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Anticipation of Predicates in Simultaneous Interpretation Between Different Word Order Languages

A study of Korean-English interpretation classrooms

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Abstract: Anticipation, broadly defined as the act of predicting words or phrases before their verbalization by the speaker, is a pragmatic simultaneous interpretation strategy enabling interpreters to minimize the temporal gap between the source and target languages, expedite the retrieval of equivalent words or phrases, and mentally prepare for the progression of the source discourse or speech. The literature on anticipation as an interpretation strategy explains that interpreters harness both linguistic and extralinguistic resources to engage in anticipation during simultaneous interpretation (SI). Linguistic resources include idioms, set phrases, lexical transition probabilities, and common sentence structures, whereas extralinguistic resources include the contextual information about the source text and the interpreter's background knowledge about the topic, setting, and speaker. Anticipation is particularly crucial to use during simultaneous interpretation from Korean into English. The structural difference between Korean, characterized as a subject-object-verb (SOV) language, and English, a subject-verb-object (SVO) language, necessitates interpreters' adept anticipation, particularly anticipation of predicates that typically conclude Korean sentences. Predicates in Korean sentences, besides indicating tense, also convey semantic content in the form of verbs or adjectives. Thus, anticipating predicates is often a crucial determinant of the success of SI. However, anticipating predicates is a skill to be obtained and trained that may not be effectively employed by interpreting students. This

study examined a set of interpretation outputs from a sample of 22 graduate students to examine their utilization of anticipation during SI from Korean into English. The analysis of their interpretation focused on their attempts to anticipate predicates as well as the accuracy of their predictions. The analysis of the students' anticipation attempts and anticipation accuracy revealed a discernible but weak correlation between the two variables. Additionally, the analysis discovered a tendency among the students to predict the auxiliary verb only and wait for more input (English) to complement or repair their partial anticipation of a predicate. This study offers insights into the ways in which students employ anticipation and provides avenues for interpreting trainers to design methods to train students' anticipation skills employed during SI.

Keywords: simultaneous interpretation, simultaneous interpretation strategy, anticipation, Korean-English simultaneous interpretation, interpreter training

논문초록: 동시통역은 제한된 자원을 효율적으로 분배해 원문에서 주어지는 정보를 인지적으로 처리하는 동시에 도착어로 전환 및 전달해야 하는 행위로, 시간적 제한 아래 고도의 인지 능력 및 수행 능력을 발휘해야 하는 어려운 작업이다. 성공적 동시통역을 위해 활용되는 다양한 통역 전략 중 예측은 통역사가 인지 부하를 줄이고 도착어 발화의 유창성을 높이기 위해 활용하는 주요 전략 중 하나다. 특정 단어, 절 또는 구가 원문에서 발화되기 이전에 예측해 발화하는 행위로 정의되는 예측은 통역사가 원문 청취 시점과 도착어 발화 시점 간의 시간적 간극을 최소화하고 적절한 통역어를 신속하게 떠올리고 결정해 발화할 수 있도록 돕는 실용적 통역 전략이다. 예측 전략과 관련된 선행연구 및 문헌은 통역사들이 관용구, 고정 어구, 연어(collocation)로 설명될 수 있는 어휘의 진행 확률(lexical transitional probability), 전형적 문장 구조 등의 언어적 자원뿐 아니라, 원문의 맥락에 대한 정보, 주제, 상황 및 연사에 대한 배경지식 등을 포함하는 비언어적 자원을 활용해 예측을 활용한다고 설명한다. 예측 전략은 한국어에서 영어로의 동시통역에서 특히 효과적일 수 있는데, 이는 주어-목적어-동사(SOV) 구조의 한국어와 주어-동사-목적어(SVO) 구조의 영어 간 통사 구조 차이에 비롯된다. 특히 한국어 문장에서 주로 문미에 등장하는 술부(predicate)를 예측해야 하는 경우가 빈번하며, 한국어 문장에서 술부는 동사나 형용사의 형태로 의미적 내용을 전달하는 것은 물론, 시제를 나타내는 기능을 하기에 술부 예측은 한영 동시통역의 성공을 결정하는 중요 요인 중 하나다. 본 연구는 아직 동시통역 기술을 충분히 완성하지 못한 학생들이 한국어에서 영어로의 동시통역 중 예측 전략을 활용하는 방식을 알아보고자 했다. 이를 위해 22명의 통번역대학원 학생의 한영동시통역 녹음본을 수집 및 분석하였다. 실험 참여자의 통역 결과물을 분석하여 참여자들의 술부 예측 시도 및 예측의 정확도를 알아보았다. 참여자들의 동시통역 시 술부 예측 시도 및 정확도를 분석한 결과, 두 지표 간에는 약한 상관관계가 관찰되었

다. 또한 대다수 참여자가 시제, 정도, 확률, 필요 등을 표현하는 조동사만 먼저 예측한 후, 원문을 더 듣고 정보 및 단어를 추가 청취한 후 술부에 해당하는 통역어를 보완 및 수정하는 경향이 있음을 발견하였다. 본 연구는 통번역대학원에서 동시통역을 학습하고 훈련받고 있는 재학생들의 한영동시통역 시 예측 전략 활용 빈도, 정확도, 활용 양상 등에 대한 관찰 및 분석 내용을 제공한다. 통역 교수자는 본 연구 결과를 동시통역 시 예측 전략 활용의 필요성 및 효과를 설명하기 위한 근거로 활용할 수 있을 것이며, 잠재적으로 통역 학습자의 예측 전략 활용 효과를 향상시키는 데 도움이 되는 교수법을 고안할 수 있을 것이다.

핵심어: 동시통역, 동시통역 전략, 예측, 한영동시통역, 통역교육

1. Introduction

While unbeknownst to many, anticipation is almost naturally mobilized when humans communicate. In fact, human sensory organs and cognition can be likened to nodes open to not only other humans but also the external environment that make constant attempts to grasp the situation or the communication happening or about to happen. Anokhin (1978) argued that "the human central nervous system developed as a mechanism of maximal anticipation of sequential and iterative phenomena of the outsider world at the greatest possible speed" (p. 19). Indeed, as part of the effort to quickly grasp the surrounding situation which they are in and thereby protect themselves, humans employ anticipation both passively and actively. It is no exception when verbally communicating; one unknowingly yet constantly attempts to anticipate where the dialogue or utterance is going and what meanings will be made. This is evident when one can predict the next word to be said before the interlocuter actually utters it. Regardless of the language in use, most people experience this in normal conversations. As suggested by Seleskovitch, the process of SI involves the same tasks as normal communication, which are thinking and speaking the formulated thought at the same time albeit after a time lag (Seleskovitch, 1978, p. 32). Scholars who have written on anticipation as an interpretation strategy have also acknowledged that anticipation is used in monolingual conversations (Jörg, 1997; Lederer, 1978; Lim, 2011).

This innate human ability to anticipate becomes a functional strategy when performing SI. Particularly on account of the fact that a thought comes from outside of the interpreter's brain, in other words, a thought

is given to the interpreter by the speaker's input (Seleskovitch, 1978, p. 33), anticipation comes in handy when the interpreter attempts to sync his or her thought with the speaker so as to minimize the cognitive load and time lag to more seamlessly perform SI. Indeed, according to Bartłomiejczyk (2006) and Pöchhacker (2016), anticipation is one of the most widely discussed interpretation strategies. In conference interpreting, the anticipation strategy is defined as "the prediction and interpretation of source text (ST) units before their actual utterance and can be explained as a response to previously received and processed linguistic and extralinguistic stimuli" (based on similar definitions by Jörg, 1997, p. 218; Setton, 1999; Wilss, 1978). When performing SI, which requires the effective and efficient management and simultaneous utilization of various efforts (listening/analysis, memory, and speech production), the interpreter can efficiently allocate the limited processing capacity by employing anticipation as an interpretation strategy (Moser, 1978, p. 359) based on linguistic and extralinguistic stimuli.

