



## Evaluating Accuracy of DeepSeek Application Translating for Conjunctions in English Language into Arabic Language

تقييم دقة ترجمة تطبيق ديب سيك لحروف العطف في اللغة الانكليزية الى اللغة العربية

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### Abstract

This research aimed to evaluate the accuracy of DeepSeek application translating for conjunctions from English language into Arabic language. the researcher chose 6 sentences contain on correlative conjunctions and 7 sentences contain on subordinate conjunctions randomly and translated them by DeepSeek application translating and evaluated them by Arabic language jurors. The results of the research revealed that average of percentages for DeepSeek application translating accuracy for correlative conjunctions is (14.66%) while subordinate conjunctions is (85.72%). So, all of English teachers, translators and learners have to use DeepSeek application translating for translating correlative conjunctions cautiously and depending on Arabic language jurors advices while subordinate conjunctions well.

**Keywords:** *AI Artificial Intelligence , MT Machine Translation*

### Chapter One

#### 1-0 Introduction:

The impact of Artificial Intelligence (AI) on literary translation has been revolutionary, dramatically accelerating turnaround times, improving first-pass accuracy, and widening access to professional-level tools. This field, which involves translating written works while preserving their original style, tone, and meaning, has historically been a difficult and complicated process that demands extensive cultural and linguistic knowledge. Nevertheless, the development of AI and natural language processing has led to the emergence of machine learning algorithms that have, to a large extent, reshaped literary translation (Deng & Liu, 2018). AI translation tools have significantly improved and produced translations comparable to those created by humans in terms of accuracy and fluency (Dali, 2025).

Despite this progress, AI tools still grapple with complex literary nuances, raising important questions about their effectiveness in contexts such as poetry, drama, and fiction. In response, the current study adopts an exploratory approach aimed at



comparatively evaluating two prominent AI translation systems, DeepSeek R1 and ChatGPT 4.5, in the specific context of literary texts translated between Arabic and English. By conducting both quantitative and qualitative analyses, this research seeks preliminary insights into the strengths and limitations of these tools, emphasizing the exploratory nature of the evaluation and underscoring the necessity for further comprehensive studies. Accordingly, this study aims to evaluate the performance of DeepSeek R1 and ChatGPT 4.5 in Arabic-English literary translation, with particular attention to their ability to capture cultural, stylistic, and semantic nuances (ibid).

### **1-1 Problem of the Research:**

According to several kinds of MT applications available on worldwide web nowadays. This research tries to detect whether there is accuracy for DeepSeek application in translating conjunctions in English language and shows the percentages of the accuracy to avoid translating randomly and getting benefit from time in class and cost.

### **1-2 Purpose of The Research:**

The main purposes of this research are to:

- Evaluating the accuracy of DeepSeek application translating for correlative conjunctions in English language into Arabic language.
- Evaluating the accuracy of DeepSeek application translating for subordinate conjunctions in English language into Arabic language.

### **1-3 Significance of the Research:**

There are many researchers classified conjunctions into two types: correlative and subordinating conjunctions. This study focuses on translating correlative conjunctions by DeepSeek application. correlative conjunctions are: either---or, not only---but also, neither---nor, both---and, whether---or, as---as and subordinate conjunctions are: after, because, if, although, so that, than, wherever. This study focuses on the accuracy of DeepSeek application in translating correlative and subordinate conjunctions with comparing of survey of human translators. This study shows the percentages of the DeepSeek application translating accuracy to avoid translating randomly and inaccurately and getting benefit and time in class.

### **1-4 Questions of the Research:**

This research aims to answer the following question:

- 1- Is DeepSeek application accurate in translating correlative conjunctions in English language into Arabic language ?
- 2- Is DeepSeek application accurate in translating subordinate conjunctions in English language into Arabic language ?



### **1-5 Limitations of The Research:**

- 1- This research is restricted to DeepSeek application .
- 2- This research is restricted to correlative conjunctions
- 3- This research is restricted to subordinate conjunctions

### **1-6 Samples of the Research:**

The researcher chooses English sentences which contain on conjunctions. It focuses on translating correlative and subordinating conjunctions by DeepSeek application and evaluate the translation by Arabic language experts of to detect the accuracy of the translation.

The researcher chooses DeepSeek application because it is free, cheap and available online.

### **1-7 Instrument of the Research:**

This research focuses on translating English sentences which contain on conjunctions by DeepSeek application. The researchers chooses different sentences which contain on correlative conjunctions and subordinate conjunctions and translates them by DeepSeek application to evaluate the scope of accuracy the mentioned application by Arabic language experts.

### **1-8 Validity of the Research:**

In order to establish validity of the research, the analysis submits to Arabic language experts for evaluation and suitability purposes. Accordingly, their comments take into consideration and their recommendations follow.

### **1-9 Reliability of the Research:**

To establish the reliability of the instruments, this research covers English sentences and focuses on correlative and subordinate conjunctions. These conjunctions are translated and analyzed by DeepSeek application. In the data analysis section, outcome DeepSeek applications translating and submitted to Arabic language experts to evaluate talks to explore any possible significant differences in the output of DeepSeek application in relation to correlative and subordinating conjunctions.

