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**STRATEGIES AND ERRORS
IN SIMULTANEOUS INTERPRETING:
A STUDENT-ORIENTED EXPERIMENT
IN ENGLISH-TURKISH LANGUAGE PAIR**

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Abstract

This paper aims to analyze and describe students' strategies and errors in simultaneous interpreting performances in English and Turkish language pair and to explore the relationship between the effect of directionality on strategies and performance errors. A small-scale experimental study was conducted with 10 interpreting students and a control group of 4 professionals and involved triangulation of multiple sources of data. The study reveals that the student and professional participants resorted to omissions, additions, substitutions and made errors. With respect to directionality, it was observed that the students made significantly more comprehension /production omissions, delay omissions, mild phrasing changes and substantial phrasing changes while interpreting from Turkish into English compared to the opposite direction. The t-test and the self-assessments of

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the professional interpreters, on the other hand, indicated that interpreting direction had no effect on their strategies or errors.¹

Keywords: Interpreting, Simultaneous Interpreting, Strategy Use in Simultaneous Interpreting, Omissions, Additions, Substitutions, Errors, Directionality

1.Introduction

Starting with the traditional discussions focusing on the superiority or inferiority of interpreting directions, the issue of directionality and strategies to tackle the challenges particular to language pairs have long been debated in simultaneous interpreting (SI). The earlier works focusing on interpreting strategies include Kopczyński (1980), Altman (1989), Viezzi (1993), all of which opened the way for more research. Starting with 1995, there was a growing interest in interpreting strategies (see Gile 1995; Kohn and Kalina 1996; Liontoulou 1996; Wadensjö 1998; Gile 1999; Al-Khanji et al. 2000; Donato 2003; Riccardi 2005; Chang 2005; Bevilacqua 2009; Korpala 2012). In English-Turkish language pair, Erkazancı (2003) focused on lexical and syntactic challenges in simultaneous interpreting; Öztürk (2012) focused on directionality and strategy use of interpreting students.

¹This paper has been written based on the findings from the master's thesis conducted by Nazlıgül Bozok under the supervision of Assoc. Prof. Şeyda Kınca at Dokuz Eylül University Department of Translation and Interpreting.

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Bearing in mind that interpreting studies need more empirical research on the issue of directionality, the present study aims to address strategies and errors in simultaneous interpreting with reference to Barik's (1971) taxonomy, and in relation to interpreting direction. The experiment conducted in this paper includes 10 interpreting students and 4 interpreting professionals, who were given two speeches, one Turkish (L1) and one English (L2). Their interpreting sessions, which constitute the main source of data in the present study, were recorded in standard, sound-proof SI booths. Other sources of data include two surveys completed before and after the interpreting performances, and the researcher's notes made during interviews conducted after the post-experiment survey. As the focus is on English and Turkish language pair, this paper abstains from drawing general conclusions regarding interpreting into L1 or L2, and rather focuses on the effect of directionality on strategies and errors in this language pair. It aims to address the following research question and sub-questions:

a. Does directionality affect the rate of omissions, additions, substitutions, and errors of the interpreting students in SI in English and Turkish language pair?

a1) To what extent do interpreting students resort to omissions, additions and make substitutions and errors in SI in English and Turkish language pair?

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- a2) Which types of omission do interpreting students use most frequently in SI?
- a3) Which types of addition do interpreting students use most frequently in SI?
- a4) Which types of substitution/errors do interpreting students make most frequently in SI?
- a5) Does directionality affect the rate of omissions, additions, substitutions, and errors of the interpreting professionals in SI in English and Turkish language pair?

The results are to be discussed within the framework of the Effort Models suggesting that simultaneous interpreting requires three core efforts (i.e., Listening and Analysis Effort, Memory Effort, Production Effort) and an additional effort (i.e. Coordination Effort) to manage the abovementioned core efforts. The Listening and Analysis Effort is comprehension oriented and requires both linguistic and extralinguistic knowledge. The interpreter hears the utterance and they start analyzing the units and make “final decisions about the ‘meaning’ of the utterance” (Gile, 2009, p. 160). The Memory Effort refers to the short term storage and retrieval of pieces of information in the minds of interpreters. The Production Effort entails the speech production in simultaneous interpreting (Gile, 1999, p. 154). When faced with production challenges, the interpreter may rearrange the sequence of information in the source text or drop or modify some elements.

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(Gile, 2009, p. 163). Finally, the Coordination Effort is needed to enable the interpreters to distribute their capacity between the other Efforts (Gile, 1995; Gile, 2009).

2. Barik's Taxonomy and Definitions

Barik (1971) was one of the first to put forward a classification of omissions, additions, substitutions, and errors. In the same year, Goldman-Eiser (1971) focused on segmentation of input in SI. Kirchhoff (1976/2002) stated that simultaneous interpreting is composed of four phases (i.e., decoding of a SL segment, recoding, TL production, and output monitoring) and thus, interpreters can use segmentation and/or anticipation while decoding. In the following decades, as mentioned in the previous section, there was a major re-examination of interpreting strategies, either as individual strategies or as a batch of selected strategies. However, Barik's classification still remains the most comprehensive and elaborate taxonomy, and also the one that is most commonly referred to and is selected as a taxonomy for analyzing the data obtained in this study. This classification is given in detail below:

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Omissions	Additions	Substitutions&Errors
<p>Skipping Omission: The interpreter does not transfer a small lexical item or a phrase existent in the ST into the TT.</p>	<p>Qualifier Addition: The interpreter adds a new qualifier or a qualifying phrase to the ST.</p>	<p>Mild semantic error: The interpreter mistranslates a lexical item, but it does not affect the meaning of the sentence substantially.</p>
<p>Comprehension Omission: The interpreter is unable to process the information given in the ST and loses the meaning.</p>	<p>Elaboration Addition: The interpreter adds new words or information to the ST to explain something, to make it clearer to the audience or to give details.</p>	<p>Gross semantic error: The interpreter mistranslates a lexical item due to misunderstanding or false reference, and it affects the meaning of the sentence substantially.</p>
<p>Delay Omission: The interpreter produces a segment of the speech while the speaker offers new bits of information.</p>	<p>Relationship Addition: The interpreter adds connectives or connecting phrases to the ST.</p>	<p>Mild phrasing change: The interpreter changes the structure of the sentence, but the gist of the sentence remains the same.</p>

