2016

Link Words in Note-Taking and Student Interpreter Performance: An Empirical Study

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Abstract

The note-taking technique (NTT) is an essential tool for consecutive interpreting. Several experts developed guidelines to help interpreters develop their own personal note-taking techniques, one of which is noting down link words. In this article, the authors discuss the findings of an empirical study which compared the note-taking and interpreting performance of 13 Belgian spoken-language student interpreters in the first year of their master's degree in interpreting. The study aimed to explore the effectiveness and influence of (not) noting down links between ideas as per the guidelines in the literature (Jones, 2002; Gillies, 2005; Rozan, 1956) on spoken language interpreting performance. Based on the conclusions of this study, some suggestions are offered as to the teaching of spoken language consecutive interpreting and note-taking.

Keywords: note-taking technique, links, consecutive interpreting, interpreter education

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Link Words in Note-Taking

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1.   Introduction

An individual's note-taking technique (NTT) is an essential tool for consecutive interpreting. The first handbooks on note taking written by pioneers like Herbert (1952), Rozan (1956) and Seleskovitch (1975) are still influential today. The influence of their works shines through in the works of today's scholars like Jones (2002), Gillies (2005) and Matyssek (2006). Their handbooks show that the need for guidelines on note taking remains present. The ultimate goal of these scholars and practitioners is to guide the interpreters towards developing practical and personalized NTTs that enables them to deliver a quality and professional interpreting performance.

Researching the quality of interpretation is a complex process. Many different characteristics of an interpreting performance can be studied and therefore they co-determine the quality of the interpreting performance. One of the characteristics of a quality and professional interpreting performance is the source-target correspondence or the equivalence between the original and the interpretation. One way to determine the source-target correspondence is to study the omissions, additions and other errors between the original and the interpretation like Gerver (1969), Kopczynski (1980), Barik (2002) and Napier (2004) did. This kind of research then often focuses on one characteristic of the interpretation. Therefore, to get a complete and elaborate image of the quality of an interpretation, many researchers like Donovan-Cagigos (1990), Gile (1992) and Napier (2004) state that research on all different characteristics of the interpretation performance including the effect of the interpretation, the context of the interpretation, etc. should be combined (Pöchhacker, 2004).

This paper aims to determine whether developing personalized notes overrules the strong perception that it is better to jot down link words as per the guidelines in the relevant literature. Secondly, the study aims to investigate if students note down link words according to the guidelines, not according to the guidelines or not at all, and how this impacts the interpreting performance.

2.   Literature review

2.1.   Learning and teaching NTT

The way in which note-taking for consecutive interpreting is taught and practiced is a crucial component of the development of a professional interpreter. Several scholars have subsequently developed handbooks on how to teach and practice note-taking and (consecutive) interpreting as a guideline for students and trainers.

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2.1.1   Stages in learning and teaching

Alexieva (1994) identifies three stages in the process of acquiring note-taking skills. Seleskovitch and Lederer (1989) complete Alexieva's stages, explaining the important role of the trainer in the different stages and proposing a number of exercises to students. In the *pre-note-taking stage,* students practice interpreting without notes. They learn that memory is the first tool for retaining information and that the notes they will take later on will merely serve as "clues" (Alexieva, 1994; Seleskovitch & Lederer, 1989). The second stage is the *pre-instruction stage*, during which the students may take notes but without receiving any instruction. During this stage, the students learn to combine two skills: analyzing the source text and note-taking (Alexieva, 1994; Seleskovitch & Lederer, 1989). They will discover, however, that "common" note-taking is too slow to accurately follow a speaker. During the last and most important stage, the *note-taking instruction stage,* students receive instructions from their trainer regarding note-taking and begin to develop invidualized NTTs. According to Seleskovitch and Lederer (1989), the trainer should split this instruction stage into different steps for each of the different elements and skills associated with NTT, such as note-taking immediately in the target language (which means that analysis and language transfer has taken place), paying attention to note down the last utterance, noting down only the essential information, and so forth. Seleskovitch and Lederer (1989) also recommend that trainers provide sample notes. Such sustained guidance supports students in developing their own NTTs (Alexieva, 1994; Seleskovitch & Lederer, 1989).