Although the distinction between inferencing and anticipation may be unclear, anticipation, which is categorized as a cognitive interpretation strategy (Li, 2013; Vandepitte, 2001; Won, 2010), is one of the most useful and frequently used strategies employed during SI (Li, 2013). Chernov (2004) even regards anticipation ("probability prediction") of the verbal and semantic structure of the message as "one of the most essential psycholinguistic factors" (p. 140) that enables simultaneity in SI along with the message redundancy. Chernov's (1994) view assumes that linguistic understanding completely hinges on human inference, and also explains that "the objective semantic discourse redundancy of the ST message and its subjective sense redundancy for the interpreter" are the conditions for successful inferencing (p. 200). Inference might not be exactly equivalent to anticipation, yet anticipation can be understood as the observable act of inference. In order to perform successful simultaneous interpretation, the interpreter should not stop at inferencing the upcoming idea, word, rheme, or sense; Only when anticipating what is about to be said, can the interpreter successfully render a word or phrase, or start forming a sentence in the target language in a way that reduces the cognitive load as well as the input load during SI. Hence, this paper focuses on anticipation, an observable act of inference that occurs when unsaid or yet-to-be-verbalized words or phrases are predicted and expressed verbally by the interpreter.

Anticipation makes interpreters' interpreting more efficient as a result

of contributing to lowering "the processing capacity requirements for the listening component" (Kurz & Färber, 2003, p. 123) and is particularly useful when simultaneously interpreting structurally different languages such as German and English, and Korean and English. However, it is a strategy or skill that is acquired and honed through training and experience. Lim (2011) noted that when given the task of doing simultaneous interpreting Korean into English, students tend to fear that they will not be able to begin or finish a sentence because the verb comes at the end of a sentence (p. 60). When it comes to performing SI from Korean into English, waiting for the verb in the source language could lead to choppy rendering of interpretation output, often difficult to follow. Hence, the importance of anticipation as an SI strategy and particularly, the importance of anticipating the predicate part of a sentence, cannot be downplayed. Hoping to provide interpreting trainers and students with some insights into how to encourage students and novice interpreters to employ anticipation and how to guide them, the researcher decided to observe and analyze how student interpreters utilize anticipation of predicates during their SI from Korean into English. Although the way student interpreters utilize anticipation may not be generalizable to professional interpreters, student interpreters having to interpret from Korean into English do employ anticipation, albeit in a non-masterful way, and their tendencies or ways of anticipating can offer insights into how to train and improve novice interpreters' anticipation strategy during SI. With this aim, this paper explores how the second-year graduate students majoring in Korean-English conference interpretation utilize anticipation during Korean into English SI and analyzes both the frequency and accuracy of anticipation used by the student interpreters. While it would be fruitful to analyze which linguistic cues or extralinguistic resources each student used to anticipate each predicate, here, we content ourselves with analyzing and finding some tendencies or patterns in using anticipation as an SI strategy exhibited by students and the implications of such findings.

2. Anticipation Strategy and Korean-English Simultaneous Interpretation

2.1 Types of Anticipation in Simultaneous Interpretation

Anticipation is generally understood as a preemptive action or response triggered or enabled by stimuli. In simultaneous interpreting, depending on the stimuli or resources that the interpreter taps into to anticipate and produce the next word, phrase, or idea to be verbalized by the speaker, anticipation can largely be categorized into "linguistic anticipation" and "extralinguistic anticipation" (Lederer, 1978; Setton, 1999; Wilss, 1978). Similar to how interpreters end up making errors based on wrong expectations arrived at on the basis of linguistic and nonlinguistic cues (Gerver, 1976; Seleskovitch, 1978; as cited in Anderson, 1994), interpreters need to refer to linguistic and extralinguistic resources and information to anticipate during SI. The first is done by relying heavily on "transitional probability (TP)," or the statistical likelihood of two or more words occurring together in a given language" (Gile, 2009; as cited in Hodzik & Williams, 2017). Collocations, set phrases, or maxims are the typical cases where interpreters can make such language predictions, as Lederer initially labeled this type of anticipation in 1978. Extralinguistic anticipation is done by mobilizing the interpreter's background knowledge of the topic, information about the speaker or the setting, and is used mostly to enable inferences and anticipation of what will be said in the unfolding speech (Setton, 1999). Lederer (1978) referred to extralinguistic anticipation as "anticipation based on sense expectation" (p. 331). Except for typical collocations or phrases with high TP, anticipation of what will be said is not always possible with the linguistic information present only. Only if situational or contextual pragmatic information is present, extralinguistic or sense-based anticipation is possible.

Albeit difficult to observe and capture, interpreters can also utilize "non-verbal, visual information such as the speaker's facial expressions and gestures and his audience's reaction to what he is saying" as extralinguistic resources that contribute to clarifying the situational context (Argyle, 1972; as cited in Anderson, 1994). In line with these explanations, Lim (2011) used the term "contextual anticipation" to refer to the equivalent of extralinguistic anticipation. Lim (2011) further divided "contextual anticipation" into intratextual and extratextual. Intratextual anticipation is explained as

anticipation based on "the clues derived from understanding of the speech itself" (p. 61), while extratextual anticipation relies on the interpreter's knowledge about the topic, setting, or speaker. However, as it is quite challenging to determine whether prediction of a plausible continuation of the source language speech is derived from intratextual elements such as the omnipresent redundancy in human discourse or from the interpreter's knowledge about the subject area gained through the preparation for a specific event happening, this paper will consider any anticipation carried out on the basis of the situation or context of the source text as extralinguistic anticipation. It is also because some may argue that intratextual anticipation hinges more on linguistic knowledge, rather than on extralinguistic resources. Bartłomiejczyk (2006) labeled this latter type of anticipation "general anticipation," meaning anticipation done by building up expectations about the source text. However, general anticipation may be misleading at least in this paper, as this paper will use the adjective "general" to refer to the moderate level of exactness of the anticipated word or expression.

2.2 Challenges in Simultaneously Interpreting between Structurally Different Languages and Anticipation as a Coping Strategy

Whether it is linguistic anticipation or extralinguistic anticipation, anticipation is of great use when interpreting two languages that exhibit structural differences, namely different word orders (Setton, 1999; Won, 2010). Even though Hodzik (2014) found that anticipation relying on TP may be neither possible nor effective for anticipation during SI between asymmetrical sentence structures, generally, linguistic anticipation, including the one utilizing TP, is useful in anticipating downstream elements in a sentence. Think of interpreting a language with the SOV (subject-object-verb) word order into a language with the SVO word order. Interpreters frequently anticipate the verb part of an SVO source language before it is uttered to minimize the memory effort and avoid having an excessively long EVS (ear-voice span). Although SI is "a linear and forward process" often realized by employing "segmenting" or "chunking" strategies (An, 2009, p. 188), when the source language and target language have differences in word order, the interpreter may not be able to process the input and reproduce the output in a linear manner but may choose to anticipate the final segment or chunk of the sentence before it is uttered. Easy it may not be, anticipating the

sentence-ending segment, which is mostly a verb, is almost necessary when interpreting from an SOV language into an SVO language. Otherwise, the interpreter would have to carry a longer EVS span and process a heavier input load at every second.