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<p>Compounding Omission: The interpreter uses the previously omitted material in a new sentence.</p>	<p>Closure Addition: The interpreter tries to finish up a sentence in which they paraphrased or omitted some items.</p>	<p>Substantial phrasing change: The interpreter says a very different thing in TT but conveys the gist of the ST to some extent.</p>
		<p>Gross phrasing change: The interpreter fails to convey the message in the ST into the TT due to mistranslation, segments made up by the interpreter because of not fully comprehending what has been said in the ST and trying to catch up the ST based on some words uttered by the speaker, omission of some items affecting the meaning or misunderstanding.</p>

Table 1: Barik’s (1971) Taxonomy and Definition

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3. Experiment (Material, Participants, Method)

Utilizing the abovementioned taxonomy, this paper focuses on student and professional interpreter performances via; observing and exploring the omissions, additions, substitutions, and errors. Data presented are gathered through the pre-experiment survey, the voice recordings of the interpreting sessions, the post-experiment survey, and the researcher's interview notes.

The pre-experiment survey is used to profile the participants in terms of their age, simultaneous interpreting background, familiarity with the interpreting strategies in general. The strategies were taken from Li's work (2013) and different names for the same strategies (i.e., compression, condensation, summarizing or omission, skipping, ellipsis, message abandonment) were also provided in the survey to prevent confusion and misunderstandings over terminology.

The experiment includes 4 professionals and 10 senior students from Dokuz Eylül and Ege Universities. All students have Turkish as their native tongue, and English as their second language. The students are assumed to be fully focused during their SI performances, and to have similar levels of simultaneous interpreting skills based on their education and pre-interpreting survey results. In the experiment, two TEDx speeches focusing on Syrian refugee children were utilized; therefore, it was assumed that issues with familiarity with the subject would not

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affect interpreting performances. Speeches were adapted to limit the following variables, which are also thought to have impacted performance: the speaker, length of the source texts, and terminology. After being transcribed and adjusted, the speeches were re-delivered by a Turkish-English bilingual to prevent the impact on interpreting performances due to differences between individual speakers (i.e., accent, speed, intonation). At this point, to address the use of altered and re-delivered speeches in the experiment, it is necessary to recall that utilizing such texts in experimental studies focusing on strategies is an orthodox practice in interpreting studies, and to underline that no negative feedback was received during the post-experiment survey or interviews. To limit the impact of terminology, the students were given a terminology list beforehand, and are allowed to keep them in the booths. All recordings were made under the same conditions, and it was assumed there were no differences in environmental factors.

The post-experiment survey is designed to evaluate participants' self-reflection on their performances, the difficulty level of the speeches, challenges faced, and the interpreting strategies employed. For a deeper understanding of the overall process, the post-experiment survey was followed by an informal interview and notes from this are also included in the study. It was assumed that the answers and the evaluations were honest in the surveys and the interviews.

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The limitations to the present study are as follows: (a) the strategies and errors assessed in the present study are confined to Barik's taxonomy, (b) the effect of directionality is assessed in one language pair (i.e., English and Turkish), (c) the sample consists only of senior students of the Department of Translation and Interpreting of Dokuz Eylül and Ege Universities, (d) the control group consists of only 4 professional interpreters.

4. Results

This section gives the results of the pre-experiment survey, the data from the recordings of the interpreting sessions of both groups, and the significant differences found in the students' performances, all of which are going to be addressed in the discussion section in detail.

4.1. The Pre-experiment Survey

The age of the control group varies between 26 and 46, with an average of 35. 3 professionals reported having taken simultaneous interpreting classes as students. 2 professionals indicated 5 to 10 years of experience, and 2, 10 to 15 years. The professionals were not asked to rate their own performance in general. All professionals were familiar with the following strategies: summarizing, omission, elaboration, stalling, approximation, paraphrasing, anticipation, transcoding, parallel reformulation, restructuring, inferencing, repair, evasion, repetition. One professional was familiar with morpho-

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syntactic transformation. 2 and 3 professionals were familiar with no repair and incomplete sentences, respectively.

The pre-experiment survey indicates that student participants' age varies between 21 and 42, with the average of 24.5. All the students reported taking simultaneous interpreting classes prior to the experiment. Four students remarked that they have worked as novice interpreters. 3 rated their performances in general as “good”, and 7 as “average”. Students' strategy familiarity ratios are as follows:

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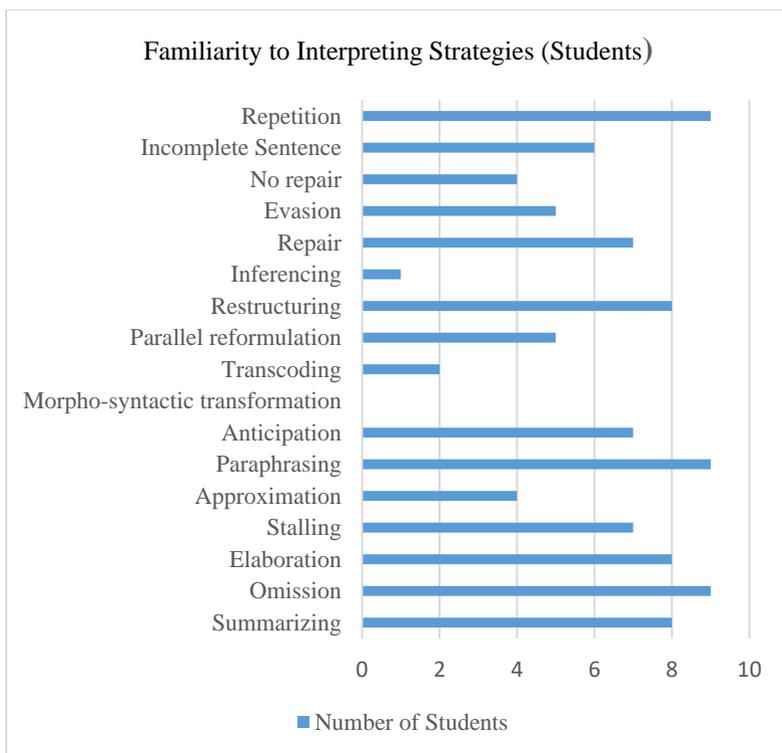


Figure 1: Familiar Interpreting Strategies of the Students

4.2. The Interpreting Performances

4.2.1. Omissions

In the recordings of the interpreting professionals, the total number of omissions was 314, including 206 skipping omissions, 4 comprehension/production omissions, 85 delay omissions and 19 compounding omissions in L1>L2. In the opposite direction, the number decreases to

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205, including 132 skipping, 54 delay and 19 compounding omissions in L2>L1, with no comprehension/production omissions in this interpreting direction.