2.1.2   Understanding and analyzing as a prerequisite for NT

Learning how to perform consecutive interpreting requires skills in quickly understanding the source text, a deliberate act defined as "deverbalization" (Seleskovitch, 1968). Interpreters listen and make sure that they understand every utterance by continually asking themselves: 'What does the speaker mean by those words?'. In this way, the interpreter understands the meaning of the utterance rather than just that of specific words (Seleskovitch, 1968; Jones, 2002).

Once the interpreter understands the source text, she can go on to analyze it, asking herself 'Who says or thinks what?'. This is important for the 'subject-verb-object analysis' part of the actual NTT (Gillies, 2005; Jones, 2002) and is reflected, for example, in diagonal note-taking. The interpreter thus determines the main ideas and uses them as a reference point for the ideas that follow. The interpreter analyzes the links in the text that create the continuity of the text (the way the ideas are related and interconnected), before noting down these relations and interconnections and translating them (Jones, 2002). When an interpreter uses the different components of the NTT (margin, lay-out on the note-pad, etc.), to aid in understanding and analysis, his or her notes should reflect the process of understanding.

2.1.3   Internalizing the guidelines of NTT

When teaching note-taking, trainers must help students adapt the guidelines proposed in the literature to an individualized NTT. Trainee interpreters must not only learn the guidelines but also be able to effortlessly apply them in their personal NTT. In this way, the interpreter can pay more attention to listening, understanding and analyzing the source text (Gillies, 2005; Seleskovitch & Lederer, 1989).

2.2.   The NTT: link words

The two main guidelines for note-taking concern (a) jotting down ideas rather than words, and (b) developing a personal NTT. By noting down ideas instead of words, the interpreter can transfer the meaning of the source text in a way that feels natural to the audience. Developing one's own NTT allows the interpreter to determine which guidelines are most useful and practical and then develop an "automated" or "internalized" NTT (Albl-Mikasa, 2008; Gillies, 2005; Matysek, 2006; Nolan, 2005; Rozan, 1956). However, *link words* are critical to all NTTs; they represent the continuity of the source text (Gillies, 2005; Matyssek, 2006; Jones, 2002; Rozan, 1956, etc.) and thus should never be omitted.

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To use link words, interpreters first 'identify the links and separations between ideas, so these links and separations should appear in the notes' (Jones, 2002, p. 41). Link words, for example, those that represent the idea of conclusion and consequence, should be noted in an abbreviated form (as an abbreviation, e.g., 'CON', or as a symbol, e.g., '➜'), in the left margin of the notes. In this way, the interpreter's notes represent ideas instead of words and remain legible. The interpreter may choose words or abbreviations from other languages that have lost their linguistic meaning and represent only ideas. Scholars recommend that interpreters group link words that represent the same idea, so that the interpreter is not bound to the words in the source text while noting the link. The Appendix gives an overview of the different abbreviations and symbols that scholars like Rozan (1956), Jones (2002) and Gillies (2005) suggest using to jot down links.

2.3. Quality and source-target correspondence

The main aim of the study was to determine whether developing individualized notes overrules the strong perception that it is better to jot down link words as per the guidelines in the relevant literature. Secondly, the study aimed to investigate whether students noting link words according to the guidelines, not according to the guidelines or not at all has an impact on their interpreting performance. These aims triggered the following research question:

- What is the relation between the presence or absence of link words noted following the guidelines in the literature on the one hand and the potential for correct interpretations, additions, omissions and/or errors concerning the links in the interpretation on the other hand?

In this study, student interpretations were quantitatively examined by analyzing the links in the source and target texts, which then were counted to determine source-target correspondence. Although conducting research on the quality of an interpretation is a complex process, many scholars including Kopczynski (1980), Barik (2002), Napier (2004) and Pym (2008) assessed quality by determining divergences between the source and the target text (Pöchhacker, 2004, 2015, 2016; Pöchhacker & Schlesinger, 2002). These divergences are often seen as non-functional and harmful to the quality of the interpretation because they stand in the way of a clear, correct, appropriate and complete transfer of meaning. However, Gerver (1969), Gile (2009), Napier (2004) and Pym (2008) state that not all divergences diminish the quality of an interpretation and that, for example, omissions of false starts, hesitations or unnecessary repetitions in the source text may improve the quality of the interpretation (Pym, 2008). The idea that some divergences between source and target text can be functional is taken into account when analyzing the corpus and will be explained later on. Ultimately, only a multi-method approach and research from different perspectives on different characteristics of the interpreting performance can guarantee an elaborate and nuanced view of the quality (Pöchhacker, 2004, 2016). In looking only at source–target links and divergences, we were able to obtain only an overall impression of the quality of the interpretation performances we studied.