Anticipating the predicate that usually comes at the end of a sentence in an SOV language is a way to reduce the cognitive load and memory load. In addition, anticipation of the predicate, which is often a verb or an adjective, in an SOV sentence holds significant importance, when taking the theme-rheme structure into account. As Chernov (1994) explained, semantic components containing new information are generally placed in the rheme part, and hence, the rheme part is where the interpreter's attention should be disproportionately distributed, as mistranslation or omission of the rhematic item can lead to a substantial error. It can be argued that it is the predicate placed in the rheme part in an SOV language that ultimately decides the sense of an utterance. This statement holds true for the Korean language as well. In Korean, the predicate consists of not only a verb or an adjective but also a sentence-ending element that signifies the relationship between the speakers communicating and the time-tense of a sentence. To be sure, in English as well, predicates including verbs mostly exist in conjugated forms and therefore, signify the time tense as well. This makes accurate anticipation of the predicate part in a sentence more challenging. Lee (2014) likened the verb to "the soul" of a sentence as it determines the syntactic structure of a sentence and explained that interpreting Korean into Mandarin Chinese adds a particular burden on interpreters precisely because the verb comes at the end of a Korean sentence while in Chinese, a verb comes right after the subject. Her analysis also indicates that when performing SI from Korean into Chinese, capturing the linguistic cues in the beginning of a sentence, and utilizing them to predict the following verb and the entire sentence structure is crucial in order for the interpreter to minimize the EVS and utter the target language in time (Lee, 2014).

The literature on anticipation as an interpretation strategy has indicated that its efficacy varies based on the language pair and exhibits directional tendencies in its application and precision (Bartłomiejczyk, 2006; Chang, 2005; Chernov, 2004; Kurz & Färber, 2003; Lederer, 1978; Pöchhacker, 2016; Van Besien, 1999; Wilss, 1978).

Structural disparities between Korean and English present unique challenges for interpretation, with anticipation emerging as a key strategy.

Korean, an SOV language, places verbs and time-tense markers at the end of sentences, while English follows an SVO structure. This syntactic distinction necessitates reformulating information for interpreters (Lee, 1997). The intrinsic linguistic feature observed in the Korean language, whereby verbs and time-tense markers are typically positioned towards the concluding segment of a sentence, frequently at its ultimate juncture, necessitates anticipation as a paramount strategy for effective interpretation during interpretation from Korean into English. Owing to instances wherein Korean sentences manifest a notable temporal delay between the subject and the terminal predicate, and occasionally embrace a dual-subject framework (An, 2009), the act of anticipating predicates within Korean sentences poses a distinctive challenge.

Albeit challenging to master, anticipation of predicates by leveraging both linguistic cues including the lexical transition probability and extralinguistic resources, namely contextual information, is a widely used interpretation strategy among interpreters, especially when simultaneous interpreting Korean into English. This study examined whether and how students in the interpreting training program utilize anticipation when executing SI of a Korean speech into English. The experiment of 22 graduate students majoring in conference interpreting aimed to discover how often and how accurately students attempt anticipating predicates in Korean sentences, and the ways they activate and enable anticipation of predicates during SI.

3. Methodology

3.1 Experiment Design

This study recruited 22 second-year students at a graduate school of interpretation and translation based in South Korea. The second-year students attending the graduate program can be considered prospective interpreters because they were only a couple of months away from joining the interpreter workforce in Korea. The second-year students of the graduate program take at least eight hours of classes on simultaneous interpreting every week and invest even longer hours in practicing and studying simultaneous interpreting. Furthermore, the experiment was conducted during the last week of October 2023, which was about a month before the students' final

graduation exam. At this time of the year, the students were not only used to simulated mock conference interpreting settings but also to interpreting typical speeches, especially those delivered by government officials, making them suitable for this study's experiment. Data were collected from two SI classes that made up a total of 22 students.

The source text selected for this experiment was a fictitious speech created by editing and merging two speeches delivered by Korea's Prime Minister Han Duck-soo in July and September of 2023, respectively. The speeches were both on the topic of Korea's population crisis brought about by the low birth rate and the government's population and immigration policies. Government speeches are frequently used as training materials in graduate schools for interpretation in Korea. The participating students had previously practiced SI using government speeches that tend to show great similarity in style and flow. In addition, considering the growing concern about the low birth rate and population aging in Korea, immigration and population policies were topics with which the students were assumed to be familiar. In short, the chosen source text was a text presumed to allow ample chances to attempt anticipating during SI. The source text was titled "Congratulatory Remarks delivered at the Population Future Forum" and the participants were informed of the title so they could understand the setting and context of the source speech. The source speech was comprised of 30 sentences, which included a total of 38 predicates, as some sentences contained more than one predicate. In this experiment, verbs used to modify the subject of a sentence or other nouns were not considered as predicates. The focus was on the anticipation of predicates that convey the meaning of action or state in the source text. According to the researcher's preliminary source text analysis, among the 38 predicates identified, 19 were predicates possible to anticipate based on the (lexical) transitional probability, while the remaining 19 were ones possible to anticipate using extralinguistic resources including the interpreter's background knowledge, knowledge about the setting or the speaker, and the preceding ideas and sentences within the source speech. Given that whether anticipation of each predicate is enabled by linguistic resources or by extralinguistic resources can be ambiguous, this aspect was neither the topic nor within the scope of this study. Yet, the source text containing predicates that could be anticipated based on either type of the two resources was deemed appropriate for this study and further studies in the future.

3.2 Data Collection and Analysis

After being reviewed by a more experienced professor with decades of experience of teaching and researching SI, the source text was read out as the participants' midterm exam material by the two instructors of the two SI classes and was about 6.5-minute-long. The participants had only a single try to execute SI and recorded their interpretation in the format of .mp4 or .wav, then sent the files to the researcher immediately after they finished interpreting.

Audacity, an open-source audio editor and recording application software, was used to compare the source speech file and each of the interpretation output files sent by the participants. As shown in Illustration 1, Audacity visualizes the recording files, enabling easy comparison of the two audio files to capture whenever anticipation was attempted or made by each student. Whenever a predicate (including a modal verb that appears before the actual verb conveying the sense of action or state is said) was verbalized by a student before the corresponding predicate was said in the source speech, it was counted as an attempt to anticipate. In this study's analysis, when a participant uttered either a complete predicate or just the auxiliary (modal) verb part of a predicate almost simultaneously as when the source sentence's predicate was said, it was categorized as "freewheeling." Freewheeling is when an idea or a sense is assumed to have been anticipated by the interpreter even though the verbalization was executed not necessarily before the equivalent word was said in the source speech. Predicates in English verbalized as freewheeling were counted toward the total number of anticipation attempts in this analysis.

Illustration 1: Audacity, a software program used to identify where anticipation occurs

In cases where participants anticipated only the time-tense or auxiliary verbs like *should, could,* or *may*, these attempts were given a weight of 0.5 each. Such partial attempts occurred when participants anticipated only modal verbs, which indicate time-tense or modalities such as likelihood, ability, permission, obligation, necessity, or advice. The researcher assumed complete anticipation when both the auxiliary verb and the subsequent verb with semantic content were verbalized before the source speech expressed the corresponding predicate, warranting a weight of 1 for the attempt count. However, if an interpreter anticipated only the modal verb portion and waited for more information to complete the predicate, it was considered a deliberate choice, labeled as a "partial" anticipation attempt, and given a weight of 0.5 for statistical purposes. For example, when anticipating to interpret the source sentence, *"Tto-han, yug-a-dol-bom-e dae-han bu-dam-eul wan-hwa-ha-gi wi-hae, seo-ul-si-leul dae-sang-eu-lo 100myeong gyu-mo-ui oe-gug-in ga-sa-gwan-li-sa si-beom-sa-eob-do chu-jin-ha-go iss-seub-ni-da"* [To lessen the burden of childrearing, (the government) is putting forth a pilot project to allow 100 foreign caretakers to be employed in the City of Seoul], Student D predicted only the modal verb that signifies the time-tense by saying "we are" first and then added "providing support for childcare" after hearing *"oe-gug-in ga-sa-gwan-li-sa si-beom-sa-eob-do"* [a pilot project to allow foreign caretakers' employment]. In this instance, only the component that signifies the time-tense was anticipated, not the whole predicate, hence being assigned with 0.5 anticipation attempt.