Recordings from the students' performances, on the other hand, show that the omission occurrences were 833 in L1>L2, and 595 in L2>L1. The distribution are as follows:

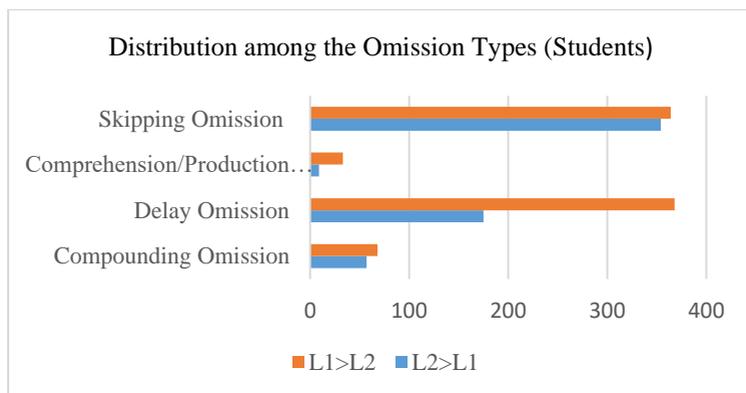


Figure 2: Distribution among the omission types made by the students

The students' skipping omissions suggest that they tend to skip the adjectives and adjectival clauses in L2>L1; repeated or rephrased parts of the sentences in L1>L2; prepositional phrases, and items listed in a long sentence, in both directions.

The number of comprehension/production omissions is the lowest among the omission category; however, there

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are great differences between the interpreting directions. For the L1>L2 direction, it is possible to conclude that most common omissions take place following a gross phrasing change or delay omissions. Another instance of c/p omissions was observed at the beginning of the interpreting session: 2 students did not interpret the first sentence, perhaps due to technical problems; however, as the voice of the speaker is clearly audible in the students' recordings, these are considered production omissions. The number of c/p omissions is considerably low in L2>L1; 4 out of 10 students made no c/p omissions, and 5 made only 1. Therefore, we can infer that a single student causes the total number of c/p omission occurrences to reach 9. Strikingly, most of the students with the rate of 1 c/p omission omitted the same adverbial clause, or the sentence including it.

The number of delay omissions detected in students' interpreting performances is 385 in L1>L2, and 175 in L2>L1. A detailed look on the nature of delay omissions in L1>L2 shows that most student participants omitted consecutive short and simple sentences. The production process takes longer while interpreting into L2; therefore, students tend to omit sentences that do not pose a threat to the overall understanding. A common delay omission observed in both interpreting directions was in the sentences following long lists. In some cases, when the production of such a sentence took longer, students even omitted 2 consecutive sentences. The most consecutively

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omitted sentences due to delay is 5 in L1>L2, and 3 in L2>L1.

Compounding omissions were observed in two ways: the students either convey the meaning of a missed sentence by using elements from the first sentence and deliver them in the second or opt to combine the second sentence with the first. However, retaining the first one requires a higher working memory, and this strategy was not very common. The total number of compounding omission occurrences in the students' interpreting performances were calculated as 68 In L1>L2, and as 57 in L2>L1. In some cases, compounding omissions lead to inaccurate messages; examples can be found in both directions but are higher in L2>L1.

4.2.2. Substitutions and Errors

Before moving on to substitutions and errors, it is important to recall that word-for-word translation cannot be taken as a basis in interpreting studies, and minor differences in wording should not be placed under the category of substitutions. Substitutions include the parts where the participants use different words to express the same, or a similar idea, or provide the gist. Failures to do this, or completely changed messages are included in “gross phrasing change”, which, while not bearing the name “error”, should be considered as such in Barik's taxonomy.

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In the professionals’ performances, there were 169 substitution and errors, with 23 mild semantic error, 26 gross semantic error, 63 mild phrasing change, 57 substantial phrasing change and 47 gross phrasing change occurrences in L1>L2, increasing to 195 occurrences with 22 mild semantic change, 9 gross semantic change, 73 mild phrasing change, 55 substantial phrasing change and 36 gross phrasing change occurrences in L2>L1.

The total number of students’ substitutions was 369 in L1>L2, falling to 287 in the opposite interpreting direction. The total number of errors, likewise, is higher in L1>L2 with a total number of 280 and is 197 in L2>L1. As seen from the table below, for students, the occurrences of substitutions and errors are higher in each category in L1>L2:

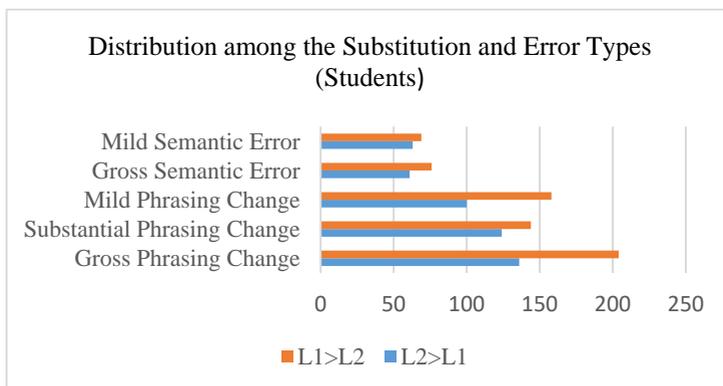


Figure 3: Distribution among the omission types made by the students

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The total of the students' mild semantic errors is 76 in L1>L2 and 60 in L2>L. These are seen at the lexical levels, and they do not cause a total collapse in the overall sentence meaning. For instance, instead of “to bomb”, students used “to demolish”, “to burn” – which do not actually describe the action or imply the action of bombing.