3. Methodology

3.1. Participants

The corpus was collected from the work of thirteen first language Dutch-speaking interpreting students in the French to Dutch interpreting class at the KU Leuven university, Antwerp campus in the first year of their master's degree in interpreting. The students had gone through the pre-Note-taking stage during which they had practiced sight translation and done memory exercises in the third year of their bachelor degree (2014-2015). At the beginning of their master's degree in interpreting (September 2015), the students had entered the pre-instruction stage and were able to take notes without receiving any further instruction. In early October 2015, the students entered the Note-taking instruction stage and attended 8 hours of training on note-taking. At the end of the classes,

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the students had to take a short test consisting of "transferring" a Dutch source text to a Dutch target text. At the end of the test, the Dutch-speaking trainer collected the recordings and the students' notes. Next the Dutch-speaking trainer analyzed the interpreting performance and notes of each student and provided feedback on his or her NTT. During this instruction period, the student interpreters had already started note-taking in the French to Dutch interpreting class. Therefore, they did not receive all the instructions about note-taking before practicing and developing their personal NTT. Apart from these 8 hours of monolingual training specifically on note-taking, the interpreting trainers also paid attention to their student's NTT. On the 15th of February 2016, approximately 3 months after the training classes on note-taking had ended, data were collected from the students who had already partly established their personal NTT by that stage.

To ensure that the research setting was as close as possible to a real-life one, the students were not aware that their notes and interpretations were being used for the study. One French-speaking interpreting trainer in the French–Dutch interpreting class was directly involved in the experiment. This trainer orally presented the French source text to the students in a natural class situation. The source text presentation was recorded and transcribed (see 2.4) so it could be compared with the transcriptions of the interpretations. The students consecutively interpreted the text into Dutch and individually recorded their interpretations. At this point, it was possible to preserve the natural environment of the research as the trainer was listening and their interpretations were presented in front of an 'audience'. The final corpus of the study consisted of 13 sets of notes and 13 recordings of interpretations. The students consented for their notes and interpretation to be used for the study.

3.2. Source text

We controlled the presentation and administration of the source text in various ways. First, we permitted the students to prepare themselves for the interpreting task just as they did every week. The French-speaking trainer announced the subject of the source text a week before the actual data collection, allowing the students to improve their familiarity with the subject and avoid a difference in prior knowledge influencing the research data by acting as a confounding variable. This method resembled the working method of the French-speaking trainer, who regularly asked the students to prepare a subject for a future class.

Second, the source text was controlled in the way that the links were carefully incorporated in the content of the source texts. An important distinction has to be made between a *link* and a *link word*. The links that were placed in the source texts are the ideas that connect other ideas in the text and that create continuity. A link can be expressed in different words or phrases (see Appendix for more information). If a link is omitted from a text, its meaning is lost and the overall meaning of the discourse is affected. A consequential idea can be expressed with words such as 'so', 'then', or 'therefore', connecting, for example, the idea of fire and the idea of smoke. A link word is simply a word noted down in (a) an abbreviated form (as an abbreviation or a symbol) and (b) in the margin section of the notes.

3.3. Data preparation

The recordings of the source text and the interpretations were transcribed in preparation for the analysis. The content of every recording was typed out in detail but no particular transcription system was used. However, potential grammatical mistakes and partial repetitions of words like 'euh' or 'euhm' (like the English 'er' or 'erm') were included in the transcriptions. Silences longer than 2 seconds were timed and noted, to identify passages that were more difficult. No further notes were made regarding the prosody of the recordings.

