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# Inferential Discourse Markers across English and Behdini Kurdish Legal and Scientific Speeches in Simultaneous Interpreting IDMs in English-Kurdish SI

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## Abstract

**Keywords:**  
English-Kurdish translation, Inferential discourse markers, simultaneous interpreting, translation strategies



Discourse coherence is crucial in simultaneous interpreting (SI), ensuring that the target audience understands the logical flow and purpose of the speaker's message, not just the propositional meaning. Among the elements that maintain coherence, inferential discourse markers (IDMs) such as *therefore*, *so*, *thus*, and *as a result* are particularly essential as they express reasoning, cause-effect, and conclusions. However, there is limited research on these markers in English-Kurdish interpreting. This study fills this gap by exploring how IDMs are handled in English-Kurdish SI through the analysis of two speeches (legal and scientific), with 10 interpretations produced by five Kurdish professional simultaneous interpreters. For examining the data, qualitative coding was used to identify IDMs, and a comparative analysis was used to investigate the strategies applied by the interpreters for rendering IDMs. The findings reveal that the dominant strategy was direct equivalence (DE), particularly for frequent and recognized markers, while paraphrasing (PP) and substitution (SUB) were applied for markers without fixed direct equivalents. Omission was rare, with only two instances. The results highlight the importance of training interpreters to recognize the pragmatic functions of DMs and depend on appropriate strategies for rendering them, providing implications for interpreter training and discourse studies.



## About the Journal

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## 1. Introduction

Discourse coherence in communication is of great importance, particularly in interpreting, because the hearer depends on the interpreter not just to render the lexical meaning but to maintain the speech's rhetorical and logical structure. One of the main devices in discourse that leads to coherence is the use of discourse markers (DMs). Among the several types of DMs, IDMs are significantly important as they explicitly express different relationships between propositions, such as causal, logical, and so on. Words and phrases such as *therefore*, *so*, *thus*, and *as a result* help the listener in evaluating reasoning, drawing conclusions, and following the intended progression of ideas of the speaker. Without the presence of these markers, discourse might be at risk of losing cohesion, clarity, and meaning precision.

In SI, rendering IDMs might be challenging due to several factors. The simultaneous interpreter is required to listen, analyze, and memorize information, and simultaneously produce an interpretation in real-time, managing a huge cognitive load. Handling these tasks together in real-time is significantly difficult. In addition to this, when interpreting from English into Kurdish, the multifunctional and context-dependent nature of IDMs, the differences in pragmatic conventions and syntactic structure, and a lack of direct equivalents for some IDMs make the process further challenging. English IDMs are typically lexicalized and come in short forms, whereas Kurdish IDMs are usually longer phrases and are used based on contextual clues. Therefore, when interpreters translate IDMs, they are expected to address the complications they encounter, perhaps by applying strategies like paraphrasing, explicitation, omission, literal translation, transliteration, and others.

An area of research that remains highly under-investigated is the treatment of IDMs in SI, even though these markers play an important role in coherence maintenance. In fact, when it comes to Kurdish research, studies investigating DMs in the domain of SI are more limited. This sheds light on an obvious gap in this specific field. In previous studies, such as those by Salih and Tahir (2023) and Ahmed (2022), the focus has either been on translation strategies for translating broader and general DMs or just translation and interpreting strategies in general, completely ignoring IDMs. It is vital to address this gap because significant insights can be gained into both linguistic transfer and discourse management in bilingual situations from studies conducted on the treatment of IDMs in SI.

The aim of the current research is to examine how interpreters simultaneously interpret English IDMs into Behdini Kurdish. Identifying the simultaneous interpreters' strategies for interpreting IDMs is the main objective of this paper. It also aims to study the perceived reasons behind the interpreters' decision-making processes, i.e., the challenges that came in their way. The paper uses the data of two speeches from unrelated domains to demonstrate the patterns used by interpreters when they maintain coherence as well as the problems they encounter.

This paper aims to answer the following research questions:

1. What are the patterns of strategies applied by simultaneous interpreters when interpreting IDMs?
2. Which IDMs posed the greatest challenge during interpreting?

Through investigating these questions, the study offers a deeper understanding of IDMs during the SI process and suggests possible contributions to interpreter training programs and discourse studies.

## 2. Literature Review

### 2.1 Discourse Markers in Pragmatics and Translation

DMs are discourse-level linguistic components that form cohesive and coherent links between various segments of discourse. While keeping the core meaning of an utterance unchanged, they assist the hearer in comprehending the various interconnections between utterances (Fraser, 1999;

Schiffrin, 1987). DMs are considered important in pragmatic studies and receive significant attention as they perform crucial pragmatic functions. These elements exhibit a low degree of lexical precision and, in addition to the semantic functions they fulfill, they serve more critical pragmatic functions (Andersen, 2001; Zwicky, 1985). These functions include initiating and concluding discourse, signaling topic shifts, and managing turn-taking, among other roles (Brinton, 1996).

In the fields of translation and interpreting, DMs are difficult to render, as they depend on language-specific pragmatic and rhetorical conventions. Although some DMs have direct cross-linguistic equivalents, many do not, and their pragmatic functions might differ from one language to another (Saddiq and Toma, 2024). According to Behin et al. (2010, p.3), a successful translation of DMs requires sensitivity to the pragmatic value of these markers rather than their lexical meanings. They also added that translators should apply several strategies for this procedure. Thus, as DMs are significant indicators of discourse management and coherence, they have earned an important focus in translation and interpreting.

## 2.2 Inferential Discourse Markers in English: Definition, Function, and Examples

An important type of DM that is of particular interest is IDMs. They indicate relationships of cause-and-effect, reasoning, and conclusions between propositions. According to Fraser (1999, p.948), IDMs can be defined as a DM that indicates a statement is a logical conclusion resulting from the previous one. He adds that in English, common IDMs are *therefore, hence, thus, then, consequently, as a result, and so* (Fraser 1999, p.948).

The key function of IDMs is to maintain coherence by connecting an S1 (introduced segment) with S2 (prior segment), whether S1 is explicitly or implicitly stated (Fraser, 1999, p.949). S1 can be a cause and S2 an effect, or they can be an argument and a conclusion, and so on. For example:

- The bank has been closed all day. **Thus**, we couldn't make a withdrawal (Fraser, 1999, p.948).
- There's a fearful storm brewing. **So** don't go out (Fraser, 1999, p.948).

The presence of an IDM saves unnecessary processing effort and clarifies the intended meaning, although without the marker, the logical connection can still be recoverable (Blakemore, 2002, p. 174).