### **1-10 Variables of the Research:**

The research has the following variables:

- **The Independent Variable of the Study is:**
  - 1- DeepSeek application
- **The Dependent Variable of the study is:**
  - 1- Correlative conjunctions
  - 2- Subordinate conjunctions



## Chapter Two

### Literature Review

#### 2-0 Artificial Intelligence

Artificial intelligence (AI) is starting to revolutionize English articulation and talking. AI powered speech recognition technologies have displayed essential in helping students in enhancing their speaking performance. These programs, that are software applications or systems that use AI algorithms and machine learning, changing spoken language into text. They are ability to examine and understanding human speaking, in order to able devices or applications to reply to voice orders, transcribe audio registration, or provide real time, speech-to-text services (Dennis, 2024).

AI technology usage has become more public in language teaching. An important number of researches have been made on how AI-powered speech recognition systems enhance speaking and articulation. AI-based articulation feedback has been explained by Garca-Sánchez and colleagues (2020) to improve non-native English speakers' articulation. Similar raises in language learners' speaking fluency were supervised by Zou and colleagues (2021) when they employed AI-powered speech recognition.(ibid).

#### 2.1 Artificial Intelligence Translation

Considering the area of translation education. The main concentrate is on how AI and MT may be employed in translation practicing systems for better planning for future job workers. In spite of the employ of computer-assisted technology has raised in formed classroom regulations, the researchers focus on learners stay facing an earnest dearth of substantial stimulus in AI-driven self-understanding circumstances. Their main aim was to discuss the vital impacts of AI on translation learning. It focuses on the importance of making principled approaches, thinking decisive about the conditions that happen, and standing with academic points of views to effectively involve AI at higher learning. Their research concentrated on the adjustable nature of MT and its essential to revolutionize the translation making. Even though AI and MT have good essential for development, the researcher agreed that it will be a long period of time before human translation can be fully involuntary. This explains that the ever-growing worth of formal learning and practicing in anticipating translators. Their research has increased significant questions focusing on the role of technology in learning and its capability of replacing instructors or empower learners (Mohammed et al, 2024)

A many number of students employing smartphones and internet machine translation applications to react across language borders, decreasing the distances between linguistic programs and cultures. Yang thus pointed that, with the advancement of spontaneous translation instruments, a new translation principle called as artificial intelligence translation has shown, in addition to scenarios building in new machine translation applications to offer greater correlation to human translators; so, their



contender discuss that there is still an invincible skill difference between the two operations (Moneus, sahari, 2024).

## 2.1 DeepSeek Application

DeepSeek application is a new field of AI. In modern of the world, everything is communicated to AI. But most of the learners employ DeepSeek to enhance their English language performances. As many of us English language is our second language and it is a very familiar condition that our second language conquest is lower than our first language conquest. So English learners requirement to pick additional attention when learning English. DeepSeek the new sample of AI has ability to revoke them out from this circumstance. It is very significant to learn English today, because it's not only advantageous for academic outcome but also it assesses to get a great work after completing the study. In spite of Bangladesh country is a multilingual, but Bangla is the first language there. So in all educational levels students learn in Bengali language but when the students got acceptance in universities they change into English medium curriculum. That is a very difficult case for students, most of the students suffer from lack of confidence as the students do not stay connection with their lectures. DeepSeek is guider for them. It has a good essential for replying explanations, questions and also examining translations (Anastasiya, 2025 as cited in Jeba, 2025).

## 2-2 English Grammar

Grammar made an essential function in English language learning with a broad diversity of supply proof to confirm the advantages of grammar learning. For example, Norris and Ortega (2000) said that an comprehensive examine of forty nine studies and reveal that a concentrate on grammar leads to the overall impact of language learning. Another instance is the research of Scheffler and Cinciała (2011) focusing on the methods that the educating of grammar has ability to enhance second language acquisition Because grammar forms ease the realizations of a student's grammar productivity, grammar structures create a participation to a feel of confidence in addition to the general educating operation of the students (Scheffler & Cinciała, 2011). Another recent research wrote by Jones, Myhill, and Bailey (2013) tests the relation between grammar and writing. From their works, a good impact of a style of grammar teaching on students' writing is found out (Ly 2024)

## 2-3 Parts of Speech

Each language contains on its main parts that are named items. Like wall is built by bricks; language is created by items. First researchers will understand about an item (khan 2022).

An item is a speech voice or a strung of voices having a special meaning for a concept, topic or thought and has a written or spoken structure. In English language item is formed by a lonely item (e.g., 'he'), he is a boy, or by strung of items(e.g., Ali, name of a person) Ali is a boy. Morphology, a part of linguistics, treats with the form of items



whereas researchers study under that structures modern items are formed, how researchers specified a meaning to an item? How an item works in a proper text? How to spell an item?(ibid)

## 2-4 Conjunctions

There are eight parts of speech in English including conjunction. A conjunction, as said by Malmkjær, is explained as an indeclinable part of speech that connects other parts of speech, together with that it has importance, by dividing their relations or meaning. According to Leung, conjunctions have been explained under many names and have drawn much care from many scientists in the area of English/Linguistics over time: Halliday and Hasan dealt with them as “linguistic tools that make cohesion”, while Sanders and Maat explain them as a “semantic relationship that is explicitly signed” According to Er, as cited by Aidinlou and Reshadi, conjunctions are a “semantic strung between two clauses”. Moreover, Leung cites four scientists in this consideration. These are: Schiffrin, who deals conjunctions as “discourse signs”, Fraser regards them as a “pragmatic type of lexical terms”, or easy, “pragmatic signs”, while Rouchota shows that conjunctions “encode not similar meanings and that they have ability to be an execution tool”, and finally, Caron imagines conjunctions easy as being employed “to explain several types of relationships between sentences” (Unubi 2016).