Gross semantic error, however, requires a much more serious change in meaning. The total errors of this type of were higher in students' performances, with 76 in L1>L2, and 61 in L2>L1. It was concluded that gross semantic error results from incorrect equivalences, false references, synonyms, homonyms or assumed meanings, or not conveying the figures accurately.

The total number of students' mild phrasing changes is 158 in L1>L2, and 100 in L2>L1. Individual scores show that 8 students had higher rates of mild phrasing change while interpreting into L1. At this point, one should note that the interpreter has many choices for conveying the meaning; therefore, not every change in sentence structure can be included in mild phrasing change.

Students' totals for substantial phrasing change are 144 in L1>L2, and 124 in L2>L1. It was seen that 6 students have a higher number of substantial phrasing changes in L1>L2. Once again, it should be remembered that substantial phrasing change involves significant changes the

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sentence phrasing; however, the gist is kept to some extent.

Students' total number of gross phrasing changes was 204 in L1>L2 and 134 in L2>L1. Most students had fewer errors while interpreting into L1. The students' recordings show that gross phrasing change occurred due to (a) failure at the production stage, (b) a distorted message caused by omission, (c) a sentence missed to catch the following one, (d) a completely different sentence meaning, (e) major grammatical mistakes leading to unacceptable structures.

4.2.3. Additions

89 additions were observed in professionals' recordings in L2>L1 with 13 qualifier additions, 56 elaboration additions, 3 relationship additions and 17 closure additions in total. In L2>L1, the number falls to 44, with 3 qualifier, 28 elaboration, 10 relationship and 3 closure additions.

The total number of students' addition occurrences is 190 in English to Turkish, and 110 in Turkish to English. The distributions are shown below:

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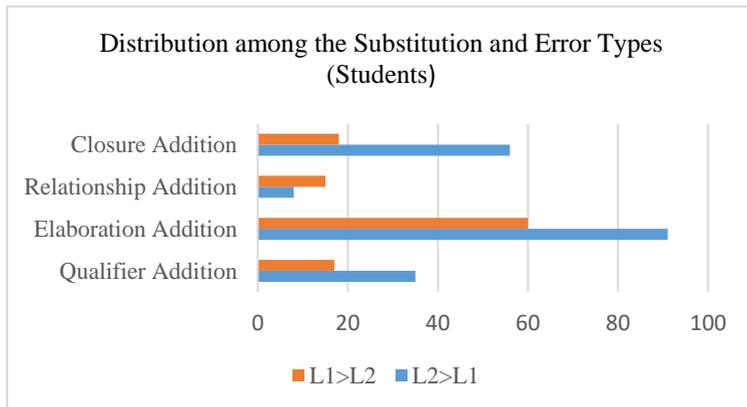


Figure 4: Distribution among the substitution and error types by the students

The graph above shows that, excluding the relationship addition, the students tend to make more additions while interpreting from L2>L1.

The total number of students' qualifier additions was 35 in L2>L1 and as 17 in L1>L2. While the students do not often resort to this type of addition, the data from individual recordings indicates that there is no common example in which most students used qualifier additions in L1>L2 direction. Most of the qualifier additions are observed to be intensifiers in both directions. The students add “very” or its Turkish equivalent “çok” before adjectives, but not frequently enough to warrant an inductive approach. Some students tend to add “approximately”, “about”, “around” before the figures or fractions for approximation in both directions. However, this also seems to be a personal

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strategy. In rare cases students added an adjective or adverb qualifying a noun.

Elaboration was the most frequent form of addition according to the student data, both from L2>L1 and L1>L2, with the totals of 91 and 60, respectively. In L2>L1, elaboration addition was commonly used in 2 sentences. One of the sentences included the verb “to take”, which can be translated as “almak” in Turkish. However, as the word has also the meaning “to buy”, 6 students used this as an addition. Another elaboration addition used by 4 students and can be considered as a “necessary” one, was in a sentence containing the verb “to leave”, translated as “ayrılmak” or “terk etmek” in Turkish. Both equivalents are often used with an indirect object in the target language, and therefore an indirect object was added within the context. In both directions, most direct additions provided no specific detail, but simply added emphasis.

Relationship additions are the least encountered addition type for the students, but these have a great importance as their misuse may cause meaning failures. There were 8 occurrences in L2>L1 and 15 occurrences in L1>L2. Relationship additions act like a bridge between the sentences and pose no threat to the overall meaning. The conjunctions “but” or “because” were the most common types in both directions. However, some cases where these are combined with delay omissions produce an unintended

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meaning or a meaningless sentence. This problem occurred once in L1>L2 but not in L2>L1.

The total number of students' closure additions is 56 in L2>L1, and 18 in L1>L2. In L2>L1, students use chunking as a strategy to tackle the sentence structures, resulting in closure additions. While interpreting from L1>L2, the students resort less often to chunking, which in turn decreases the use of closure additions. They rather use closure additions to compensate for their skipping omissions or, mild or gross phrasing changes.

4.2.4. T-test Results

To measure the effect of directionality both in students and in professionals, a two-tailed t-test was run. The results in macro-level reveal that, for professionals, we cannot reject the null hypothesis, i.e., there is no significant relationship between directionality and omission, addition, substitution, and errors. However, for students, the p-value is below the significance level ($\alpha = 0.05$), and it is possible to reject the null hypothesis and conclude a significant relationship between directionality and performances with respect to omissions, additions, substitutions, and errors:

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Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	L2toL1ProfALL – L1toL2ProfALL	-30,250	45,966	22,983	-103,392	42,893	-1,316	3	,280
Pair 2	L2toL1StuALL – L1toL2StuALL	-45,100	18,894	5,975	-58,616	-31,584	-7,548	9	,000

Table 2: Significant differences between interpreting directions of the student and professional participants

On the micro-level analysis, in the student recordings, the significant differences are incomprehension/production omission, delay omission, elaboration addition, closure addition, mild phrasing change and gross phrasing change occurrences:

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 6	L2toL1StuM2 – L1toL2StuM2	-2,400	3,026	,957	-4,565	-,235	-2,508	9	,033
Pair 10	L2toL1StuM3 – L1toL2StuM3	-19,300	7,646	2,418	-24,769	-13,831	-7,983	9	,000
Pair 26	L2toL1StuA2 – L1toL2StuA2	3,100	3,542	1,120	,566	5,634	2,766	9	,022
Pair 34	L2toL1StuA4 – L1toL2StuA4	3,800	2,574	1,744	-9,744	-1,856	-3,327	9	,009
Pair 50	L2toL1StuE3 – L1toL2StuE3	-5,800	5,514	1,744	-9,744	-1,856	-3,327	9	,009
Pair 58	L2toL1StuE5 – L1toL2StuE5	-7,000	8,654	2,737	-13,191	-,809	-2,558	9	,031

Table 3: Significant differences between interpreting directions in terms of strategy and error types

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The negative values in the first column of the above table are comprehension omission (M2), delay omission (M3), mild phrasing change (E3) and gross phrasing change (E5). For students, the table shows higher levels of omissions, substitutions and errors from L1 to L2. For instance, among the abovementioned categories, the highest difference is in M3, which is delay omission, with the average difference of 19,300 between two directions with a standard deviation of 7,646, and a significant difference between the delay omissions in Turkish to English and the delay omissions in L2 to L1 with a p value of .000 were found.

4.3. The Post-Experiment Survey and the Interviews

The post-experiment processes were included in this paper to evaluate the success of the measures taken before the experiment, and to gain insight to the participants' minds during their simultaneous interpreting performances.

The survey includes three questions answered with a 5 point-Likert scale. These questions aimed to measure the difficulty level of the speeches, the participants' familiarity to the subject and the self-evaluation of their interpreting performances. As for the question regarding the familiarity to the subject, all professionals indicated "extremely familiar" in both directions. For the next question, half of the professionals said the speeches were "not at all challenging" while the other half indicated that

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they were “not so challenging”. Evaluating their own performances, 2 professionals rated themselves “average”, while the others indicated “good”. In terms of directionality, 2 professionals reported that they performed the same in both interpreting directions; 1 professional reported performing better in English to Turkish, and another, vice versa. Next, the student answers are examined. The students’ results between 1-5 on the Likert scale are given below:

<i>Likert Scale</i>	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
SI Direction	Familiarity to The Subject					Difficulty Level					Self-Evaluation				
ENG>TR				3	7	3	1	4	2			3	3	4	
TR>ENG				4	6		3	6	1			4	6		

Table 4: Results of the post-experiment survey

The next question in the post-interpreting survey aimed to find the problem triggers, focusing on the factors causing the problems in their interpreting sessions, and the levels of these problems. No professional participants believed that problems were caused by the speed of the speech, the accent, the terminology, or the sentence structures. A detailed histogram covering the students’ answers with respect to the speech in English is as follows:

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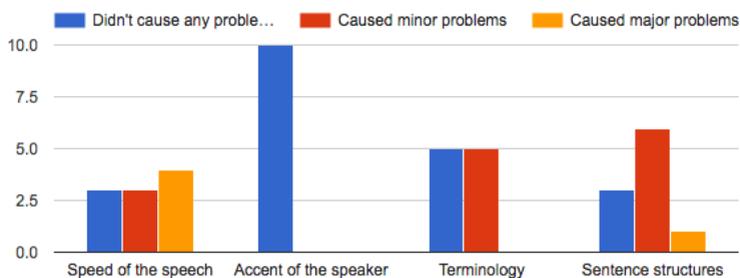


Figure 5: Factors Causing Problems in the English Speech

On the other hand, according to the survey data, most of the students stated that the speed of the speech in Turkish caused problems. At this point, it is useful to recall that both speeches were designed and prepared to be at the same speed. Therefore, this does not indicate that the speech was faster, but rather, that the students had more problems following the speech while interpreting into English. Thus, this is another indicator of the effect of directionality. A detailed histogram covering students' answers with respect to the speech in Turkish is as follows:

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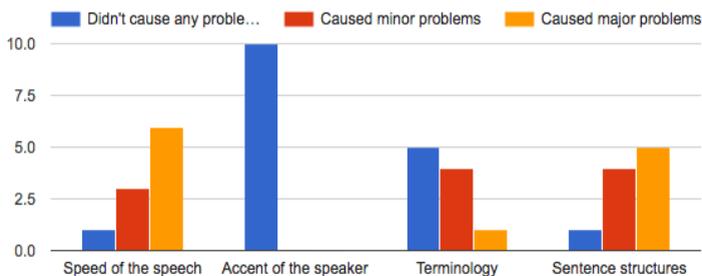


Figure 6: Factors Causing Problems in Turkish Speech

Students were asked which strategies they employed during their interpreting performances, and the majority stated that they resorted to omissions, and summarizing, examined under substantial phrasing change in this study. More students reported resorting to elaboration in L2>L1 than the opposite direction, consistent with the performance findings. Approximation was included in qualifier addition in this study, and 3 students reported using it as a strategy. The majority stated that they used paraphrasing, considered within mild phrasing change in this study. 3 students indicated using restructuring in L1>L2, increasing to 5 in L2>L1. Repair was noted as a used strategy by 4 students in L2>L1, and by 3 in the opposite direction. Repetition was also used as a strategy by 4 students in L2>L1 and by 3 in L1>L2. Evasion was one of the least used strategies in both directions, by 2 in L2>L1 and 1 s in L1>L2. This is an important finding, showing that the delay omissions were the result not of strategic choices, but rather, of production. No repair and

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incomplete sentences can be evaluated together, both being included in substantial phrasing change category in the present study. One student reported using no repair in either direction, i.e., they are aware of the incorrect sentence but chooses to leave it. The number of students acknowledging incomplete sentences is 3 in L2>L1 and 4 in the opposite direction. However, in the analysis, all the students were found to have incomplete sentences in L2>L1 and L1>L2.