## 2.3 Challenges in Interpreting IDMs Across Languages

SI adds a high level of complexity to the treatment of IDMs. This is because interpreters must process the incoming message and reformulate it in the target language (TL) in real-time. Researchers in the field of translation and interpreting, such as Furkó (2014), Jiang and Tao (2017), Mohammadi (2021, 2022), Rozumko (2021), and Saddiq and Toma (2024), pointed out that rendering IDMs poses several different challenges for translators and interpreters and requires them to employ strategies. Some challenges include, but are not limited to:

1. **Multifunctionality:** Many IDMs are multifunctional and polysemous in nature. They serve more than one function and are highly context-dependent (Behin et al., 2010; Crible et al., 2019; Egg and Redeker, 2008; Furkó, 2014; Müller, 2005; Namat, 2011; Saddiq and Toma, 2024). Therefore, interpreters must decide instantly which function the IDM is serving.
2. **Far-reaching scope:** IDMs often create long-distance relationships between propositions, which becomes challenging to track in real-time (Crible and Cuenca, 2017, p.154), and this might lead to the omission of some markers in interpreting.
3. **Co-occurrence:** In oral speeches, more than one IDM might appear together, forming a complex sequence. These sequences have combined meanings that are challenging for the listener to process in real-time, such as '*but I mean*' and '*and so*' (Crible and Cuenca, 2017, p.160). This becomes especially challenging in interpreting, leading the interpreter to rely on strategies.
4. **Structural and lexical differences:** In many languages, there are no direct equivalents for particular IDMs, and there are also very different syntactic structures. These make translating and

interpreting IDMs difficult and cause interpreters to apply strategies (Mohammadi, 2022; Saddiq and Toma, 2024).

5. **Cognitive load:** Under great cognitive load, such as managing many overlapping tasks (listening, analyzing, memorizing, and reformulating), along with the pressure of time and many other factors, interpreters might omit elements they see as of little value (Gile, 2009, p.210). Such elements might be markers, although their omission may weaken discourse coherence (Saleem and Ameen, 2021, p.7).

These challenges become further complicated in English-Kurdish interpreting. Kurdish often uses longer and flexible constructions depending mostly on the context, whereas English relies on concise lexicalized markers (Saddiq and Toma, 2024). All of these challenges make the interpreting process of IDMs problematic and require interpreters to resort to different strategies.

## 2.4 Previous Research on IDMs in Translation and Interpreting

A number of studies have been conducted on the investigation of IDMs in translation and interpreting across different languages. However, there is a lack of such studies in the Kurdish language, particularly the Behdini dialect.

Bendazzoli (2019) concentrated on the use of the IDM *so* by simultaneous interpreters when interpreting from Italian into English. The study highlighted that interpreters not only translated the IDM *so* but also strategically added it for managing the syntactic differences between the two languages, the cognitive load, and the audience's understanding.

Saleem and Ameen (2021) conducted a study focusing specifically on translation students when translating DMs from English into Kurdish. They found that due to the multiple functions and translation choices of a single DM, the lack of one-to-one equivalents, and the insufficient understanding of the context, misinterpretations and omissions occurred. It was suggested by the study that a text's cohesion and coherence might be potentially undermined by omissions.

Mohammadi (2021) researched the underspecification process used to render the DM *and* in the field of SI from Persian into English. He captured that when translating the DM *and*, the interpreters' primary strategy was underspecification. According to the analysis, interpreters better matched the discourse norms of the TL by substituting the DM *and* in 35% of the instances and omitting it in 38% of instances. Furthermore, the DM *and* was not underspecified in 26% of instances and was translated using its direct equivalent *و*.

In a separate study conducted by Mohammadi (2022), the strategies interpreters rely on for translating temporal and inferential markers were examined. According to the study's findings, when preserving coherence, interpreters often employed strategies that were dynamic in nature or context-driven. That is, the interpreters adapted and modified various markers, applied four groups of markers (such as elaborative, contrastive, inferential, and temporal), or depended on pragmatic and linguistic theories (such as underspecification and the cooperative principle).

The studies mentioned above collectively present the common complexities interpreters and translators encounter when dealing with IDMs. As a result, they may translate, substitute, modify, add, or omit these markers. Notwithstanding these perceptive studies, there still exists a clear gap for further investigation because there is a limited body of research regarding the translation of IDMs in the English-Kurdish SI.

## 2.5 Research Gap

For understanding IDMs, the literature provides a theoretical basis explaining these markers and their essential discourse roles. However, studies that explore IDMs in English and Kurdish are very few, and even more limited in Behdini Kurdish. As noted, the literature examining the use of IDMs across the latter two languages during SI is relatively limited, as the two are very different in their syntactic and pragmatic norms. This gap becomes especially significant since English-Kurdish SI is growing rapidly in multiple fields, including political, legal, scientific, and academic areas.

By examining the strategies through which English IDMs are interpreted into Behdini Kurdish by professional simultaneous interpreters during SI, this paper fills this gap in the existing literature. The study provides empirical evidence, derived from the analysis of two speeches, of the challenges encountered as well as the strategies employed by interpreters for overcoming the challenges. Consequently, this elucidates how coherence, fluency, and accuracy are facilitated by interpreters when interpreting from English into Behdini Kurdish.

### 3. Methodology and Data Collection

#### 3.1 Data Collection

The study's data included two speeches from legal and scientific domains (See Appendix 1 for the full transcription of the two speeches). These speeches were selected as they included cases where IDMs represent logical relations and contribute to coherence. The average duration of each speech was about 9-10 minutes, providing sufficient material for analysis without overwhelming the interpreters.

Five male professional simultaneous interpreters who had more than three years of experience were selected for the purpose of gathering interpretations. These interpreters were required to construct a simultaneous interpretation of the two English speeches in Behdini Kurdish, totaling ten interpretations. The interpreting sessions were all recorded and transcribed into Kurdish subsequently for examination. The ages, years of experience, and educational backgrounds of these interpreters varied, enabling a richer dataset. This variation also explored various approaches to SI and expanded the viewpoint on the research questions. A summary of each interpreter's profile is given in Table (1).

**Table 1: Interpreter Profile Overview**

Interpreter ID	Age	Years of Experience	Educational Qualification	Degree
Interpreter 1	29	6 years	IT	BA
Interpreter 2	30	4 years	Translation	MA
Interpreter 3	34	13 years	Linguistics	MA
Interpreter 4	40	20 years	Linguistics	MA
Interpreter 5	34	11 years	English Language and Literature	MA

Taking part in this research and being asked to perform an interpreting task was in keeping with the ethical considerations. Before the interpreters participated, they were provided with an explanation of the tasks to be undertaken, what the data they provided might be used for, and the objectives of the study. Confidentiality and anonymity regarding the interpreters' identity were assured to them as codes were used to refer to them, such as Interpreter 1, Interpreter 2, Interpreter 3, Interpreter 4, and Interpreter 5. Each interpreter was fully made aware of their right to withdraw at any time, and consent was acquired beforehand.

#### 3.2 Procedure

The procedure went through three phases. The first step was to identify every instance of the IDMs. After that, the Behdini Kurdish translation of each IDM delivered by the interpreters was aligned with them. At last, the strategy applied (Direct equivalence (DE), Paraphrasing (PP), Substitution (SUB), or Omission (OM)) was identified in rendering each IDM. This analysis is shown in Table (2).

#### 3.3 Research Design

A qualitative approach is used in this study, which is best suited for examining the strategies that simultaneous interpreters employ when rendering IDMs in SI as well as for understanding the

reasons why they use these strategies, such as PP, SUB, DE, and OM. A quantitative approach involving the assignment of numerical values to the strategies, indicating their frequency of use, would have been inappropriate, as the aim of this study is not to estimate the frequency of occurrences. A qualitative approach offers a more appropriate means of addressing the objectives of this study because it can examine the strategies in-depth and reveal the underlying reasons behind their use.