In the second step of data preparation, we determined the links in the source texts and distinguished their interpretations from other words. In this way, correct interpretations, omissions, additions and/or errors in relation to links could be investigated. Based on the idea of functionality discussed by Gerver (1969), Gile (2009) and Pym (2008) we would mentally omit the word or phrase from the discourse (so that the transcriptions would remain unaffected); if this omission changed the continuity and overall meaning of the discourse, then the omission would be non-functional and the word or phrase would be defined as a link. If the omission did not change the continuity and overall meaning of the discourse, then the omission would be functional and the word or phrase would not be considered a link.

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For example, the word 'ook' in Dutch or 'also' in English can be a link (that connects two ideas) or an "other" word (with no extra meaning). In this example, the word links two ideas: "Dus de conclusie, euhm het gevecht tegen de vergeetcrisis is niet beëindigd en wij moeten echt deelnemen om een gemeenschappelijk front te vormen met Artsen Zonder Grenzen, de organisatie. Het is **ook** onze verantwoordelijkheid om mensen over heel de wereld te helpen." [So in conclusion erm the fight against the oblivion crisis has not ended and we really must participate to form a united front with Médecins Sans Frontières, the organisation. It is **also** our responsibility to help people from all over the world.] In the English sentence, mentally omitting the word 'also' would change the overall meaning of the discourse and an idea would be lost. This becomes even more clear when 'also' is replaced with the word 'furthermore': 'It is **furthermore** our responsibility to help people from all over the world.' One could change the word used to express the link but could not omit the idea from the discourse without changing the discourse's meaning.

In the following example, 'also' adds an element to a list: "Ze [de organisatie] biedt medische hulp aan mensen aan mensen uit van over de hele wereld die gewond zijn door euh gewapende conflicten of die getroffen worden door natuurrampen. Daarnaast biedt ze **ook** medische hulp aan mensen die slachtoffer zijn van een pandemie of van een epidemie." [It offers medical help to people from all over the world who are hurt because of er armed conflicts or natural disasters. It **also** offers medical help to people who are victims of a pandemic or epidemic.] In this example, 'also' could be omitted from the text without damaging the overall meaning of the discourse.

3.4. Analysis

The analysis of the corpus consisted of three stages. First, the transcriptions of the source text and the interpretation were compared to determine which links were interpreted correctly or incorrectly and which were omitted or added. Based on the taxonomy of Barik (2002) a taxonomy of divergences and correct interpretations was drafted to investigate the source–target correspondence of the corpus based on the links (Pöchhacker & Schlesinger, 2002). Table 1 gives a definition and example of each category in the taxonomy.

Table 1: Taxonomy of ST–TT divergences in links

Omissions	A link from the source text is not interpreted in the interpretation.	*Example*: the link 'because' in the source text was not interpreted.
Additions	A link that was not present in the source text is added in the interpretation.	*Example*: the link 'but' was not present in the source text and is added in the interpretation.
Errors	Another link than the one in the source text is added in the interpretation to replace a link that was omitted from the source text.	*Example*: the link 'therefore' in the source text was interpreted as 'on condition that'.
Correct interpretations	The link from the source text is correctly interpreted in the interpretation.	*Example*: the link 'in conclusion' in the source text was interpreted as 'in conclusion'.

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A distinction was made between functional and non-functional *omissions* of links. Functionally omitted links did not change the continuity and overall meaning of the discourse. For instance, the trainer added the sentence "…parce que bon eh, c'est ce que je viens de vous dire." (… because, yeah, that is what I just said). The *omission* of this information and link does not change the continuity and overall meaning of the discourse and is therefore functional. If, on the other hand, links are added or interpreted incorrectly, the continuity and overall meaning of the discourse would change drastically and the audience would receive another message than that which the speaker intended. Such added or erroneous links were considered non-functional.

During the second stage, the interpreter's personalized notes were analyzed (meaning that normally basic NTT are taken into account as they have been taught and consequently developed in a personal note-taking system, see 1.1.1). For every correct interpretation, omission, addition and error we checked if the interpreter had noted a link word and how he had noted it. The researched link words are thus divided into three categories: noted *according to the guidelines* (AG), noted *not according to the guidelines* (NAG) and *not* (N) noted at all. "According to the guidelines" means that the link word is noted (a) in an abbreviated form (an abbreviation or a symbol) and (b) in the margin of the notes.