When it comes to evaluating and statistically quantifying accuracy of anticipations made by the participants, the researcher, a professional conference interpreter and interpreting instructor with more than two years of teaching experience, had to utilize her judgment. For the accuracy analysis, the researcher evaluated both the time-tense and verb choices in each of the interpreted sentences. The accuracy evaluation took interpretation shifts, or paraphrasing, into account. If the source sentence, *"Jon-gyeong-ha-neun nae-oe gwi-bin yeo-leo-bun, 'in-gu-mi-lae-po-leom 2023' gae-choe-leul jin-sim-eu-lo chug-ha-hab-ni-da"* [Distinguished guests, congratulations to all of you on the opening of the 2023 Population Future Forum], had been interpreted with the verb "welcome" instead of "congratulate" or "congratulations," such a shift in interpretation was accepted, and the output sentence was evaluated as a correctly anticipated interpretation. Such interpretation is labeled "general anticipation" in this study, to refer to the moderate level

of exactness of the anticipated word or expression, meaning relatively less exact word-to-word translation was done. A similar approach was taken throughout the evaluation, which means the researcher was well-aware of multiple interpretation versions being possible and considered accurate for each Korean predicate. For instance, predicates such as *"no-lyeog-ha-go iss-seub-ni-da"* [(the government is) working to], *"chu-jin-ha-go iss-seub-ni-da"* [(the government is) putting forth], and *"jun-bi-ha-go iss-seub-ni-da"* [(the government is) preparing to put forth], carry somewhat general meanings of "working hard on something" or "aiming to implement something," and these predicates can be interpreted in various ways using a wide variety of verbs in English.

To quantify anticipation accuracy rates, each student's total count of accurate anticipations was divided by his or her total count of anticipation attempts made, which produced the values of accuracy rates in percentage. When a participant attempted anticipating a whole predicate made up of a modal verb and the "main" verb (*bon-dong-sa* or *bon-yong-eon* in Korean) following the modal verb but managed to predict only one of them (either the modal verb or the following "main verb") correctly, it was deemed the anticipation was incorrect, which led to the deduction of one point instead of 0.5 point from the full-score of accuracy. For instance, Student F anticipated the predicate for the sentence, *"In-gu-mi-lae-po-leom-eun geu-dong-an 4cha san-eob-hyeog-myeong, AI, gi-hu-wi-gi, in-gu-mun-je deung-eul da-lu-myeon-seo dae-han-min-gug-i na-a-gal bang-hyang-eul mo-saeg-hae-wass-seub-ni-da"* [The Population Future Forum has discussed the topics such as the Fourth Industrial Revolution, AI, the climate crisis, and population problem, and sought ways forward for the Republic of Korea], by verbalizing "we have, we are going to talk about..." Although Student F tried anticipating the entire predicate before the predicate was said in the source speech, the student inaccurately repaired the time-tense (modal verb) part of the predicate. This case was deemed incorrect anticipation, leading to the deduction of one whole point for the accuracy, not 0.5 point. The detailed accuracy evaluation results can be found in the Appendix 2.

4. Results

All of the 22 participants' names have been anonymized using alphabet letters. Anticipation frequency was analyzed by counting how many predicates were anticipated regardless of the accuracy, out of the total 38. Anticipation accuracy was determined by counting how many of the total 38 predicates each interpreter correctly anticipated, and by comparing the total number of accurate anticipations to the total number of anticipation attempts. These calculations produced the ratio of accurate anticipation compared to the total 38 predicates and the accuracy rate of attempted anticipations.

Table 1: Anticipation attempts made by the participants

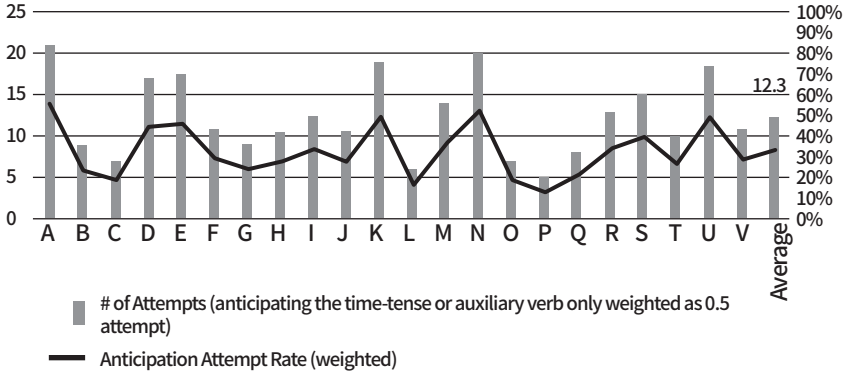
Participant	Absolute No. of anticipation attempts	Anticipation attempt rate (not weighted for the anticipation of the time-tense or auxiliary verb only)	**No. of attempts (anticipating the modal verb only, weighted as 0.5 attempt)**	**Anticipation attempt rate (anticipating the time-tense or auxiliary verb only, weighted as 0.5 attempt)**
A	23	60.53%	21	55.26%
B	10	26.32%	9	23.68%
C	8	21.05%	7	18.42%
D	18	47.37%	17	44.74%
E	19	50.00%	17.5	46.05%
F	12	31.58%	11	28.95%
G	11	28.95%	9	23.68%
H	11	28.95%	10.5	27.63%
I	15	39.47%	12.5	32.89%
J	12	31.58%	10.5	27.63%
K	20	52.63%	19	50.00%
L	6	15.79%	6	15.79%
M	16	42.11%	14	36.84%
N	22	57.89%	20	52.63%
O	7	18.42%	7	18.42%
P	5	13.16%	5	13.16%
Q	10	26.32%	8	21.05%
R	17	44.74%	13	34.21%
S	18	47.37%	15	39.47%
T	13	34.21%	10	26.32%
U	22	57.89%	18.5	48.68%
V	13	34.21%	11	28.95%
Average	**14**	**36.84%**	**12.3**	**32.48%**

4.1 Anticipation Frequency

Table 1 below illustrates the anticipation attempts made by each participant in terms of the absolute number of anticipation attempts (anticipation of a modal verb being weighted equally as anticipation of the entire predicate) and the number of attempts counted after issuing the 0.5 anticipation attempt for the attempts of anticipating a modal verb only.

The number of anticipation attempts made by the participants ranged from minimum five times to maximum 21 times. Student A made the most frequent anticipation attempts: 23 times in the absolute number and 21 times in the weighted number. Student P made anticipation attempts only five times, which is the least number of anticipation attempts among the 22 participants. The minimum number of anticipation attempts was the same both in terms of the absolute number and the weighted number of times, as Student P always anticipated a predicate in its entirety, never attempting to anticipate only the modal verb part of a predicate. The average number of anticipation attempts made by the 22 participants was 12.3 times, which is translated to 32.48% of the 38 predicates on average were anticipated by the students. Figure 1 below visualizes the statistics on anticipation attempts in the form of a graph. In this study's analysis, the number of anticipation attempts calculated by giving the 0.5 weight to each attempt to anticipate the modal verb only in a sentence will be used for discussion.

