same method described above. No major discrepancies were found in comparing the list of PNPs identified with WordSmith Tools and the list drawn manually, and both lists were used in the translation booth. However, the clusters of terms extracted manually by the interpreter present a cognitive conceptual structure (Magris 2002: 155) that in general terms facilitates and promotes the interpreter’s memorization. This is confirmed by personal experience as well as by many other professional interpreters, though more research work would be needed in order to confirm our hypothesis (Baselli & Pignataro forthcoming). The terms are organized by order of appearance in the discourse and divided into categories such as pathologies, drugs and viruses. The terms are more easily memorized and quickly retrieved during a simultaneous interpretation if structured in a conceptual system. The clusters extracted with WordSmith Tools were ranked alphabetically and the contexts contributed to the process of knowledge acquisition. This list was very specific but it did not take into account the pragmatic criterion that is of paramount importance in customising pre-conference terminological preparation.

² My translation.

9. CONSIDERATIONS ABOUT THE USE OF AN IT TOOL

The idea of using WordSmith Tools is borrowed from academic experience at IULM University where students enrolled in the Conference Interpreting courses are trained to use it and some of them decide to apply it to their terminology dissertations. IT tools require computational skills that go beyond what is expected from interpreters (Fantinuoli 2006: 188), but they might provide a flexible support for quantitative analysis. By using them, interpreters acquire linguistic and extra-linguistic information and reading additional specialized documents can help them to acquire knowledge and alleviate the workload during the interpreting task (Gile 1995). Usually their preparation is very traditional and time consuming and includes manual selection of specialized terminology from parallel texts, in little time, considering that materials are typically made available by conference organizers only a few days before a conference. The assumption is that this process may be accelerated through the use of an IT tool such as WordSmith Tools, for the automatic extraction of terminologies in specific contexts.

10. CONCLUSION

The importance of the terminological work carried out by conference interpreters before an event is acknowledged in the literature by several authors (among others, Gile 1995; Will 2007), but the type of terminology to be investigated and included in the resulting glossaries in order to anticipate major difficulties during the SI, depends on the experience of the interpreter in a specific domain. The work of terminology collection is a complex process and software tools make their contribution when quantitative analysis needs to be carried out, but the manual and cognitive contribution of the interpreter is of fundamental importance. The terminological work created manually by the interpreter is structured in a conceptual system (Magris 2002: 150) that contributes to the memorization of complex syntactic structures, thus alleviating the cognitive load (Gile 2005) in terms of processing capacity during the comprehension and production phase in simultaneous interpretation. The list obtained from the above-mentioned corpus created by WordSmith Tools was less “tailor-made” to the specific needs of the interpreter and more difficult to consult during a real simultaneous interpretation. This was confirmed by personal experience as a simultaneous interpreter but it certainly needs to be further investigated. The work conducted with WordSmith Tools made the terminological compilation more systematic and was particularly useful for the quantitative analysis of complex syntactic structures such as PNPs. Although a certain degree of arbitrariness is unavoidable, we tried to assess the two methods of terminological preparation in a consistent way, that is to say, taking into account the interpreter’s needs in a precise context. Detecting and analysing PNPs in the preparation phase contributes to develop an automatic

recognition system and helps to shield the interpreter from “cognitive load saturation” (Gile 2005: 2). No general rules can be defined for the interpreting pattern of English PNPs into Italian, although some guidelines have been proposed. This was our initial assumption, which remains to be proven by experimental data. In the second phase of the research, the intention is to create an oral corpus, transcribe it and analyse language-pair factors and directionality in LSP conferences (cf. Cencini & Aston 2001; Falbo 1999; Orletti & Testa 1991; Setton 2002), with the English (B) and Italian (A) language combination (Baselli & Pignataro forthcoming). We hope that our research carried out so far will stimulate further investigation into setting guidelines for pre-conference terminological preparation in LSP for conference interpreters, especially as regards the disambiguation of complex English PNPs in scientific English.

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