During the third and final stage, we analyzed the relation between the links in the interpretation and the link words in the notes. First, we checked, to see if, for every correct interpretation, omission, addition and/or error in the interpretation, the related link word had been noted in the interpreters' notes; and second, we determined how it had been noted. The link words were categorized as AG, NAG, or N. During this stage, we focused on the connection between the link words in the interpreter's notes and the links made in the interpreted version (TT); we made no conclusions on the quality or coherence of the overall interpreting performance.

4.   Results and Discussion

Table 2 shows the mean of the results for the three stages of analysis. The last column on the right with the heading 'total links' shows the mean of the results of Stage 1 of the analysis (how the links from the source text were interpreted in the target text). The last row in Table 2 with the heading 'total link words' shows the mean of the results of Stage 2 of the analysis (if and how the students noted link words). The rest of the Table 2 shows the results of Stage 3 of the analysis: how the different categories of links in the interpretation may have been connected to the different ways in which the related link words were noted in the interpreters' notes (namely, AG, NAG or N).

Figure 1 shows the relation between the divergences and correct interpretations of links and the different ways in which associated link words were noted. This was investigated during Stage 3. The results in Figure 1 are represented in Table 2 in the rows with the captions 'Divergences' and 'Correct interpretations'.

Figure 2 shows more findings of Stage 3 of the analysis, to wit the relation between the omissions, additions and errors in the interpretation and the different ways in which the related link words were noted. The results represented in Figure 2 may be found in Table 2 in the three rows with the captions 'Omissions', 'Additions' and 'Errors'.
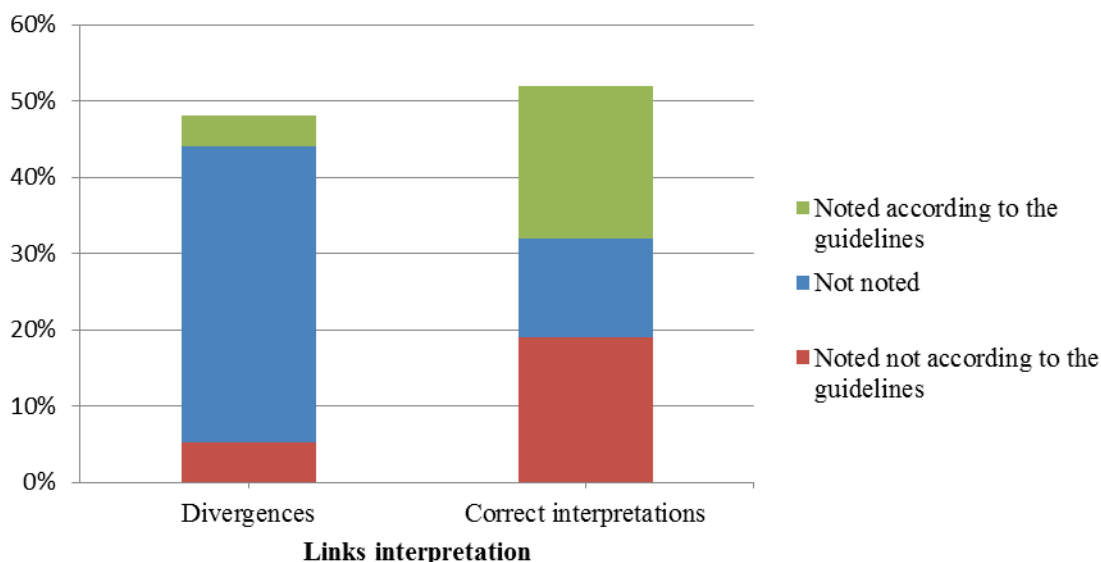
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Table 2: Mean results: Link words in the notes related to the divergences or correct interpretations of links

	Noted AG	Not noted	Noted NAG	Total links
Divergences	3,5%	42%	3,5%	49%
Omissions	2%	16%	1%	19%
Additions	1%	15,5%	1,5%	18%
Errors	1%	8%	2%	12%
Correct interpretations	21%	13%	17%	51%
Total link words	24,5%	55%	20,5%	100%

Figure 1: Mean results: Relation between links in the interpretation and link words in the notes (AG/NAG/Not)