Figure 1: Anticipation attempts (with anticipating modal verbs weighted as 0.5 attempt)



4.2 Anticipation Accuracy

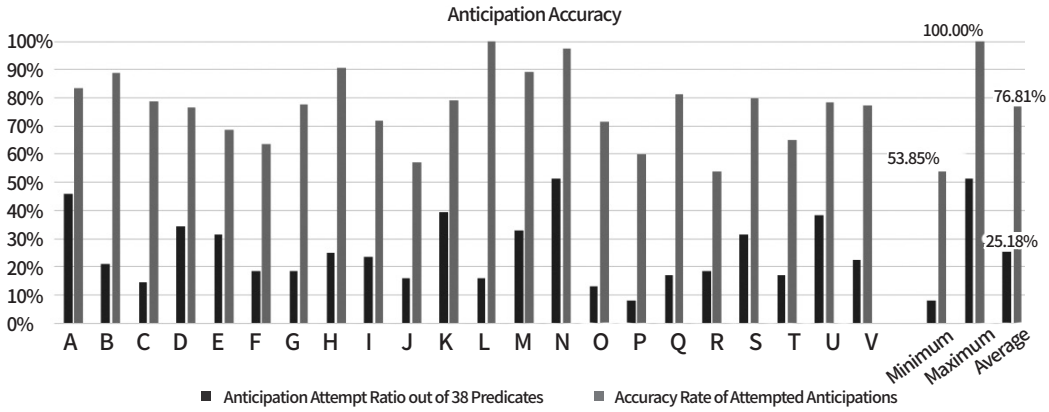
Table 2 illustrates each participant's anticipation accuracy in the metric of the accuracy rate of attempted anticipations. The accuracy rates of attempted anticipations seem unexpectedly high, with the average value being 76.81%. When looking only at the figures on the far-right column, readers may be misled to believe that the participating students were skilled at using anticipation to its best effectiveness. Table 2 also shows the number of anticipation attempts made for the total of 38 predicates in fractions, so readers can discreetly view each participant's anticipation accuracy. Since the number of attempted anticipations varies by participant, it can potentially cause the accuracy rates of attempted anticipations to seem significantly high among those who made significantly fewer anticipation attempts.

Table 2: Anticipation accuracy

Participant	Number of anticipation attempts (in fraction)	Accuracy rate of attempted anticipations
A	21/38	83.33%
B	9/38	88.89%
C	7/38	78.57%
D	17/38	76.47%
E	17.5/38	68.57%
F	11/38	63.64%
G	9/38	77.78%
H	10.5/38	90.48%
I	12.5/38	72.00%
J	10.5/38	57.14%
K	19/38	78.95%
L	6/38	100%
M	14/38	89.29%
N	20/38	97.50%
O	7/38	71.43%
P	5/38	60.00%
Q	8/38	81.25%
R	13/38	53.85%
S	15/38	80.00%
T	10/38	65.00%

U	18.5/38	78.38%
V	11/38	77.27%
Minimum		53.85%
Maximum		100.00%
Median		78.08%
Average		76.81%
Standard deviation		0.12

Figure 2: Anticipation accuracy



As reported by the table and graphs above, minimum 7.89% and maximum 51.32% of the 38 predicates in the source speech were accurately anticipated by the students. The results indicate that, on average, the participants were able to accurately anticipate more than 25% of the predicates (25.18%) verbalized in the source speech. Data on the accuracy rates of attempted anticipations provides more value insights for analysis and discussion. The accuracy rate of attempted anticipation was minimum 53.85% and maximum 100%. Although the maximum value of 100% was possible only for Student L, an outlier who made significantly fewer anticipation attempts of six times only and did not try guessing the modal verb part of a predicate at all, anticipation seemed to have served as a quite effective interpretation strategy for the participants, as suggested by the average anticipation accuracy rate of 76.81% with the standard deviation of 0.12. Although direct comparisons of the participants' anticipation rates are not within the scope nor the focus of this study, merging and integrating the

statistics on anticipation attempts and the statistics on anticipation accuracy would be useful in directly comparing the accuracy of anticipation between the participants who made anticipation attempts the same number of times. More will be discussed about anticipation accuracy rates in the following section.

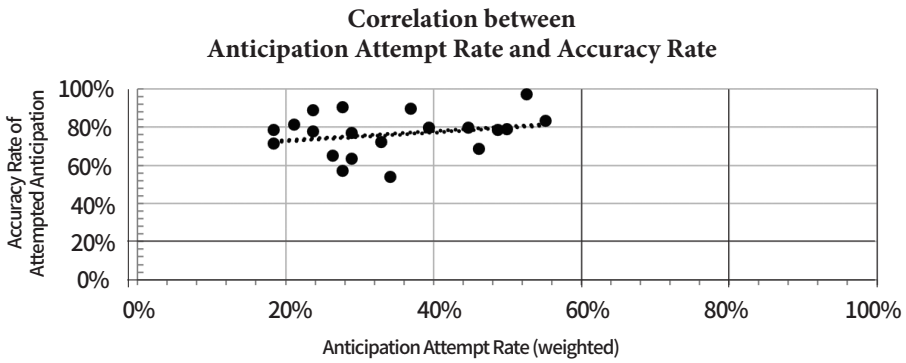
5. Discussion

5.1 Anticipation Attempts

The researcher hypothesized that given the structural differences between Korean and English, the participants would have no choice but to anticipate the predicates, especially the sentence-ending predicates. The conjecture was corroborated by the experiment results. All of the participants attempted anticipation of predicates at least five times throughout their interpretation. On average, the participants attempted anticipation for 12.3 predicates. Although the number of anticipation attempts varied by participants, there were four participants who made anticipation attempts for at least nineteen predicates or more, which account for 50% or more of the total predicates used in the source speech.

Student A's interpretation, which exhibited significantly frequent anticipation attempts (total 21 anticipation attempts) and a fairly high accuracy rate of anticipation (83.33%), caught the researcher's attention, as Student A's

Figure 3: Correlation between anticipation attempts and anticipation accuracy



native language is English, not Korean. In fact, students who have English as their native language and are not Korean nationals are rare in the graduate school programs in Korea. Student A's active use of anticipation and high accuracy raised the possibility of the native language impacting the use and accuracy of anticipation in SI. However, another student (Student B) whose native language is English and a foreign national, attempted anticipation only nine times in the same experiment and his anticipation accuracy was 23.68%, which was not an impressive figure compared to Student A's. Because it would require a better-designed experiment with controlled variables to understand the influence of one's native language on the use of anticipation as a simultaneous interpretation strategy, this experiment does not offer robust evidence that attributes Student A's unusually active use of anticipation and high anticipation accuracy to his native language factor. This study did not consider each participant's English proficiency level, and therefore, it did not capture the instances where the participants did attempt anticipation but failed to deliver the anticipated predicate in English in a timely manner. It is possible that the anticipation of sense or corresponding words in the target language occurred more frequently but was not observed in the form of interpretation output. However, with the current data collection methodology available, there seems to be no way to really observe or capture such instances.

Anticipation attempts were more frequent in the beginning and final parts of the source speech. For instance, the predicates in the sentences aimed to greet the audience, introduce the topic or purpose of the event, and thank the host, which typically appear in the beginning of most speeches, were anticipated by almost all of the participants. The very first sentence of greeting was accurately anticipated by all participants without any exception. The second predicate in the second sentence which introduced the topics discussed in the pertinent event was anticipated by 21 participants. Only one participant did not attempt to anticipate the predicate of the second sentence. The second-to-last sentence of the source speech, *"O-neul i ja-li-ga in-gu-mun-je-e dae-han gong-gam-dae-leul hwag-san-ha-go geon-seol-jeog-in dae-an-eul ma-lyeon-ha-neun mae-u tteus-gip-eun non-ui-ui jang-i doe-gi-leul gi-dae-hab-ni-da"* [I hope today's event will be a venue for very meaningful discussion to share awareness on the population issues and produce constructive solutions], which conveys the speaker's best wish for the successful hosting and fruitful discussion made in this event, is another

case in point. It is a cliché statement in Korean government speeches and its predicate was anticipated by all participants except for one. These are a testament to the fact that the participants have the knowledge about how government speeches typically unfold and ample experience of practicing interpretation of government speeches in Korean. It was found that the participants know how to use their extralinguistic resources to utilize anticipation. The concentration of anticipation attempts in the beginning and the end of the speech suggests that the understanding of the text flow increase the ease of anticipating for the participants.