In the interview, all students commented that interpreting in L2>L1 was easier. They were also asked to comment on the problematic parts of the speech. All “complained” about problems in different parts of the speech, and about “missing” some parts. Regarding additions, the students generally reported not adding anything significant. Some commented that additions were made only to give approximations. When asked about making substitutions, all students agreed they had. Some commented that it is natural in simultaneous interpreting. In the last part of the interview, the students commented on errors. All were in doubt about the accuracy of their translation of numbers. Some said that they dropped sentences, and moved on to the next one, and some said that they failed in production in some cases.

5. Discussion

The present study does not claim to have demonstrated a higher quality of interpreting while interpreting into one’s

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mother tongue, but rather describes the relationship between the strategies and errors, and the interpreting direction. The main research question focused on the effect of directionality on students' omission, addition, substitution, and error rates. At the macro-level, it can be concluded that the students tend to perform better – in terms of the strategies and errors that are the focus of the present research – in English to Turkish than vice versa.

The first sub-question concerns interpreting students' extent of omissions, additions and substitutions/ errors in simultaneous interpreting in English and Turkish language pair. Generally, no difference between directions was found in the ranking of omissions, additions, substitutions, and errors; therefore, looking at the data, it can be said that students use omissions widely in the English and Turkish language pair. The total numbers given in the previous section suggest that the students resort to strategies and make errors in both directions.

The discussion regarding the following sub-questions is concerned with the frequency of the types of omissions, additions, substitutions, and errors. These shed light on the issues regarding the process involved in simultaneous interpreting. As for the omission types most frequently used by the interpreting students, the findings illustrate that these are skipping omissions and, compatible with the findings of Al-Khanji et al. (2000, p. 553), and that these occur in the case of detail, or in the case of repetition. It

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can be said that the students take shortcuts to keep up with the speaker without endangering the communicative aim, i.e., these are “low risk omissions” (Pym, 2008, p. 94). However, in the interviews into account, they refer “omissions” other than skipping omissions, and they mostly “regret” these omitted parts.

The second most frequent occurrence is in delay omissions. It was observed that the students omit some sentences while focusing on other parts. Although delay omissions can be observed in both directions, the t-test results show a significant difference in terms of directionality. The much higher frequency in delay omissions translating from Turkish into English can be explained with the Production Effort. Gile (2005, p. 11) states that he considers Production Effort to require more attention as it entails a deliberate effort in “retrieving lexical items” and in “constructing syntactically acceptable target language sentences”. Therefore, at this point, it can be proposed that students’ production capacity is more challenged by the L2 compared to L1 production requirements. The effort put into finding the equivalents of words and constructing sentences interferes with their Listening and Analysis Effort, leading to more delay omissions. The students are also aware that they “miss” – as admitted in the interviews – parts of the speech and cannot “catch up” while interpreting into L2.

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However, in some cases, they were able to compensate for this loss; these cases are the ones in which compounding omissions were encountered. Compounding omissions can be considered as a proof of Memory Effort, revealing that the Production Effort does not completely block Listening and Analysis Effort. When engaged in producing a sentence, the students are still able to follow the speaker. The least encountered omission type was comprehension/production omission in both directions. However, the results show more comprehension/production omissions in L1>L2 than in L2>L1. As a better capacity to understand and analyze sentences in L1 is presupposed, this result cannot be linked to Listening and Analysis Effort, and the problem in Turkish to English direction likely occurs on the Production Effort level.

Regarding the first sub-question, on the macro-level, additions were the least frequently encountered strategies in both directions. As for the students' most frequent addition types, recordings illustrate more frequent elaboration than the other types. This is followed by closure additions, qualifier additions and relationship additions respectively in both interpreting directions, however, with significant differences in directionality in the extent of elaboration additions and closure additions. The students tend to make significantly more elaboration additions while interpreting into their L1, also explained by the Production Effort: the students construct the target language structures more easily while interpreting into L1,

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giving time to make direct additions to the source, where thought necessary. Another aspect is the syntax: as explained in the findings, elaboration additions may sometimes be necessary rather than optional. In these cases, the students can produce the target structures, and adding the appropriate elements (e.g., direct object) for the target audience.

The second most frequently encountered addition type in both interpreting directions (i.e., closure addition) also shows significant statistical differences; more closure additions were used while interpreting into L1. The main reason is resorting to chunking, which is not included as a strategy in the present study but proven to be used more while interpreting into L1 when we look at the closure additions. Chunking is a Memory Effort-reducing strategy, but may also increase the Production Effort (Gile, 1995, p. 196).

Therefore, by looking at the significant difference in closure additions caused by the interpreting directions, it is possible to suggest that while interpreting into their L1, instead of retaining the currently emerging speech, the students prefer to produce them immediately, and this results in closure additions. This also demonstrates the easier production in their L1 compared to L2. Therefore, the significant differences in these two addition types support the findings of Gumul (2017), and proposing that “retour interpreting” (i.e., interpreting from L1 into L2) is

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more challenging for the students. The third most frequently occurring addition type was observed to be the qualifier addition, and despite no significant difference according to the paired t-test results, the students clearly resort to these more while interpreting to L1. The last type of addition (i.e., the relationship addition) is also a possible indicator of the better functioning of Listening and Analysis Effort in L1, as the number of occurrences is nearly double compared to L2; however, highly varied individual distributions, make it similarly impossible to put forward a firm argument.

The next sub-question focused on substitutions and errors. At this point, it is crucial to remember that although examined together in Barik's taxonomy, the categories of mild semantic error, mild phrasing change and substantial phrasing change can be grouped under the label of substitutions. The first one bears the word "error"; however, the effect of this type is very small, and it would not be appropriate to regard it as such. In terms of substitutions, students' preferences between mild and substantial phrasing change varies according to language. While interpreting from L1 into L2, the students resort to mild more than substantial phrasing changes, and vice versa in the opposite interpreting direction. Mild phrasing changes indicate that the message is fully comprehended and conveyed with a different phrasing into the target language, and totally acceptable considering the challenging nature of simultaneous interpreting and the

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problems caused by the syntactic asymmetries. The t-test results show a significant difference between the occurrences of mild phrasing change, and this strategy is more utilized while interpreting from L1 into L2. First, this can be regarded as a proof of a better performance in L1 regarding the Listening and Analysis Effort. It also shows that after comprehending the words, students find a way to express it in the target language in their own words, or in a more acceptable way for the target audience.