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Figure 2: Mean results: Relation between divergences in the interpretation and link words in the notes
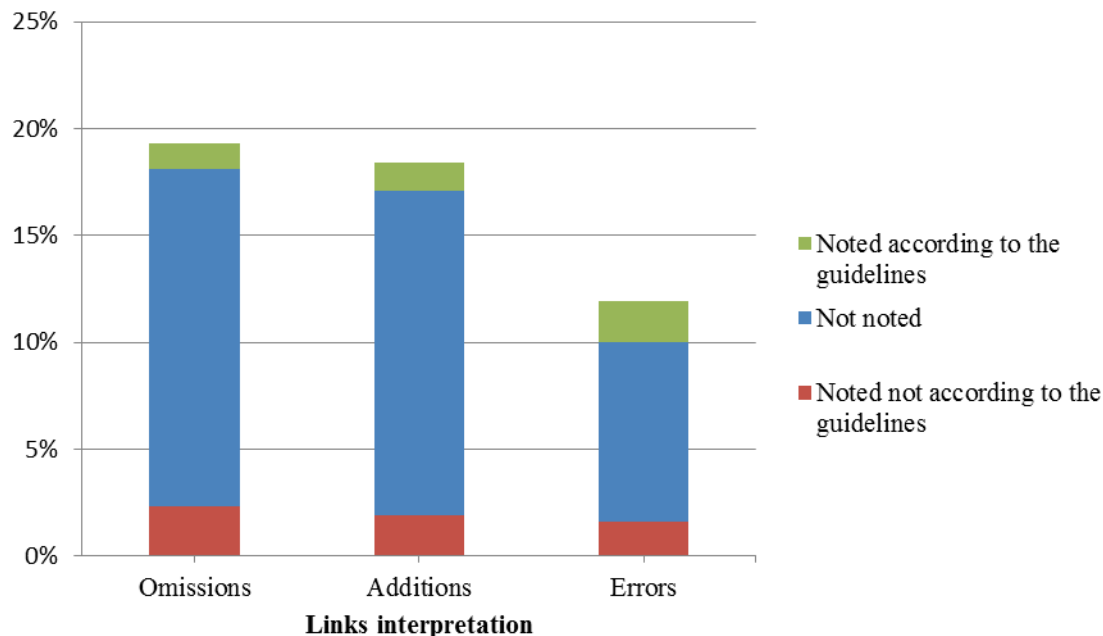
4.1.   General findings

The general results of the study underpinned our interpretation of the main results. These are represented in Figure 1, and also in the last column in Table 2 under the heading Total Links and the last row with the caption 'Total link words'.

The last column named 'Total links' in Table 2 and the whole of Figure 1 show that the students interpreted approximately the same number of divergences (49%) as they produced correct interpretations (51%). These numbers have to be refined as only four students interpreted more than 60% of the links correctly and only one student interpreted more than 60% of the links incorrectly. The majority of the students (eight students), however, interpreted approximately an equal amount of correct interpretations and divergences.

The last row in Table 2 under the heading 'Total linked words' and Figure 1 show that the students mostly did not (55%) note link words. Where the students did note link words, they noted more link words according to the guidelines (24,5%) than not according to the guidelines (20,5%). The link words that were identified as not according to the guidelines belonged to this category only because they were not noted in the margin. Only one student did not note them in an abbreviated form and on top of that, did not note the link words in the margin. Therefore, the majority of the link words in this category partially corresponded to the guidelines (Jones, 2002; Gillies, 2005).

A possible explanation for noting link words according to the guidelines, not according to the guidelines or not at all could be related to students' personal NTT. Such a personal NTT is recommended in the literature and allows the interpreters to adapt the given guidelines so that they can develop a personal NTT that works for them. Scholars, however, strongly advise against not noting link words at all (Gillies, 2005; Jones, 2002; Matyssek, 2006; Rozan, 1956; etc.).

4.2.   Main findings

Table 2 and Figures 1 and 2 show the relationship between the link words in the interpreter's notes and the correct interpretations, additions, omissions and/or errors in the interpretation. Five main findings can be derived from the

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tables and the figures on the one hand, and a comparison of the individual results on the other hand. Table 2 and the figures show the mean of the individual results and are represented in the following discussion of the results by giving the percentage between brackets. The second comparison was added to obtain a more nuanced view of the different relations between student interpretations and notes. The results of this comparison are represented by the number of students between brackets. It becomes clear that although a relation (between the interpretation and the notes) may seem weak based on the mean percentages, this relation actually is not uncommon at all because it is present in many student interpreting performances—as shown by a comparison of the individual results of the students.