This approach is useful because it offers insights into the real-time constraints and decision-making processes interpreters encounter when sustaining coherence during SI. It provides implications for interpreter training programs, specifically regarding the ways logical flow is created through IDMs in bilingual settings.

#### 4. Results and Discussion

##### 4.1 Results

The findings from the examination of IDMs in the two English speeches, legal and scientific, along with their ten simultaneous interpretations in Behdini Kurdish, are presented in this section. All instances of the English IDMs together with their interpreters' translations in Behdini Kurdish, interpreters' IDs, and the strategies they used are displayed in Table (2). A summary of the strategies is provided in Table (3), listing each individual marker with its frequency in English, along with the frequency of each strategy. Finally, examples and commentaries regarding these strategies are demonstrated.

**Table 2: SI Strategies for IDMs into Behdini Kurdish**

English IDMs	Interpreter's Kurdish Translation	Interpreter ID	Strategy
<b>1. Because</b>	ژیهروکی	Interpreter 1	DE
	چنکی	Interpreter 2	DE
	چونکی	Interpreter 3	DE
	چونکورو	Interpreter 4	DE
	ژیهروکی	Interpreter 5	DE
<b>2. On these grounds</b>	ل فرتیدا	Interpreter 1	PP
	سەر بنه‌مایه‌ی ئه‌ی تشته‌ی	Interpreter 2	SUB
	ل سەر ئان بنه‌مایان	Interpreter 3	DE
	ئێ سەر ئان بنه‌ها بنه‌ره‌تیا ئانکو بنه‌ ئه‌ی بنکا	Interpreter 4	PP
	ئێ سەر ئان بنه‌مایان	Interpreter 5	DE
<b>3. In this case</b>	ده‌ی حاله‌ته‌ی هه‌نیدا	Interpreter 1	PP
	ده‌ی حاله‌ته‌ی	Interpreter 2	PP
	ئێ ئه‌ی شه‌وه‌ی	Interpreter 3	PP
	ئێ ئه‌ی حاله‌ته‌ی	Interpreter 4	PP
	ئده‌ی ئه‌ی ئه‌ی كه‌سیدا ده‌ی بارودوخیدا	Interpreter 5	PP
<b>4. Then</b>	پاشه‌ی	Interpreter 1	DE
	پشته‌ی هه‌نگه‌ی	Interpreter 2	SUB
	پشته‌ی ئه‌ی چه‌نده‌ی ئه‌ی	Interpreter 3	PP
	پاشه‌ی	Interpreter 4	DE
	ژیه‌ره‌نده‌ی ئه‌ی ئه‌ی بارودوخیدا	Interpreter 5	PP
<b>5. On this condition</b>	ده‌ی حاله‌ته‌ی هه‌نیدا	Interpreter 1	PP
	ل سەر ئه‌ی بنه‌مایه‌ی	Interpreter 2	SUB
	ئێ ئه‌ی چه‌نده‌ی و ل ل دیف و ئه‌ی شه‌رتی	Interpreter 3	PP
	ئێ ئه‌ی شه‌رتیه‌ی	Interpreter 4	PP
	ئێ ئه‌ی بارودوخیدا	Interpreter 5	DE
<b>6. Accordingly</b>	ژیه‌ره‌نده‌ی	Interpreter 1	SUB
	سەر ئه‌ی بنه‌مایه‌ی ئه‌ی	Interpreter 2	PP
	ب ئه‌ی چه‌نده‌ی ئه‌ی	Interpreter 3	PP
	هه‌وسانه‌ی	Interpreter 4	SUB
	ل ل د گوری ئه‌ی چه‌نده‌ی	Interpreter 5	DE

7. <u>It follows that</u>	_____	Interpreter 1	OM
	دیف هندی ئه ژیک کو	Interpreter 2	PP
	ژیهر ئه چهندی	Interpreter 3	SUB
	ئه هه م یه هوسا دیار دیکه تن کو	Interpreter 4	PP
	ل ئه هه ئی ل گوری	Interpreter 5	PP
8. <u>Therefore</u>	ژیهر هندی ئی	Interpreter 1	DE
	ژیهر ئه چهندی ئی	Interpreter 2	DE
	ژیهر ئه چهندی ئیک	Interpreter 3	DE
	له ورا	Interpreter 4	DE
	ژیهر ئه چهندی	Interpreter 5	DE
9. <u>Consequently</u>	دهه مان ده مدا	Interpreter 1	SUB
	ویس و سه ر ئه بیته مای	Interpreter 2	PP
	وه کو ده ره ئه نجام	Interpreter 3	DE
	وه ک ده ره ئه نجام	Interpreter 4	DE
	ده ره ئه نجامدا	Interpreter 5	DE
10. <u>As a result</u>	وه ک ده ره ئه نجام ئه بی ئه کاره هه نه	Interpreter 1	PP
	سه به و ئه گه ر ئه ئه تشته	Interpreter 2	PP
	وه کو ئه ده ره نجام	Interpreter 3	DE
	وه کو ده ره ئه نجام	Interpreter 4	DE
	دئه دئه ئه ده ره ئه نجامیدا	Interpreter 5	DE
11. <u>Hence</u>	_____	Interpreter 1	OM
	له ورا	Interpreter 2	DE
	ژیهر هندی	Interpreter 3	DE
	هوسانه	Interpreter 4	SUB
	دئه یواریدا	Interpreter 5	SUB

The data sheds light on the ways logical links are handled in Behdini Kurdish by simultaneous interpreters, revealing several patterns concerning the approaches of the interpreters to rendering IDMs. In terms of the strategies employed, the most frequent was **DE**, **PP** followed, then **SUB**, and finally **OM**. It can be inferred from these findings that when direct Kurdish equivalents are available, interpreters typically use them, but they also appear to greatly depend on PP.

The ambiguity or unavailability of DE led to cases where certain markers could not be translated directly, resulting in frequent uses of PP and SUB. The primary reason for this pattern was the absence of a fixed direct equivalent in the TL. Other reasons included the need to clarify the logical relationship for the audience, such as when the IDM *then* was paraphrased as *ژیهر هندی ئی ئه د وی*. Additionally, the interpreters sometimes forgot a relevant equivalent, such as when they replaced the IDM *consequently* with *دهه مان ده مدا*.

The rare strategy that only appeared twice was OM, in which the IDMs *it follows that* and *hence* were deleted by the interpreters. In this case, the interpreters favored a smooth and natural speech flow in Kurdish and might have deliberately omitted the marker, aware that a great deal of meaning would not be affected (Baker, 1992). The fact that this strategy was the least common indicates how conscious interpreters were of not omitting essential markers from discourse when maintaining coherence.

SI constraints having a significant impact on the interpreters' strategy selection is another pattern observed in these findings. For instance, what prompted the interpreters to apply DE might have been time pressure, as it is quicker to remember a direct equivalent than to rephrase a sentence. Memory load could also have come into play when interpreters encountered unfamiliar or complex IDMs and were unable to recall a direct counterpart. Therefore, they resorted to PP to streamline the marker's structure and lessen their cognitive load.