5.2 Correlation between Anticipation Attempts and Anticipation Accuracy

The notably high anticipation accuracy of Students A, K and N, all of whom attempted anticipation for about half of the 38 predicates (anticipation attempt rates ranging from 50% to 55.26% among the three participants) prompted the researcher to examine the correlation between the number of anticipation attempts and the anticipation accuracy rate. When calculating the correlation coefficient, the values of two outliers, Students L and P, who attempted anticipation only five and six times respectively, were deliberately excluded. Students L and P made too few anticipation attempts for their anticipation accuracy rate to be considerably reliable. In particular, Student L attempted anticipation only five times, and all of the five anticipations were correct. Student L's 100% accuracy rate does not necessarily indicate sophisticated use of anticipation during SI; rather, it suggests that the student mustered enough courage to predict the predicates only when highly assured of accuracy. Meanwhile, Student P made even fewer anticipation attempts, yet achieved an anticipation accuracy rate of only 60%. This suggests fewer attempts do not necessarily lead to higher anticipation accuracy. With Students L and P's data included, the correlation coefficient between anticipation attempt rates and accuracy rates of attempted anticipation stood only at 0.170. When the two outliers' values were excluded, the correlation coefficient rose to 0.250. Evans (1996) suggests the guide to describe the strength of the correlation coefficient, *r*, as the following: (0.00 – 0.19 = very weak), (0.20 – 0.39 = weak), (0.40 – 0.59 = moderate), (0.60 –0.79 = strong), and (0.80 – 1.00 = very strong). Using this guide, the resulted correlation coefficient 0.250 is interpreted as indicating a "weak positive correlation." Figure 3 illustrates the result that

suggests that a positive correlation exists between the two variables, albeit weak.

It is worth noting that the participants who attempted anticipation for at least half of the total 38 predicates, showing the anticipation attempt rates well beyond the average of 36.84%, achieved relatively high accuracy rates of attempted anticipations. For instance, Students A, K, N, and U, whose anticipation attempt rates ranged from minimum 48.68% to maximum 55.26%, achieved anticipation accuracy rates ranging from 78.38% to 97.50%. An assumption can be made that the participants who were confident about the accuracy of their anticipations employed anticipation as an interpretation strategy more actively. The reverse assumption is also possible; the more anticipations one tried, the higher the anticipation accuracy rate was, cautiously suggesting that encouraging the use of anticipation in SI from Korean into English by interpreting trainers could be effective in improving the effectiveness of students' anticipation. While it is not appropriate to highlight a single interpretation strategy when teaching SI, the effectiveness of anticipation can be illustrated using the data presented in this study. The weak yet existent correlation between anticipation attempts and anticipation accuracy could be used to convince students who are often hesitant to make anticipation attempts due to their lack of experience and initial high inaccuracy in anticipation.

5.3 Attempts to Anticipate Auxiliary Verbs Only

An interesting pattern was found through the analysis of interpretation output produced by the participants. Initially, the researcher had expected to observe anticipation of each predicate in Korean (the source language), which would have both the time-tense or the modal verb and the actual verb or adjective that carries the semantic content. Except for three participants (Students L, P, and Q) who anticipated the whole predicates in all anticipation attempts, most of the participants sometimes anticipated and verbalized only auxiliary verbs (or also known as modal verbs), such as "will," "be going to," "should," and "need to," and waited to hear more words in the source language to say the actual verbs to complete the predicates. Although some might view this as an instance of using the stalling strategy, the researcher believes that by verbalizing modal verbs which also signify the time-tense of each sentence, the participants indeed made the intentional choice of anticipating the time-

tense as well as the overall direction of how each sentence would unfold or develop meanings. It can be considered a safer approach that students tend to take to make up for the lack of confidence in their anticipations.

Except for Student T, whose five out of six anticipations of the modal verbs were incorrect, almost all participants achieved relatively high success rates in anticipating the auxiliary verbs. In other words, the participants were quite good at anticipating the time-tense of sentences as well as the intention of sentences, whether the intention is to induce or encourage someone to take action or to inform the government's plan for the future. Although it is not ideal to have a time lag between the moment when a modal verb is said and the moment when the real verb (with the actual semantic content) is uttered, student interpreters seem to resort to this approach to lower the load of input by at least anticipating and verbalizing the modal verb and aim to increase their interpretation accuracy by listening to more words or to the actual verb before finishing the interpretation of predicates. Similar to how the participants tapped into their contextual knowledge as well as their understanding of how Korean speeches typically flow to make anticipation attempts more actively in the beginning and end of the speech, the participants may have more confidence when attempting to predict modal verbs including the time-tense, owing to their knowledge-based and experience-based anticipation of what would be said next in a typical flow of Korean government speeches. Refining this tactic under the umbrella of the anticipation strategy and properly teaching it may contribute to increasing students' overall anticipation accuracy and efficiency.

This tactic of anticipating the modal verbs only was more actively employed towards the end of the source speech. Especially when interpreting relatively lengthy sentences that contained more than one predicate in the parallel syntactic structure, the participants opted to use this tactic of anticipating the modal verb only and well in advance, then completing their interpretation output after hearing more cues from the source speech or even upon hearing the action verb or the adjective. For instance, when the sentence *"U-li jeong-bu-do ji-geum-kka-ji-ui in-gu-jeong-chaeg-eul myeon-mil-hi geom-to-ha-yeo, deo hyo-gwa-jeog-i-go che-gam-do nop-eun jeong-chaeg-eu-lo ba-kkwo-na-ga-gess-seub-ni-da"* [By thoroughly reviewing (or examining) the existing population policy, the government will make revisions to develop a more effective policy that produce tangible results] was uttered in the source speech, 16 out of the total 22 participants anticipated the time-tense first by

uttering "will" and then completed the interpretation of the first predicate after hearing the action verb "*geom-to-ha-yeo*" [to review or to examine]. This pattern was repeated for the following sentence, "*U-li sa-hoe jeon-ban-eul yug-a-chin-hwa-jeog-eu-lo jae-seol-gye-ha-go, go-yong, gyo-yug, ju-geo deung gu-jo-jeog-in mun-je-leul pul-eo-na-ga-gess-seub-ni-da*" [The government will redesign the Korean society to become easier for childrearing and address structural issues related to employment, education, and housing]. 11 of the 22 participants anticipated the modal verb that signifies the time-tense first and then added the real action verb equivalent to "redesign" after hearing more input or even the Korean word itself. Although the tactic of anticipating the modal verb only was not confined to the latter sentences in the source speech, its use was definitely more frequent in the latter part of the speech. As the source speech reached the latter part where longer sentences were uttered, the participants would have had more cues and confidence to prompt them to anticipate at least the modal verb part. In addition, coincidentally, the latter part of the speech included more lengthy sentences than the beginning part. The longer sentences seem to have forced the participants to anticipate at least the modal verb to lower the memory load and to give them chances to "divide and conquer" the sentence.

6. Conclusion

It is evident that while the degree of attempting anticipation varied among the students, a significant number of them actively engaged in anticipation tactics; the average number of anticipation attempts made for the total of 38 predicates is 14, and with anticipation attempts for modal verbs weighted as 0.5 attempt, the average number of anticipation attempts is 12.3. This suggests that the students attempted anticipating for almost a third of the predicates in the speech. Notwithstanding their lack of experience and expertise which could often lead to inaccurate anticipation, the students seem to understand the necessity of predicting predicates when simultaneously interpreting Korean into English.