On the other hand, substantial phrasing changes, including partial or general paraphrasing, or summary of the source message is more frequent while interpreting into L1; however, there is no statistically significant difference, and it is impossible to reach general conclusions about the directionality for this strategy, other than that substantial phrasing change is a frequently utilized strategy useful for decreasing the time lag. The last, and least frequently observed substitution (i.e., mild phrasing change) is the only substitution examined on the lexical level. Without statistically significant difference in this type, and very similar frequencies in both directions, it is again impossible to discuss tendencies in terms of directionality.

As for students' errors (i.e., gross semantic error and gross phrasing change), the total number in English to Turkish direction was 195, increasing to 371 in the opposite direction, nearly two times more; therefore, the effect of directionality on errors cannot be rejected. While no statistically significant difference was observed in gross

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semantic errors, meaning that the students make errors limited to the lexical levels in both interpreting directions, the difference in gross phrasing changes is a remarkable indicator of failures in the Production Effort while interpreting into L2, since these more often result in confused or meaningless translations, lost meaning, incomplete sentences, made-up sentences, and major grammatical mistakes.

As illustrated in the previous section, the variable of familiarity of the subject matter was limited, and all students were “extremely” or “very familiar” with the source texts. Besides, the post-interpreting survey shows that the accent did not cause even minor problems. The terminology also caused minor or no problems. Therefore, there is no indication that the significant differences in terms of strategies and errors stemmed from the difference in speeches, the accents, or terminology, all of which were effectively limited during the study. However, they found interpreting the speech from L1 into L2 more challenging. Surprisingly, the students thought the Turkish speech was delivered faster than the English speech, although, these two texts were adapted to be similar. Again, this raises the issue of the effect of directionality in the Production Effort. The students lag behind the speaker while producing the target message, omitting some sentences, giving an impression of a faster delivery rate. For the English and Turkish language pair, it is possible to conclude a higher cognitive load for interpreting into L2.

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Another interesting point made by the students was that major problems caused by sentence structure interpreting from L1. As the texts were designed to be equally challenging, this is also highly subjective feedback. The retrospective interviews highlight that the problem with the sentence structures in L1 causes production problems, not comprehension problems. This is also compatible with the analysis, as they clearly make far more gross phrasing changes than comprehension/production omissions. In their self-evaluations, the students consider themselves more successful interpreting into their L1. To crosscheck the findings from the interpreting performances, students were asked about the strategies utilized in each direction. Most were aware of their strategies, and their remarks are generally compatible with the author's findings. However, the present study does not distinguish whether strategies are used “instinctively” or “consciously”, and these strategy evaluations are not pursued further.

Then, we examine the effect of interpreting direction in the professionals' performances. According to the paired t-test, no statistically significant difference was observed at the macro-level. Hence, for professionals, we cannot argue that experience impacts the relationship between occurrence of omissions, additions, substitutions/ errors and directionality. The only significant difference observed was in skipping omissions, a category that does not endanger sentence or speech meaning. Skipping omissions are highly subjective and text dependent;

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therefore, it is impossible to reach definite conclusions in terms of the Effort model, as it can with other omission types. The number of professionals is very limited, and it is accepted that the individual performances may vary, and thus general conclusions cannot be drawn regarding their strategy or error occurrences. Furthermore, in their post-interpreting surveys, the professional participants denied that the factors of speech, accent, terminology, and sentence structures caused problems. This was expected, as the texts were designed mainly for the students. Evaluating her performance, one interpreter reported performing better while interpreting from L1 into L2; however, the others performed equally in each direction. Their self-evaluation is compatible with the result of the paired t-test, point to no significant effect of directionality for the professionals.

Lastly, as the findings show that students' performances of are significantly affected by the direction, and we can consider that interpreting into L2 involves greater cognitive load and difficulties in producing the target language. The findings support the view that the students' performances are affected by directionality, with better performance while interpreting into L1 in terms of strategies and errors. However, the professionals' performances show that this difference can be eradicated with experience. Therefore, instead of the traditional view of arguing whether interpreting into L1 or L2 is simpler, the present study acknowledges that the interpreting

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students may experience greater problems and challenges in interpreting in L1, but, the professional interpreters performances suggest while interpreting into L1 – the frequency of omissions, additions, substitutions and errors – can be reduced in time with practice and experience. Before closing the discussion, we would once again like to underline that these results and discussions are binding only within the scope of the specific strategies and errors examined, without making any claims regarding the output quality.

6. Conclusion

In this small-scale experiment, the numbers participating in the study was set as 10 students and 4 professionals. The analysis of the students' simultaneous interpreting performances indicates a significant difference in the occurrences of omission, addition, substitution, and error with respect to directionality. The results of the t-test clearly show higher rate of delay and comprehension/production omission occurrences while interpreting from L1. Likewise, higher occurrences of mild phrasing changes and gross phrasing changes are observed in the same direction. It was thus proposed that the utterances are fully comprehended in the source language, but that more frequent mild phrasing changes result from the desire to increase acceptability in the target language. Therefore, this demonstrates a better performance in Listening and Analysis Effort in L1. The other significant differences in delay omission, in comprehension/production omission

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and in gross phrasing change indicate students operating at saturation level while conveying the meaning into L2 and facing problems in Production Effort. In contrast, in the professionals' recordings, no significant difference with reference to the Efforts was identified regarding the effect of directionality on the omission, addition, substitution, and error occurrences. Further support comes from the Post-Interpreting Survey data and the retrospective interviews. The students generally evaluated themselves as less successful interpreting into L2 than into L1; thus, it can be once again concluded that interpreting into L2 is more challenging. In contrast, the professional interpreters' surveys, and interview data show that 3 evaluated their performances the same in both directions, indicating that experience moderates the effect on directionality.

In conclusion, the present findings suggest that interpreting direction affects students' omission, addition, substitution, and error rates. Moreover, for the English and Turkish language pair, it can be concluded that the students make fewer comprehension/production and delay omissions, mild phrasing changes and gross phrasing changes, but more elaboration and closure additions while interpreting into L1. In the light of the discussion of the Effort Models, this study demonstrates that, for the students, the Production Effort requires less cognitive load while interpreting into L1. However, as mentioned, the experiment conducted within the framework of this

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study is small-scale; thus, suggestions for further research are as follows: (a) an enlarged sample size for the purpose of generalization, (b) enlarged sample size to give the researcher the opportunity to work with translations of the same text, (c) enlarged sample size with a group receiving treatment, (d) a similar study conducted with different text types to measure the effect of text types and directionality on omissions, additions, substitution, and errors in simultaneous interpreting.