With regard to the IDMs individually, it seemed that *therefore* and *because* were the non-problematic markers, as all five interpreters translated them directly. Conversely, the IDMs that

engendered the greatest complexity were *it follows that*, *in this case*, *on this condition*, and *accordingly*, as scarcely any interpreter used their direct equivalents for rendering them. These markers' lack of fixed direct counterparts, their abstract meaning, and their low frequency in daily Kurdish usage were the reasons for this.

Overall, Table (2) serves as a key analytical instrument used throughout this entire paper. It helps with identifying the problematic areas and the most prevalent interpreting strategies by not only organizing the data structurally but also allowing comparisons among IDMs and interpreters. It sheds light on how, under the constraints of real-time, simultaneous interpreters manage IDMs.

**Table 3: Summary of strategies used for IDMs**

Marker	Frequency in English (n=5)	DE	PP	SUB	OM
1. Because	5	5	0	0	0
2. On these grounds	5	2	2	1	0
3. In this case	5	0	5	0	0
4. Then	5	2	2	1	0
5. On this condition	5	1	3	1	0
6. Accordingly	5	1	2	2	0
7. It follows that	5	0	3	1	1
8. Therefore	5	5	0	0	0
9. Consequently	5	3	1	1	0
10. As a result	5	3	2	0	0
11. Hence	5	2	0	2	1

Table (3) illustrates that the **most frequent strategy** used by simultaneous interpreters was **DE**, applied in **24** cases. The **second most common strategy** was **PP** with **20** cases. Following this, the **less frequent strategy** was **SUB**, appearing in **9** cases. Lastly, the **rare strategy** was **OM**, with only **2** cases. While DE was dominant, PP's high frequency indicates structural gaps in Behdini Kurdish equivalents for English IDMs.

Additionally, the **easiest markers** to render were *therefore* and *because*, as DE was applied for translating them by all five interpreters, highlighting that these markers are high-frequency causal markers in everyday Kurdish speech. In contrast, *it follows that*, *in this case*, *accordingly*, and *on this condition* were the **most difficult markers** since no stable direct equivalents were used for translating them, except that the last two markers were rendered through DE only once. Apart from that, all the four markers were rendered by PP, SUB, and OM by all interpreters. This is due to their low frequency of use in Behdini Kurdish discourse and the influence of Arabic expressions, which may lead to variability or reliance on PP and SUB.

With the patterns and strategies established, each marker will be individually stated with an example and a commentary explaining the strategies used for interpreting the marker.

### 1. Because

#### Example:

- **English Sentence: Because** the outcome of a trial can affect a person's freedom, a person's reputation, or even life, every detail matters.
- **Interpreter's Kurdish Interpretation:** ژبه‌رکو دهرئه‌نجام یه‌ دادگه‌هه‌ دبیته‌ ته‌ئ کارتیکنه‌ ئه‌ سهر که ئازادیا که‌سه‌کی بکه‌ته‌ن ئه‌ ی سمه‌ته‌ ئا ئانکو ره‌وشته‌ی که‌سه‌کی یان کو ژیا نا ویژی.. هه‌می هورده‌کاری ئه‌ گرنه‌گن.

**Commentary:** All the five interpreters rendered *because* through DE, using well-established Kurdish counterparts such as ژبه‌رکو or چونکو. This one-to-one match shows that the marker has a fixed and widely recognized equivalent in Behdini Kurdish, making it straightforward to handle in real-time interpreting. The consistency stands in contrast with markers like *it follows that*, which lack fixed counterparts and often require PP or SUB.

## 2. On these grounds

**Example:**

- **English Sentence:** On these grounds, the legal system requires all parties to provide supporting evidence for their arguments.
- **Interpreter's Kurdish Interpretation:** ئه‌مه‌ی ئه‌كدارن بۆ پيشكيشكرنا ئه‌ به‌لگه‌يێن پشته‌قان داينبكه‌ن بۆ دانوستاندنێن خو. سيسته‌مێ ياسايي پيتقي ب هه‌می ئه‌ سهر قان بنه‌مايان، سيسته‌مێ ياسايي پيتقي ب هه‌می لايه‌نان هه‌می ئه‌كدارن بۆ پيشكيشكرنا ئه‌ به‌لگه‌يێن پشته‌قان داينبكه‌ن بۆ دانوستاندنێن خو.

**Commentary:** Strategies used for rendering *on these grounds* were DE and PP by four interpreters and SUB by one. This shows that some interpreters could not recall the markers' direct equivalent, leading them to maintain the flow of the speech by paraphrasing and substituting the marker.

## 3. In this case

**Example:**

- **English Sentence:** In this case, the burden of proof lies with the prosecution in criminal trials.
- **Interpreter's Kurdish Interpretation:** دبه‌ری ئه‌فقو ئانكو ئه‌م بيژيني باري نيشاندانا ب به‌لگه‌ی دب دببته‌ تشته‌كێ ئه‌ .. د تو دی تومه‌ت دی هه‌يته‌ تومه‌تباركرن.

**Commentary:** All interpreters used PP for translating *in this case*, with interpreter 1, interpreter 2, and interpreter 4 including Arabic words since Kurdish is to some extent influenced by Arabic. This indicates a lack of a fixed direct counterpart for this marker in Behdini Kurdish, making it one of the most difficult markers to handle in real-time, although the paraphrased versions of the marker were also effective.

## 4. Then

**Example:**

- **English Sentence:** Then, the defense also has the right to present its own evidence.
- **Interpreter's Kurdish Interpretation:** ديفينس ئه‌ هه‌ره‌وسا كو ئه‌ مافه‌ی هه‌ی ئه‌وان ئه‌ی كو مافه‌ی هه‌یه‌ به‌لگه‌يێن خو پيشانبدن.

**Commentary:** The IDM *then* was translated through DE, PP, and SUB. Although only two interpreters used DE, the same function of the marker was rendered through the other strategies, because the interpreters depended on the context when rendering this marker. This indicates that even if sometimes the marker is not directly translated, suitable alternatives can be found.

## 5. On this condition:

**Example:**

- **English Sentence:** On this condition, the integrity of the evidence becomes critical.
- **Interpreter's Kurdish Interpretation:** ئه‌ ده‌ستپاكيا به‌لگه‌يان بيته‌ جهه‌كێ بيته‌ جهه‌ی با هه‌ستيارين و بايه‌خه‌ی.

**Commentary:** Only one interpreter used DE for rendering *on this condition*, whereas the others used PP and SUB. This proves that there is no well-established direct equivalent for this formal marker, making it difficult to interpret directly in SI.

## 6. Accordingly:

### Example:

- **English Sentence:** Accordingly, the training of lawyers, of judges, and of police officers must focus heavily on the handling of evidence.
- **Interpreter's Kurdish Interpretation:** ئی راهیتانا یا پاریزهران، یا ل ل د گوری فئ چەندی، یا دادوهران، یا فه‌رمانبەرین پولیسان پیتقییه ئانکو نه‌چاره ل پشتبەستنه‌کا ته‌رکیزه‌کا درست ل سه‌ر یا سه‌رده‌ریکرنا به‌لگه‌یه.