Also, the experiment results revealed that most of the students (except for three students) employed the tactic of anticipating or attempting to anticipate at least the time-tense or modal verb of a sentence. In these cases, the students would wait to hear more information or words and then

complement their initial anticipation with the "real verb" carrying the sense. Indeed, the accuracy rates of anticipating only the auxiliary verbs were relatively high, except for one outlier who had five of the six auxiliary verbs predicted incorrectly. Although further analysis using qualitative methods including interviewing is needed to understand as to why this tactic was employed, a conclusion can be drawn that interpreters still in training also refer to extralinguistic resources including the preceding ideas or sentences and the overall context of a speech to make anticipation attempts, even if they are incomplete anticipation attempts requiring repairs or complementation.

This analysis based on the experiment observations can be developed into a research hypothesis that novice interpreters like student-interpreters tend to make anticipation attempts in a very safe manner, choosing to anticipate only the word for which they are quite sure of anticipation accuracy. That is why this study looked at the correlation between anticipation attempts and anticipation accuracy. The correlation coefficient was 0.250, a value that suggests a weak or ambiguous positive correlation between the two variables. Despite the correlation coefficient suggesting a weak correlation between the two variables, when examining the values produced by students who made significantly more anticipation attempts (more than 18 times; Students A, K, N, and U), there appears to be a clear correlation between active anticipation and anticipation accuracy. Students A, K, N, and U exhibited the (weighted) anticipation accuracy rate ranging from 73.38% to 97.50%. Albeit confined to a few students, the high accuracy rates observed among those who actively employed anticipation may suggest the potential effectiveness of anticipation as a strategy in SI from Korean into English.

This study is not without its limitations. First, whether the selected source texts' difficulty level both in terms of content and sentence structure was appropriate for the experiment participants may be up for debate. The source text was written and delivered as a speech; however, such a speech does not represent the full spectrum of texts that interpreters encounter both during training and in professional settings. In particular, the source text used contains specific information about the Korean government's policies regarding the topic. Anticipating such information accurately might have been challenging for the participants, even if they had the capacity to utilize both linguistic and extralinguistic cues for successful anticipation. It would have been ideal if the source text had been peer-reviewed and selected by multiple professional interpreters and interpreting trainers. Perhaps a

similarly designed experiment should be conducted again, with a more spontaneous, spoken-language style source text. In addition, when analyzing the students' anticipation of the modal verb(s) in a sentence, whether each of the attempts was truly the result of employing the anticipation strategy or it was a way to stall interpretation(verbalization) until more words are heard could not be clearly distinguished. In other words, some of this study's analyses relied on the researcher's subjective evaluation. Although the researcher has several years of experience of teaching and evaluating interpreting students, the researcher's decision on when and at which point in time anticipation occurred may not always be accurate. The distinction between stalling and anticipating a modal verb was blurry at times, but the researcher decided to view the anticipation of a modal verb as the interpreter's intentional choice to attempt predicting the time-tense or the general direction of the sentence's semantics.

Moreover, this study was conducted solely on student interpreters, highlighting the need for further research involving professional interpreters to draw more accurate, concrete conclusions about anticipatory tactics used in SI from Korean into English. This study discovered a tendency among the students to anticipate auxiliary verb(s) only and wait for more source text input to complement their anticipation of predicates A similar experiment needs to be replicated for professional interpreters to examine whether this tendency or tactic is unique to student interpreters or not. Then, the observed tactic of anticipating auxiliary verbs could be considered a tried and proven tactic, deserving to be taught by interpreter trainers.

Nevertheless, this study has some implications for interpreters in training and their trainers. The findings emphasize the potential effectiveness of active anticipation in improving interpretation accuracy. This suggests that interpreter trainers could benefit from emphasizing and refining anticipation skills as a core component of training. Moreover, the study's identification of a specific tactic, which is anticipating auxiliary verbs only and complementing the anticipation after more input comes from the source text, provides valuable insights for interpreter trainers about a coping mechanism of utilizing anticipation in a rather cautious manner employed by inexperienced, often unconfident, students. This result can be further studied to offer some insights on how to guide students to more actively engage in anticipation and increase the accuracy of their anticipation in SI.

Furthermore, more in-depth analysis on which resources each

participant used to make anticipation attempts will be useful in explaining which cues or what kinds of contextual or extralinguistic information aided their anticipation. In particular, if there had been linguistic or contextual cues and specific lexical transitions that made anticipation easier, such examples should be highlighted by instructors who introduce and encourage the use of anticipation in SI from Korean into English. A series of qualitative interviews of the participants may contribute to identifying both useful resources for effective anticipation and hurdles in making predictions for students. Overall, the study contributes to the advancement of interpreter training by shedding light on the role of anticipation in simultaneous interpretation. In addition, this empirical study is one of the rare studies that analyzed a relatively large sample of 22 students' Korean-English SI renderings to identify and capture when, how often and whether accurate anticipation occurred. The data and results of this study could be used as the basis for interpreter trainers to develop and incorporate activities and assignments aimed at enhancing anticipation skills, leveraging both lexical transition probability and extralinguistic resources including contextual knowledge.

Appendices

Appendix 1: The source text used for SI experiment

	Congratulatory Remarks by Prime Minister at Population Future Forum on September 20, 2023 <(가칭)인구미래포럼 축사> 연설자: 국무총리 연설일: 2023.09.20
1	존경하는 내외 귀빈 여러분, '인구미래포럼 2023' 개최를 진심으로 축하합니다.
2	인구미래포럼은 그동안 4차 산업혁명, AI, 기후 위기, 인구문제 등을 다루면서
3	대한민국이 나아갈 방향을 모색해왔습니다.
4	2017년 출범 이후 지금까지 우리 사회의 심각한 인구문제를 논의해오신 (가칭)인구미래재단 이사장님을 비롯한 주최 기관 측에 감사의 말씀을 드립니다.
5	내외귀빈 여러분, 여러분이 오늘 논의하는 인구문제, 이민정책 등은 그 의미가 매우 크다고 생각합니다.
6	지금, 세계는 글로벌 인구구조의 변화를 겪고 있습니다.
7	나라마다 심각성의 차이는 있으나, 점차 낮아지는 출산율과 생산가능인구 감소 문제에 마주하고 있습니다.
8	여러분이 잘 아시는 대로, 우리나라는 세계에서 합계출산율이 가장 낮은 국가로서 인구 위기에 직면해 있습니다.
9	그동안 역대 정부가 저출산 문제를 풀어가기 위해 300조 원이 넘는 많은 예산을 투입했지만,
10	가속화되는 인구문제를 반전시키기엔 역부족이었습니다.
11	이것은 인구 위기의 요인이 경제, 사회, 교육, 문화 등 매우 복합적이기 때문일 것입니다.
12	대한민국의 눈부신 발전의 원천은 '인재'였습니다.
13	현재의 인구구조 불균형이 지속된다면, 대한민국의 지속가능한 성장마저 위협받게 됩니다.
14	우리 정부는 인구문제, 이민정책 등에 종합적으로 대응하기 위해 범정부적인 차원에서 노력하고 있습니다.
15	우선, 시급한 과제 가운데 하나는 산업현장의 부족한 인력난을 해소하는 것입니다.
16	우리의 대표적인 수출산업인 조선업, 2차 전지 등 제조업과 건설산업 현장에서는 이미 심각한 구인난을 겪고 있습니다.
17	이에 대한 해법으로 외국인 인력정책을 탄력적으로 추진키로 하였습니다.
18	먼저, 외국인력 쿼터를 역대 최대규모인 12만 명으로 늘리고,
19	사업장별 고용 한도도 두 배 이상 확대하였습니다.
20	지방의 뿌리업종 중견기업과 택배업, 호텔·콘도업 등 만성적인 인력난에 시달리는 일부 업종에 대해서도 외국인력을 활용할 수 있도록 하였습니다.
21	또한, 육아돌봄에 대한 부담을 완화하기 위해, 서울시를 대상으로 100명 규모의 외국인 가사관리사 시범사업도 추진하고 있습니다.
22	이를 위해 상대 국가와의 협의는 물론이고, 수요조사, 공청회, 토론회 등을 통해 국민 각계의 의견을 수렴하도록 할 것입니다.
23	내외 귀빈 여러분, 대한민국은 지금 세계 10위권의 선진국이며,
24	체류하고 있는 외국인이 245만 명에 달하는 글로벌 개방국가입니다.