The first main finding can be derived from the 'Divergences' and 'Correct interpretations' in Table 2 and from Figure 1. They clearly show that the majority of the divergences (42%) can be associated with a link word that was not noted at all and that the majority of the correct interpretations (21%) can be associated with a link word that was noted according to the guidelines.

The second main finding concerns the relationship between the interpreters' notes and the omissions in the interpretations and is represented in the row entitled 'Omissions' in Table 2 and in Figure 2. There are various potential explanations for the omissions that were made. First, the omissions may have been associated with a link word that was not noted (16%; 12 out of 13 students). A possible explanation for this could be that the student had not heard the link in the source text and therefore did not write it down and did not interpret it. Second, the omissions in the interpretations may have been connected to a link word that was noted according to the guidelines (2%; 3 out of 13 students). This finding can be explained in the case of one student who noted the link in the form of a symbol; and it is possible that this student did not sufficiently internalize the symbols and as a result did not interpret the symbol correctly. Therefore, this student was unsure about the meaning of the symbol. The other two students noted their link words in the form of abbreviations so that there could be no confusion about the meaning. The researchers were unable to deduce why these two students omitted the link words from their interpretation. Third, the omissions in the interpretations may have been associated with a link word that was noted not according to the guidelines (1%; 6 out of 13 students). This finding confirms Gillies' guideline (2005) to note the link words in the margin of the notes, so that they immediately draw the attention of the interpreter reading from left to right.

The third main finding concerns the relationship between the interpreters' notes and additions in the interpretations and is represented in the row entitled 'Additions' in Table 2 and in Figure 2. Again, there are various potential explanations for the additions that were made. First, the additions may have been associated with a link word that was not noted (15,5%; 12 out of 13 students). A possible explanation could be that the student invented or imagined a link that fitted the context but was not present in the source text. Second, the additions in the interpretations may have been associated with a link word that was noted not according to the guidelines (1,5%; 3 out of 13 students). A possible explanation could be that the student heard a link in the source text that was not there and noted an extra link word not according to the guidelines, resulting in an addition. Third, the additions in the interpretations may have been associated with a link word that was noted according to the guidelines (1%; 2 out of 13 students). This means students may have heard a link that was not present in the source text and noted it according to the guidelines, resulting in an addition; but this was not a frequent occurrence.

The fourth main finding concerns the relationship between the interpreters' notes and the errors in the interpretations and may be found in Figure 2, and next to 'Errors' in Table 2. Once more, these errors can be explained in several ways. First, the errors may have been associated with a link word that was not noted (8%; 11 out of 13 students). This finding may have been due to students inventing a link because they were unable to remember the original link and had not noted it down. Second, the errors in the interpretations may have been connected to link words that were noted not according to the guidelines (2%; 5 out of 13 students). A possible explanation could be that the student heard the wrong link and therefore interpreted another link than the one used in the source text. Third, errors in the interpretations may have been due to a link word that was noted according to the guidelines (1%; 6 out of 13 students), which was quite unexpected. Because 12 of the 13 students noted a symbol to signify a link word in this situation, a possible explanation could be that the students did not sufficiently internalize their symbols or that they did not use them consequently. In both cases, the students may have been unsure about the meaning of the symbol and interpreted it incorrectly.

The fifth main finding concerns the relationship between the interpreters' notes and correct interpretations and may be found in Figure 2, and next to 'Correct interpretations' of Table 2. Finally, we also provide possible

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explanations for the correct interpretations connected to link words and notation. First, the correct interpretations may have been associated with a link word that was noted according to the guidelines (21%; 10 out of 13 students). Second, correct interpretations may have been connected to a link word that was noted not according to the guidelines (17%; all 13 students). This is possible because the definition of a link word used in this study clearly states two conditions: a link word is noted according to the guidelines if (a) it is noted in an abbreviated form (an abbreviation or a symbol) and (b) it is noted in the margin of the notes. An example of this situation could be due to a student noting a link word outside of the margin but still managing to interpret the original link correctly. Third, the correct interpretations may have been associated with link words that were not noted (13%; all 13 students). A possible explanation for this situation could be that the student remembered the link from the source text and interpreted it correctly without noting down the relevant link word.