**Commentary:** *Accordingly* was interpreted directly by only one interpreter, while the other four interpreters rendered it through PP and SUB. This also highlights the lack of a fixed equivalent for this abstract marker, which is also referred to among the problematic markers.

## 7. It follows that:

### Example:

- **English Sentence:** It follows that a trial without reliable evidence is not truly fair.
- **Interpreter's Kurdish Interpretation:** دیف هندی فه‌ژیک کو .. محاکمه بی به‌لگه .. به‌لگه رنگ ئی نه‌یا درسته ب راستی نه‌یا عادلانه‌یه.

**Commentary:** *it follows that* was translated through three cases of PP, one of SUB, and one of OM. No interpreter rendered it directly, meaning this marker lacked a well-recognized direct equivalent in Behdini Kurdish and was considered the most difficult marker to be handled in SI. The IDMs *it follows that*, *in this case*, *accordingly*, and *on this condition*, are considered formal, abstract, and low-frequency markers in Kurdish, therefore lack exact counterparts and are difficult in SI.

## 8. Therefore:

### Example:

- **English Sentence:** Therefore, we must continue to strengthen our legal systems by improving the rules and training related to evidence.
- **Interpreter's Kurdish Interpretation:** ژبه‌ر فئ چەندی ژێ، پیتقییه ل سه‌ر مه‌ ئه‌م به‌رده‌وام بینن ب هیزکرنا ئی سیسته‌می خو بی یاسایی ب شیوازی باشکرنا یاسایان و ته‌د ئی ته‌درییکرنا تشتان ئه‌وین گریداین ب به‌لگه‌ی و دابینکرنا به‌لگه‌.

**Commentary:** All interpreters rendered, *therefore* using DE. This one-to-one correspondence shows that this marker has a fixed equivalent in Behdini Kurdish, making it straightforward to treat in SI. This means the IDM *therefore*, along with *because*, are high-frequency markers in everyday Kurdish, unlike formal or abstract markers such as *accordingly* or *it follows that*.

## 9. Consequently:

### Example:

- **English Sentence:** Consequently, many countries have begun investing heavily in renewable energy infrastructure.
- **Interpreter's Kurdish Interpretation:** وه‌کو ده‌رته‌نجام، ئی گه‌له‌ک حکومت ئی ئی گه‌له‌ک ئی و وه‌به‌ره‌یتان یا کری ئت ئت ئی بن ئی بناغه‌کی بناغی ئی وزه‌یا دوباره دروستبووی.

**Commentary:** *Consequently* was translated through DE three times, PP once, and SUB once, indicating that the two interpreters who used PP and SUB might have been unable to remember the direct equivalent of this marker. This means that even if certain markers do have direct equivalents in Behdini Kurdish, they may not be widely used.

## 10. As a result:



that translators often restructure or explicitate DMs to fit in the TL conventions and preserve logical clarity.

The occurrences of SUB in the study's data reflect a broader phenomenon referred to as underspecification by Mohammadi (2021) in his study on English-Persian simultaneous translation. One of the manifestations of underspecification is SUB, which Mohammadi observed that in 35% of times, interpreters substituted the DM *and* with other markers rather than their equivalents to capture the intended meaning and make the coherence relation clearer. In our data, a similar pattern appeared where interpreters substituted markers such as *then* with the marker *پشتی هنگی* (after that) for conveying the intended meaning and making the coherence relation clearer. Consequently, SUB is not an arbitrary strategy that simultaneous interpreters apply when needed; in fact, it is a systematic one.

Ultimately, the low rate of OM in this study is regarded as a significant discovery. Gile's (2009, p. 210) theory is strongly challenged by this finding, according to which OM is expected to frequently happen under cognitive load, specifically for low-value items, including DMs. Nevertheless, OM is found to be very low in this research, indicating that interpreters valued IDMs as essential elements that enhance overall coherence, and they did not consistently omit them. This supports Blakemore's (2002) view that such markers help guide listeners' understanding, as well as Saleem and Ameen's (2021, p.7) observation that omitting IDMs weakens the cohesion and coherence of discourse.

In conclusion, SI strategies used for rendering IDMs are not just arbitrary but deliberate, skilled responses to SI challenges such as linguistic gaps and cognitive pressure. Simultaneous interpreters follow clear patterns of these strategies, which are either practically taught or theoretically explained in interpreting and translation studies. They apply these strategies in real-life interpreting sessions until they become automatic in their cognitive processes.

#### 4.2.2 Patterns' Explanation

The preference for DE, PP, and SUB is influenced by the linguistic and cognitive aspects. Linguistically speaking, Behdini Kurdish comprises well-established direct equivalents for certain markers, such as *therefore* and *because*, leading interpreters to use DE and facilitating their use in SI. Less frequent IDMs, such as *it follows that* and *in this case*, are not widely recognizable in Behdini Kurdish and lack fixed direct equivalents, encouraging the interpreters to paraphrase or substitute them. Moreover, PP and SUB sometimes occurred to make logical relationships clearer between speech segments.

From a cognitive point of view, SI involves time pressure, memory load, and many other constraints that shape strategy choices (Gile, 2009, p.201). As in the findings, time pressure often caused interpreters to apply DE, as remembering a direct equivalent is quicker. Meanwhile, in cases where direct equivalents were unavailable or ambiguous, PP and SUB occurred. Instances of these two strategies were due to the memory load on interpreters, making it difficult for them to think of an equivalent quickly, as there were no well-recognized ones. Thus, they paraphrased and substituted the marker instead.

A further explanation of the low frequency of OM by interpreters lies in pragmatic and discourse-related factors. Based on the findings of the study, it becomes clear that in Behdini Kurdish discourse, explicit cohesive devices might be favored, reflecting the low possibility of interpreters deleting IDMs. Interpreters resorted to OM only when the logical flow was already clear from the context, or when they judged that adding the marker would disrupt fluency.

Markers such as *it follows that*, *in this case*, *accordingly*, and *on this condition* were considered the most problematic markers. This can be due to the influence of Arabic expressions, lack of fixed direct equivalents in Behdini Kurdish, the markers' abstract meanings, and their low frequency in Kurdish everyday communication. However, there were other markers like *therefore* and *because* which were rendered directly by all interpreters. This suggests that common and basic IDMs that

have fixed recognized equivalents are rendered consistently, whereas the less-used or abstract ones usually lead to hesitation or inconsistency.

#### 4.2.3 Implications for Simultaneous Interpreting Practice

The study's findings provide certain implications for the training and practice of simultaneous interpreters. Initially, DE's strong preference reveals that interpreters are able to sustain coherence when direct counterparts are present. Nevertheless, regular instances of PP and sporadic instances of SUB suggest that in the Behdini Kurdish counterparts for English IDMs, there exist several structural gaps. Accordingly, functional equivalence should be prioritized by interpreters, and the markers' pragmatic functions should be emphasized over lexical matching. As Behin et al. (2010, p.3) noted, DMs should be translated based on their pragmatic value rather than their lexical meanings. Izzadeen and Majeed (2020) also indicated that translators should consider the pragmatic functions of expressions rather than only their linguistic structure, since meaning is highly context-dependent and varies across different languages and cultures. Thus, teaching interpreters the IDMs' functional roles that structure discourse coherence should be considered a crucial point in their training programs, and they should not just be trained on expanding their vocabulary knowledge. The second implication is that targeted practice is required for certain markers, such as *accordingly* and *it follows that* as they introduce significant complexity due to their infrequent appearance, abstractness, and formalness. There is a number of translation alternatives for these markers, and their fixed direct Behdini Kurdish counterparts do not exist. To manage these complexities under SI constraints during SI, interpreters must consider the pragmatic functions of these markers. They should also practice the many translation alternatives beforehand so that they can easily remember the best-suited option. By this, the overall cohesion will be improved, and inconsistencies will be prevented.