25	특히, 우리 농어촌이나 제조업 중심 지역에서는 많은 외국인이 지역경제 활성화에 기여하며,
26	다양한 문화를 형성해나가고 있습니다.
27	우리 정부는 여러 부처에 흩어져있는 외국인 관련 이민정책을 체계적으로 이끌어갈 수 있는 거버넌스 체계를 준비하고 있습니다.
28	K-pop이 세계인들이 즐기는 문화가 된 것처럼, 우리도 다른 문화의 다양성을 존중하고 포용하는 성숙한 선진사회로 나아가야 합니다.
29	이를 위해, 우리 사회 각 분야 전문가 여러분의 적극적인 참여와 협력을 당부드립니다.
30	우리 정부도 지금까지의 인구정책을 면밀히 검토하여,
31	더 효과적이고 체감도 높은 정책으로 바꿔나가겠습니다.
32	우리 사회 전반을 육아친화적으로 재설계하고,
33	고용, 교육, 주거 등 구조적인 문제를 풀어나가겠습니다.
34	또한 초고령사회에 대응하기 위해 의료, 돌봄, 고령친화산업 등에 힘쓰면서,
35	외국인력 활용, 지역소멸 문제에도 적극 대응하겠습니다.
36	인구위기는 우리 사회 모두가 함께 고민하고, 함께 풀어가야 할 문제입니다.
37	오늘 이 자리가 인구문제에 대한 공감대를 확산하고 건설적인 대안을 마련하는 매우 뜻깊은 논의의 장이 되기를 기대합니다.
38	감사합니다.

Appendix 2: An excerpt of the detailed anticipation accuracy evaluation sheet

Predicate	Sentence	Student A (attempt)	Student A (accuracy)
1	존경하는 내외 귀빈 여러분, '인구미래포럼 2023' 개최를 진심으로 축하합니다.	o	o
2	인구미래포럼은 그동안 4차 산업혁명, AI, 기후 위기, 인구문제 등을 다루면서	o	o
3	대한민국이 나아갈 방향을 모색해왔습니다.	o	o
4	2017년 출범 이후 지금까지 우리 사회의 심각한 인구문제를 논의해오신 (가칭)인구미래재단 이사장님을 비롯한 주최 기관 측에 감사의 말씀을 드립니다.	x	
5	내외귀빈 여러분, 여러분이 오늘 논의하는 인구문제, 이민정책 등은 그 의미가 매우 크다고 생각합니다.	x	
6	지금, 세계는 글로벌 인구구조의 변화를 겪고 있습니다.	x	
7	나라마다 심각성의 차이는 있으나, 점차 낮아지는 출산율과 생산가능인구 감소 문제에 마주하고 있습니다.	x	
8	여러분이 잘 아시는 대로, 우리나라는 세계에서 합계출산율이 가장 낮은 국가로서 인구 위기에 직면해 있습니다.	x	

Predicate	Sentence	Student A (attempt)	Student A (accuracy)
9	그동안 역대 정부가 저출산 문제를 풀어가기 위해 300조 원이 넘는 많은 예산을 투입했지만,	o	o
10	가속화되는 인구문제를 반전시키기엔 역부족이었습니다.	o (freewheeling)	o
11	이것은 인구 위기의 요인이 경제, 사회, 교육, 문화 등 매우 복합적이기 때문일 것입니다.	o	o
12	대한민국의 눈부신 발전의 원천은 '인재'였습니다.	x	
13	현재의 인구구조 불균형이 지속된다면, 대한민국의 지속가능한 성장마저 위협받게 됩니다.	x	
14	우리 정부는 인구문제, 이민정책 등에 종합적으로 대응하기 위해 범정부적인 차원에서 노력하고 있습니다.	x	
15	우선, 시급한 과제 가운데 하나는 산업현장의 부족한 인력난을 해소하는 것입니다.	o (only the modal verb)	o
16	우리의 대표적인 수출산업인 조선업, 2차 전지 등 제조업과 건설산업 현장에서는 이미 심각한 구인난을 겪고 있습니다.	o	o
17	이에 대한 해법으로 외국인 인력정책을 탄력적으로 추진키로 하였습니다.	x	
18	먼저, 외국인력 쿼터를 역대 최대규모인 12만 명으로 늘리고,	o	x
19	사업장별 고용 한도도 두 배 이상 확대하였습니다.	o	x
20	지방의 뿌리업종 중견기업과 택배업, 호텔·콘도업 등 만성적인 인력난에 시달리는 일부 업종에 대해서도 외국인력을 활용할 수 있도록 하였습니다.	o	x
21	또한, 육아돌봄에 대한 부담을 완화하기 위해, 서울시를 대상으로 100명 규모의 외국인 가사관리사 시범사업도 추진하고 있습니다.	o	x
22	이를 위해 상대 국가와의 협의는 물론이고, 수요조사, 공청회, 토론회 등을 통해 국민 각계의 의견을 수렴하도록 할 것입니다.	o (only the modal verb)	o
23	내외 귀빈 여러분, 대한민국은 지금 세계 10위권의 선진국이며,	x	
24	체류하고 있는 외국인이 245만 명에 달하는 글로벌 개방국가입니다.	x	
25	특히, 우리 농어촌이나 제조업 중심 지역에서는 많은 외국인이 지역경제 활성화에 기여하며,	x	
26	다양한 문화를 형성해나가고 있습니다.	x	

Predicate	Sentence	Student A (attempt)	Student A (accuracy)
27	우리 정부는 여러 부처에 흩어져있는 외국인 관련 이민정책을 체계적으로 이끌어갈 수 있는 거버넌스 체계를 준비하고 있습니다.	o	O
28	K-pop이 세계인들이 즐기는 문화가 된 것처럼, 우리도 다른 문화의 다양성을 존중하고 포용하는 성숙한 선진사회로 나아가야 합니다.	x	
29	이를 위해, 우리 사회 각 분야 전문가 여러분의 적극적인 참여와 협력을 당부드립니다.	o	O
30	우리 정부도 지금까지의 인구정책을 면밀히 검토하여,	o (only the modal verb)	o
31	더 효과적이고 체감도 높은 정책으로 바꿔나가겠습니다.	x	
32	우리 사회 전반을 육아친화적으로 재설계하고,	o (freewheeling)	o
33	고용, 교육, 주거 등 구조적인 문제를 풀어나가겠습니다.	o (freewheeling)	o
34	또한 초고령사회에 대응하기 위해 의료, 돌봄, 고령친화산업 등에 힘쓰면서,	o	o
35	외국인력 활용, 지역소멸 문제에도 적극 대응하겠습니다.	o	o
36	인구위기는 우리 사회 모두가 함께 고민하고, 함께 풀어가야 할 문제입니다.	o	o
37	오늘 이 자리가 인구문제에 대한 공감대를 확산하고 건설적인 대안을 마련하는 매우 뜻깊은 논의의 장이 되기를 기대합니다.	o	o
38	감사합니다.	o (freewheeling)	o
	Anticipation attempt frequency and ratio of accurate anticipations	23/38	16+(0.5x3) = 17.5/38
	Anticipation attempt frequency (weighted) and accuracy rate of attempted anticipations	19+(0.5x4) = 21/38	17.5/21

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Professional Profile

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