5.   Study Limitations

We admit that the sample of participants and the corpus were both small and therefore present no more than an impression of the quality of the interpreting performance. We do not offer statements on overall quality or coherence of the interpreting performance. The authors recommend further research, on a larger scale, with other groups of participants, focusing on the relation between other elements in the NTT on the one hand, and the interpreting performance on the other hand, to see if this would confirm or refine the recommendations and the conclusions of this study.

The findings and conclusions of this study would be more elaborate and complete if other data about the cognitive process from the interpreter had been investigated. As it is, we can only speculate why for example students did note a link word according to the guidelines and interpreted it incorrectly. Further research would help to clarify these assumptions and give a more elaborate and complete answer to the research question. In other words, cognitive data might help to explain the observations proposed in this study and contribute to a multi-method approach as pursued by Pöchhacker (2004).

6.   Conclusions

The main findings of the study show a relationship between the presence or absence of link words written in the interpreter's notes following the guidelines in the literature, on the one hand, and the interpreter's performance, on the other hand. The following three conclusions can be drawn based on the main findings and can provide a more elaborate answer to the research question in this study:

- Our data showed that there were more correct interpretations of links when, first of all, the students noted link words according to the guidelines and second of all, when they noted link words in any (personal) way but not according to the guidelines. Where interpreters did not at all note link words, our data showed that there were more divergences in the interpretation.

- Our data showed that there were more correct interpretations of links when student interpreters noted the link words according to the guidelines rather than not according to the guidelines.

- The previous two conclusions confirm what is recommended in the guidelines about link words. The empirical data obtained in our study—although from a limited corpus—suggests that interpreters should note down link words according to these guidelines, in order to clearly transfer the continuity and the overall meaning of the source text in their interpretation.

The conclusions suggest that the guidelines proposed in the literature (Jones, 2002; Gillies, 2005; Rozan, 1956) are indeed of great importance for the learning process of consecutive interpreting students. Even though the student-participants had learned (about) note-taking, the results show that the number of correct interpretations

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of links was rather low (51%). Only four students' interpretations reflected the continuity (the way the ideas are related and interconnected) of the source text clearly and correctly. The majority of the students failed to convey this continuity. Therefore, students have to be made more aware of several elements: first, the importance of links in a text and in an interpretation and second, the importance of noting down the link words that represent this continuity as proposed in the literature.

As has been suggested by Seleskovitch and Lederer (1989), the interpreting trainer plays an important role in this learning process, in making students aware of the importance of links for a quality interpretation and stress the importance of the guidelines that explain how to apply these. Educators can guide the students in the process of adapting these guidelines to help them develop a personalized NTT that works for them. Our findings suggest that these elements should be addressed not only during the note-taking–instruction stage as Seleskovitch and Lederer (1989) describe, but for the entire duration of training. After all, the majority of the participating student-interpreters, who were already taking notes and training through consecutive interpreting exercises for more than 3 months, noted more link words not according to the guidelines or not at all and did not manage to correctly maintain the links of the original discourse. Therefore, continuous monitoring of the development of trainees' note-taking techniques by both interpreter trainers and interpreting trainees themselves might be crucial to enhancing the quality and coherence of trainees' overall interpreting performance. In this way, the guidelines in the literature and feedback from the interpreting trainer can be combined to provide maximum guidance in the process of helping students toward developing professional consecutive interpreting competence.

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Appendix: Link Words

Table: Link words in the literature

Link	Rozan (1956, p. 17)	Jones (2002, p. 53)	Gillies (2005, pp. 60–61)
Explanation or cause	AS, CAR, WHY	AS, ←	COS, CAU, →
Opposition or limitation	THO, BUT,SED	BUT	B, THO
Condition (and consequence)	IF		IF(→)
Reference	AS TO		
Conclusion	ASI		
Correspondence	=		

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Addition	+		
Supplemental specification	DE +		
Goal			TO
Example			VB, EG
Consequence		SO, ➔	