Ultimately, these findings strongly emphasize that simultaneous interpreters must be taught and trained to rely on strategies to manage the SI constraints they face while maintaining discourse coherence. Being aware of when to use DE, PP, SUB, or OM can greatly impact the fluency and coherence of speech. Shortly, the study points out that IDMs are not mastered solely through vocabulary in SI, but through a skill that combines cognitive control, pragmatic awareness, and linguistic knowledge.

## 5. Conclusion

This paper explored the strategies that Behdini Kurdish simultaneous interpreters use to interpret IDMs from English into Behdini Kurdish. Several patterns were revealed through the analysis of one English legal speech and one English scientific speech, along with their ten Behdini Kurdish versions. Firstly, DE was the predominant strategy, specifically for high-frequency causal markers such as *therefore* and *because*, which have well-established direct counterparts in Kurdish. Secondly, PP and SUB were common for treating low-frequency and more abstract IDMs, such as *accordingly*, mainly because such markers lack fixed equivalents in the TL or occur infrequently in everyday communication. Lastly, OM was scarce and only strategically used for preserving fluency in cases where the causal relation was already obvious from the context. Together, the findings reveal that the strategy choices made by interpreters depend on linguistic resources in Behdini Kurdish as well as cognitive demands inherent to SI.

Apart from the descriptive results, the current study makes an important contribution by highlighting less-studied language pairs. Most of the existing research on DMs is conducted between European languages, leaving pairs like English-Kurdish understudied. This study specifically examines the English-Kurdish language pair, providing empirical evidence on how it handles IDMs. It shows how coherence is achieved across languages with different discourse traditions, supported by a comparative analysis that uncovers both challenges, such as linguistic gaps, and strategies, such as PP, used to overcome these challenges.

The training of interpreters can benefit from this study's practical implications. DMs should not be

viewed as peripheral and less significant markers but as essential linguistic elements that ensure logical speech flow. The DMs' pragmatic roles should be specifically covered in these training programs, and interpreters should be taught and encouraged to rely on suitable strategies when necessary. These factors help handle markers that lack precise terms in the TL, enabling interpreters to sustain coherence more effectively, especially in situations where inferential links are crucial. In conclusion, several directions are recommended for future research. Future studies should expand the scope of this study and explore other types of DMs in SI, such as elaborative and contrastive, to see if similar patterns occur. Additionally, investigating the treatment of IDMs and other DM classes across different interpreting modes (e.g., consecutive) would offer valuable insights. Research could also examine DMs within various genres, including political, medical, and media contexts, where genre-specific patterns might appear. Moreover, increasing the corpus size by involving more simultaneous interpreters would yield a more comprehensive understanding of the differences in strategy choices. These efforts would complement the current findings and help build a broader understanding of discourse coherence management under SI constraints.

## 8. References

- Ahmed, A.K., 2022. Teaching and learning simultaneous interpreting at Kurdistan Region universities: Challenges and strategies. Unpublished Master's thesis. Duhok: University of Duhok, College of Languages.
- Andersen, G., 2001. *Pragmatic markers and sociolinguistic variation: A relevance-theoretic approach to the language of adolescents*. John Benjamins Publishing Company: Amsterdam. Available at: <https://doi.org/10.1075/pbns.84> [Accessed: 30 August 2025].
- Baker, M., 1992. *In other words: A coursebook on translation*. Routledge: London and New York
- Behin, B., Abedini Bonab, G., and Chehreh, M., 2010. A comparative study of discourse markers: The case of three English applied linguistic texts with their Farsi translations. *The Journal of English Language Pedagogy and Practice*, 3(7), pp.1-22.
- Bendazzoli, C., 2019. Discourse markers in English as a target language: The use of *so* by simultaneous interpreters. *Textus*, 1, pp.183-202.
- Blakemore, D., 2002. *Relevance and linguistic meaning: The semantics and pragmatics of discourse markers*. Cambridge University Press: New York. Available at: <https://doi.org/10.1017/CBO9780511486456> [Accessed: 22 September 2025].
- Brinton, L. J., 1996. *Pragmatic markers in English: Grammaticalization and discourse functions*. Mouton de Gruyter: Berlin and New York. Available at: <https://doi.org/10.1515/9783110907582> [Accessed: 30 August 2025].
- Crible, L., and Cuenca, M.-J., 2017. Discourse markers in speech: Characteristics and challenges for corpus annotation. *Dialogue & Discourse*, 8(2), pp.149-166. Available at: <https://doi.org/10.5087/dad.2017.207> [Accessed: 3 September 2025].
- Crible, L., Abuczki, Á., Burkšaitienė, N., Furkó, P., Nedoluzhko, A., Rackevičienė, S., Valūnaitė Oleškevičienė, G., and Zikánová, Š., 2019. Functions and translations of discourse markers in TED Talks: A parallel corpus study of underspecification in five languages. *Journal of Pragmatics*, 142, pp.139-155. Available at: <https://doi.org/10.1016/j.pragma.2019.01.012> [Accessed: 3 September 2025].
- Cuenca, M.-J., 2022. Translating discourse markers: Implicitation and explicitation strategies. In: M.-J. Cuenca and L. Degand, eds. *Discourse markers in interaction: From production to comprehension*. De Gruyter Mouton: Berlin, pp. 215-246. Available at: <https://doi.org/10.1515/9783110790351-009> [Accessed: 19 September 2025].
- Egg, M., and Redeker, G., 2008. Underspecified discourse representation. In: A. Benz and P. Kühnlein, eds. *Constraints in Discourse*. John Benjamins Publishing Company: Amsterdam, pp.117-138. Available at: <http://dx.doi.org/10.1075/pbns.172.06egg> [Accessed: 3 September 2025].
- Fraser, B., 1999. What are discourse markers? *Journal of Pragmatics*, 31(7), pp.931-952. Available at: [https://doi.org/10.1016/S0378-2166\(98\)00101-5](https://doi.org/10.1016/S0378-2166(98)00101-5) [Accessed: 31 August 2025].
- Furkó, B. P., 2014. Perspectives on the translation of discourse markers: A case study of the translation of reformulation markers from English into Hungarian. *Acta Universitatis Sapientiae, Philologica*, 6(2), pp.181-196. Available at: <https://doi.org/10.1515/ausp-2015-0013> [Accessed: 1 September 2025].
- Gile, D., 2009. *Basic concepts and models for interpreter and translator training*. Revised ed. John Benjamins Publishing Company: Amsterdam. Available at: <https://doi.org/10.1075/btl.8> [Accessed: 22 September 2025].
- Izzadeen, S.I., and Majeed, S.H., 2020. A pragmatic approach to translation: A study of deixis in *the Glass Menagerie*. *Zanco Journal of Human Sciences*, 24(4), pp.296-308. Available at: <https://doi.org/10.21271/zjhs.24.4.19> [Accessed: 5 October 2025].