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REFERENCES

- Al-Khanji, R., El-Shiyab, S., & Hussein, R. (2000). On the use of compensatory strategies in simultaneous interpretation. *Meta*, 45(3), 548–557. <https://doi.org/10.7202/001873ar>
- Altman, J. (1989). Error analysis in the teaching of simultaneous interpreting: A pilot study. *Fremd-Sprachen*, 33(3), 177–183.
- Barik, H. C. (1971). A description of various types of omissions, additions and errors of translation encountered in simultaneous interpretation. *Meta*, 16(4), 199. <https://doi.org/10.7202/001972ar>
- Bevilacqua, L. (2009). The Position of Verb in Germanic Languages and Simultaneous Interpretation. *The Interpreters' Newsletter*, 14, 1–31.
- Bozok, N. (2018). *Strategies and errors in simultaneous interpreting: A student oriented experiment in English-Turkish language pair*. [Master's Thesis, Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü]. CoHE Thesis Center.

- Bozok, N. & Kınca, Ş. (2022). Strategies and Errors in Simultaneous Interpreting: A Student-Oriented Experiment in English-Turkish Language Pair. *Current Trends in Translation Teaching and Learning E*, 32 – 75.
<https://doi.org/10.51287/cttl20222>
- Chang, C. (2005). *Directionality in Chinese/English Simultaneous Interpreting: Impact on Performance and Strategy Use*. [Doctoral dissertation, the University of Texas at Austin]. UT Electronic Theses and Dissertations.
<https://repositories.lib.utexas.edu/handle/2152/1524>
- Donato, V. (2003). Strategies Adopted by Student Interpreters in SI: A Comparison between the English-Italian and the German-Italian Language Pairs. *The Interpreters' Newsletter*, 12, 101–134.
- Erkazancı, H. (2003). *Effect of lexical and syntactic strategies on simultaneous interpreting*. [Master's Thesis, Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü] YÖK Açık Bilim.
<https://acikbilim.yok.gov.tr/handle/20.500.12812/469717>
- Gile, D. (1995). *Basic concepts and models for interpreter and translator training*. John Benjamins.
- Gile, D. (1999). Testing Effort Models' Tightrope Hypothesis in Simultaneous Interpreting – A Contribution. *Hermes: Journal of Linguistics*, 23, 153-172.

Bozok, N. & Kınca, Ş. (2022). Strategies and Errors in Simultaneous Interpreting: A Student-Oriented Experiment in English-Turkish Language Pair. *Current Trends in Translation Teaching and Learning E*, 32 – 75.
<https://doi.org/10.51287/ctl20222>

Gile, D. (2005). Directionality in conference interpreting: a cognitive view. In R. Godijnns & M. Hinderdael (Eds.), *Directionality in interpreting the 'retour' or the native?* (pp. 9–26). Communication & Cognition.

Goldman-Eisler, F. (1972). Segmentation of input in simultaneous translation. *Journal of Psycholinguistic Research*, 1(2), 127-140.

Gumul, E. (2017). Explication and Directionality in Simultaneous Interpreting. *Linguistica Silesiana*, 38, 311–325.

Kirchhoff, H. (2002/1976). SI: interdependence of variables in the interpreting process, interpreting models and interpreting strategies. In F. Pöchhacker & M. Shlesinger (Eds.), *The Interpreting Studies Reader* (pp. 112-130). Routledge.

Kohn, K., & Kalina, S. (1996). The strategic dimension of interpreting. *Meta*, 41(1), 118–138.
<https://doi.org/10.7202/003333ar>

Kopczyński, A. (1980). *Conference interpreting some linguistic and communicative problems*. Adam Mickiewicz University Press.

Bozok, N. & Kınca, Ş. (2022). Strategies and Errors in Simultaneous Interpreting: A Student-Oriented Experiment in English-Turkish Language Pair. *Current Trends in Translation Teaching and Learning E*, 32 – 75.
<https://doi.org/10.51287/cttl20222>

- Korpala, P. (2012). Omission in Simultaneous Interpreting as a Deliberate Act. In A. Pym & D. Orrego-Carmona (Eds.), *Translation research projects* (pp. 103–111). Intercultural Studies Group.
- Li, X. (2013). Are Interpreting Strategies Teachable. *The Interpreters' Newsletter*, 18, 105–128.
- Liontoulou, K. (1996). Strategies in German-to-Greek simultaneous interpreting: A corpus-based approach. *Gramma: Journal of Theory & Criticism*, 19, 37–56.
- Öztürk, A. (2012). *Directionality in simultaneous interpreting: English- Turkish Language Pair*. [Master's Thesis, Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü]. CoHE Thesis Center.
- Pym, A. (2008). On Omission in Simultaneous Interpreting: Risk Analysis of a Hidden Effort. Efforts and Models in Interpreting and Translation Research . In G. Hansen, A. Chesterman, & H. Gerzymisch-Arbogast (Eds.), *Efforts and models in interpreting and translation research: A tribute to Daniel Gile* (pp. 83–105). John Benjamins.

Bozok, N. & Kınca, Ş. (2022). Strategies and Errors in Simultaneous Interpreting: A Student-Oriented Experiment in English-Turkish Language Pair. *Current Trends in Translation Teaching and Learning E*, 32 – 75.
<https://doi.org/10.51287/ctl20222>

Riccardi, A. (2005). On the Evolution of Interpreting Strategies in Simultaneous Interpreting. *Meta*, 50(2), 753–767. <https://doi.org/10.7202/011016ar>

Viezzi, M. (1993). Considerations on interpretation quality assessment. In C. Picken (Ed.), *Translation, the vital link: Proceedings: XIIIth FIT world congress* (pp. 389–397). essay, Institute of translation and interpreting.

Wadensjö, C. (1998). *Interpreting as interaction*. Longman.