- Jiang, Z., and Tao, Y., 2017. Translation universals of discourse markers in Russian-to-Chinese academic texts: A corpus-based approach. *Zeitschrift für Slawistik*, 62(4), pp.583-605. Available at: <https://doi.org/10.1515/slav-2017-0037> [Accessed: 2 September 2025].
- Mohammadi, A. M., 2021. An analysis of the underspecifications of “and” in parallel corpora: A case study in simultaneous translation in the Iranian context. *Journal of Foreign Language Research*, 11(1), pp.67-80. Available at: <https://doi.org/10.22059/jflr.2021.321993.828> [Accessed: 21 September 2025].
- Mohammadi, A. M., 2022. An analysis of the Iranian simultaneous interpreter’s strategies based on translation spotting: A study of inferential and temporal discourse markers. *Journal of Foreign Language Research*, 12(1), pp.132-152. Available at: <https://doi.org/10.22059/jflr.2021.329419.880> [Accessed: 6 September 2025].
- Müller, S., 2005. *Discourse markers in native and non-native English discourse*. John Benjamins Publishing Company: Amsterdam.
- Namat, K. I., 2011. *A contrastive study of discourse markers in English and Kurdish*. Unpublished master’s thesis. University of Duhok: Duhok.
- Rozumko, A., 2021. Underspecification in the translation of discourse markers: A parallel corpus study of the treatment of connective functions of indeed in Polish translations. *Journal of Pragmatics*, 177, pp.122-134. Available at: <https://doi.org/10.1016/j.pragma.2021.02.021> [Accessed: 1 September 2025].
- Sadiq, M. T., and Toma, S. S., 2024. Assessing university students’ competence in translating English discourse connectives into Kurdish. *Academic Journal of Nawroz University*, 13(1), pp.608-624.
- Saleem, H. I., and Ameen, H. H. M., 2021. Problems students face in translating discourse markers from English into Kurdish. *Academic Journal of Nawroz University*, 10(3), pp.1-8. Available at: <https://doi.org/10.25007/ajnu.v10n3a1067> [Accessed: 22 September 2025].
- Salih, R.R. and Tahir, R.I., 2023. Challenges of translating English pragmatic markers into Kurdish by EFL students. *Journal of Language Studies*, 6(4), pp.139–149. Available at: <https://jls.tu.edu.iq/index.php/jls/article/view/336> [Accessed: 23 January 2026].
- Schiffrin, D., 1987. *Discourse markers*. Cambridge University Press: New York. Available at: <https://doi.org/10.1017/CBO9780511611841> [Accessed: 30 August 2025].
- Zwicky, A. M., 1985. Clitics and particles. *Language*, 61(2), pp.283-305. Available at: <https://doi.org/10.2307/414146> [Accessed: 30 August 2025].

## Appendix 1: Full Transcription of the Two Speeches

### 1. Legal Speech: The Role of Evidence in Fair Trials

In any legal system, the goal is to achieve justice through a fair and balanced process. One of the most important elements of a fair trial is the use of proper evidence. Without solid evidence, courts would be left to decide based on uhh opinion, um assumption, or even bias. That is why evidence must be collected, it must be presented, and examined with great care and fairness. .... **Because** the outcome of a trial can affect a person’s freedom, a person’s reputation, or even life, every detail matters. ... Uh, Judges and uh juries cannot rely solely on uh witness statements or uh emotional arguments. Instead, .. they must base their decisions on reliable facts that support or challenge the claims made in court. .... Uh, **on these grounds**, the legal system requires all parties to provide supporting evidence for their arguments. ... Whether it is physical evidence, digital data, or expert testimony, each piece really contributes to a clearer picture of what truly happened. .... The law sets strict rules for collecting and for presenting evidence uh to ensure that no one is wrongly accused or is unfairly convicted. .... **In this case**, the burden of proof lies with the prosecution in criminal trials. They must prove the defendant’s guilt beyond a reasonable doubt. If they fail to present enough convincing evidence, the defendant should not be found guilty. ... This protects innocent people from being punished for crimes that they did not commit. .... **Then**, the defense also has the right to present its own evidence. ... This includes witnesses, documents, or even video footage that may prove the accused person’s innocence. .... Uhh, by allowing both sides to share and to challenge each other’s evidence, the court can actually reach a balanced and just decision. .... **On this condition**, the integrity of the evidence becomes critical. If evidence is tampered with, hidden, or obtained illegally, it may be rejected by the court. .... Legal professionals must always follow the rules of procedure to make sure that the truth is respected and that justice is not harmed. Trust in legal institutions depends on how strictly these rules are followed. .. **Accordingly**, the training of

lawyers, of judges, and of police officers must focus heavily on the handling of evidence. ... Knowing how to uh gather, store, and to present evidence correctly is key to maintaining the fairness of trials. Mistakes in the handling of evidence can lead to serious consequences, uhh including wrongful convictions or the release of guilty individuals. .. **It follows that** a trial without reliable evidence is not truly fair. It puts individuals at risk of injustice and damages the legal system's credibility. ... Every citizen must be confident that if they go to court, the decision will be based on facts, not personal opinions or power. .... **Therefore**, we must continue to strengthen our legal systems by improving the rules and training related to evidence. Uh, clear, honest, and thorough use of evidence is essential for fair trials and a just society. Once the truth is supported by proof, the law can serve its real purpose—protecting the innocent and holding the guilty accountable.

## 2. Scientific Speech: The Role of Renewable Energy in Addressing Climate Change

Ladies and gentlemen, climate change is one of the most pressing scientific issues of our time. Rising global temperatures, melting glaciers, and extreme weather events are no longer distant threats — they are present realities. The scientific community has dedicated decades to studying the causes and consequences of this phenomenon, and today we have a clear understanding: human activity, particularly the burning of fossil fuels, is the main driver of climate change. As such, the search for clean, sustainable alternatives is not only urgent but necessary. First, we must examine the core problem: the overdependence on fossil fuels like coal, oil, and natural gas. ... These sources release large amounts of carbon dioxide into the atmosphere, which traps heat and warms the planet. Scientists have long warned that continuing along this path will lead to more severe and irreversible environmental damage. Second, renewable energy sources such as solar, wind, and hydroelectric power offer promising solutions. They generate electricity without producing harmful greenhouse gases and are increasingly affordable due to advances in technology. ... Governments, researchers, and engineers around the world are working to improve these systems and make them more efficient. .... **Consequently**, many countries have begun investing heavily in renewable energy infrastructure. Solar panels now cover rooftops in urban centres, ... wind farms are being built in coastal areas, and new hydroelectric dams are producing clean energy for millions. ... These developments are not just beneficial for the environment — they also support economic growth and energy independence. .... Eventually, scientists believe that if the majority of the world transitions to clean energy, the most damaging effects of climate change can be slowed, if not reversed. However, this transformation will not happen overnight. It requires strong cooperation between scientists, policymakers, industries, and the public. It also requires continuous innovation in strong systems, grid management, and transportation technologies. One important step is energy storage. Since solar and wind energy depend on weather conditions, storing excess energy for use at times of need is vital. Scientists are now designing advanced battery systems to meet this challenge. Subsequently, these systems are being integrated into national energy grids, allowing for a more stable and reliable supply of electricity even during cloudy or windless days. .... **As a result**, renewable energy is becoming more dependable and widely adopted. Countries that were once hesitant are now committing to climate goals and setting timelines to phase out fossil fuels. Public awareness is growing, and demand for green energy options is rising steadily. .. **Hence**, we can say that scientific research has played a key role in guiding global energy policies. ... By presenting clear evidence and practical solutions, science has empowered leaders to make informed decisions. More importantly, it has offered hope for a cleaner, more sustainable future. .... Immediately afterwards, every scientific breakthrough must be translated into action. Discoveries alone are not enough. We must ensure they are implemented, funded, and shared across borders to create global progress. .. In conclusion, the role of science in combating climate change is critical. Through research, innovation, and cooperation, we can transition to renewable energy and protect our planet for generations to come. Thank you.

## بکارئینانا نیشانین دهقی بین دهرئه نجامی دناقهرا ئینگیزی و کوردی د وهرگیرانا دهملدهست دا

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### پۆخته

پینکفه گریدان دناف ئاخفتنیدا خالهکا هه ره گرنگه د وهرگیرانا دهملدهست دا، دووپانکرنی ل سهر هندج دکهت کو ئه و کهسین گوهداریی دکهن ژ زمانی ئارمانجکری د پینکفه گریدان لۆژیکی یا رستان و د مه بهستا ناما ئاخفتنکهکری بگههن نه کو بتنی د راما نا گشتی یا ئاخفتنی. ژ ئه وان توخمین پاراستنی ل سهر پینکفه گریدان دکهن، نیشانین دهقی بین دهرئه نجامینه وهکی ژ بهرهندي، ئه فجا، هوسا، و د ئه نجامدا. ئه فقه ژي زور د گرنگ چوونکی دهربرینی ژ لۆژیک و په یوه نديا ئه گهري ب ئه نجامی فه و دهرئه نجامی دکهن. سه ره رای ئه فقی چه ندي ژي، ژمارا فه کولینان سه بارهت فان نیشانین دهقی د وهرگیرانا زارهکی یا ئینگیزی-کوردیدا د سنووردارکرینه. ئه ف فه کولینه وئ فالاهیی پردکته ب ریکا دیارکرنا وئ چه ندي کا چه و نیشانین دهقی بین دهرئه نجامی د وهرگیرانا دهملدهست یا ئینگیزی-کوردیدا دهینه بکارئینان ب ریکا شیکارکرنا دوو جۆرین گوتاران: یاسایی و زانستی، دگه ل 10 وهرگیرانین زارهکی بین کو هاتینه ئه نجامدان ژلایی وهرگیرانین دهملدهستین بسپۆرین کورد فه. بۆ شیکارکرنا زانبارییان، هیماکرنا جۆری هاتبوو بکارئینان ژبو دیارکرنا نیشانین دهقی بین دهرئه نجامی و ههروهسا شیکارکرنهکا به اوردکرنی هاتبوو بکارئینان بۆ خواندنا ئه وان ستراتیژین هاتینه بکارئینان ژلایی وهرگیرانین زارهکی فه بۆ فه گوهاستنا فان نیشانین دهقی بین دهرئه نجامی. ئه نجام دهنه دیاردهکن کو ستراتیژیا زالکر، ستراتیژیا هه فه ئیزیا راسته وخو بوو، بتابهتی ژبو وان نیشانین دهقی بین به ردهوام د دیار و بهرنیاس، د هه مان دم دا، دووباره دارشتن و گوهورپین دهاته بکارئینان بۆ ئه وان نیشانین دهقی بین بیی هه فه ئیزین راسته وخوین جیگیر هه بن. ژبیرن یا دهگهمن بوو، بتنی دوو نموونه ل سهر هه بوون. ئه نجام دووپاتی ل سهر گرنگیا راهیناندانا وهرگیران ل سهر نیاسینا ئه رکنین پراگماتیکی بین نیشانین دهقی و پشتبه ستنی ل سهر ستراتیژین گونجای بۆ فه گوهاستنا ئه وان دکهن، کو ئه فقه ژي ئامازه پیکه رین هه ره گرنگ دابیندکته بۆ راهیناندانا وهرگیرانین زارهکی و خواندنین گوتاران.

**وشه سه ره که کانه:** وهرگیرانا ئینگیزی-کوردی، نیشانین دهقی بین دهرئه نجامی، وهرگیرانا دهملدهست، ستراتیژین وهرگیرانی

## استخدام علامات الخطاب الاستنباطية بين اللغتين الإنجليزية والكردية في الترجمة الفورية

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### الملخص

يعتبر تماسك الخطاب أمراً بالغ الأهمية في الترجمة الفورية، إذ يضمن فهم المتلقي المستهدف للتدفق المنطقي والغرض من رسالة المتحدث، وليس فقط المعنى الافتراضي. ومن بين العناصر التي تحافظ على التماسك، تُعد علامات الخطاب الاستدلالي مثل لذلك، وبالتالي، وعليه، ضرورة بشكل خاص لأنها تعبر عن المنطق، والسبب والنتيجة، والاستنتاجات. ومع ذلك، هناك أبحاث محدودة حول هذه العلامات في الترجمة الفورية من الإنجليزية إلى الكردية. تملأ هذه الدراسة هذه الفجوة من خلال استكشاف كيفية التعامل مع علامات الخطاب الاستدلالي في الترجمة الفورية من الإنجليزية إلى الكردية من خلال تحليل خطابين: قانوني وعلمي، مع 10 ترجمات شفوية فورية أنتجها خمسة مترجمون فوريون أفراد محترفون. ولفحص البيانات، استخدم الترميز النوعي لتحديد علامات الخطاب الاستدلالي، واستخدم تحليل مقارن للتحقيق في الاستراتيجيات التي يطبقها المترجمون الفوريون لتقديم علامات الخطاب الاستدلالي. تكشف النتائج أن الاستراتيجيات السائدة كانت التكافؤ المباشر، خاصة للعلامات المتكررة والمعترف بها، بينما طُبقت إعادة الصياغة والاستبدال للعلامات التي لا تحتوي على مرادفات مباشرة ثابتة. كان الحذف نادراً، حيث لم يُسجل سوى حالتين. تُبرز النتائج أهمية تدريب المترجمين الفوريين على إدراك الوظائف البراغماتية لعلامات الخطاب، والاعتماد على استراتيجيات مناسبة لترجمتها، مما يُقدم انعكاسات على تدريب المترجمين الفوريين ودراسات الخطاب.

**الكلمات المفتاحية:** الترجمة الإنجليزية الكردية، علامات الخطاب الاستدلالي، الترجمة الفورية، استراتيجيات الترجمة