**2-4-1 Correlative Conjunctions:** the researcher shows that correlative conjunctions are pair of items that do with each other as a conjunction. In another hand, Ed explains that correlative conjunctions are pairs of items that do together to unify other items or clauses in a sentence. The pair of items must be employed with each other to have the intentional meaning. Torres claimed that correlative conjunctions have the same structures as coordinating conjunctions. Both of them do in the same method, exception that correlative conjunctions employed in couples. The correlative conjunctions are both\_\_and, not only\_\_but also, either\_\_or, and neither\_\_nor.( Savitri et al. 2022)

## Chapter Three

### 3.1 Methodology of the Research

The researcher chose 6 sentences contain on correlative conjunctions and 7 sentences contain on subordinate conjunctions randomly, then translated them by DeepSeek application and submitted to Arabic language jurors to give their opinions in the accuracy of translation and evaluating the accuracy of translation. The tables below show the sentences that contain on conjunctions and their translation by DeepSeek application.

**Table 1: DeepSeek Application Translating for Correlative Conjunctions**

Correlative Conjunctions	The sentence	DeepSeek Translation	Acceptable Translation
Both..and	<u>Both</u> the students	كلا الطلاب	حضر الطلاب



	<b>and</b> the teachers attended the ceremony	والمدرسين حضر الحفل	والمدرسون جميعهم الى الحفل
Not only..but also	She is <b>not only</b> intelligent <b>but also</b> very hardworking	هي ليست فقط ذكية بل ايضا مجتهدة جدا	الطالبة ليست ذكية فقط بل مجتهدة ايضا
Either..or	You can have <b>either</b> tea <b>or</b> coffee	يمكنك شرب الشاي او القهوة	✓
Neither..nor	<b>Neither</b> my brother <b>nor</b> my sister lives in Baghdad	لا اخي ولا اختي يعيشان في بغداد	لا يعيش اخي ولا اختي في بغداد
Whether..or	<b>Whether</b> you win or lose you should proud your efforts	سواء فزت ام خسرت يجب ان تفخر بجهدك	يجب ان تفخر بجهدك سواء اخسرت ام فزت
As...as	Physics is <b>as</b> important <b>as</b> chemistry for engineer	الفيزياء بنفس اهمية الكيمياء للهندسة	الفيزياء اهميته كالكيمياء للهندسة

The table above shows DeepSeek application translating for correlative conjunctions from English into Arabic. 6 sentences: 5 wrong and 1 correct according to Arabic language jurors. Wrong percentage is (83.34%) and correct percentage is (14.66%).

**Table 2: DeepSeek Application Translating for Subordinate Conjunctions**

Subordinate Conjunctions	The sentence	DeepSeek Translation	Acceptable Translation
After	We left <b>after</b> the movie	غادرنا <b>بعد</b> ان انتهى الفلم	✓
Because	She left early <b>because</b> she wasn't feeling well	غادرت مبكرا <b>لأنها</b> لم تكن تشعر بتحسن	✓
If	<b>If</b> it rains, we'll cancel the trip	<b>إذا</b> هطلت الامطار, فسوف نلغي الرحلة	✓
Although	<b>Although</b> he's young, he's very mature	<b>على</b> الرغم من انه صغير السن, الا انه ناضج جدا	✓
So that	She whispered <b>so that</b> no one could hear	همست <b>لكي</b> لا يسمعها احد	همست <b>كي</b> لا يسمعها احد
Than	He runs faster <b>than</b> I do	هو يجري <b>اسرع</b> مني	✓



Wherever	Sit <u>wherever</u> you like	اجلس في اي مكان تشاء	✓
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The table above shows DeepSeek application translating for subordinate conjunctions from English into Arabic. 7 sentences: 1 wrong and 6 correct according to Arabic language jurors. Wrong percentage is (14.28%) and correct percentage is (85.72%).

### 3.2 Design of the Research

This researcher used a descriptive analytical method to evaluate the accuracy of DeepSeek application translating for correlative conjunctions and subordinate conjunctions from English language into Arabic language.

## Chapter Four

### 4.0 Statistical Analysis

This chapter contains on answers for the hypothesis of the research according to percentages of the accuracy of DeepSeek application translating for English correlative and subordinate conjunctions in English language into Arabic language according to Arabic language jurors as shown below:

1- Is DeepSeek application accurate in translating correlative conjunctions in English language into Arabic language ?

**Table 3: DeepSeek application translating analysis for correlative conjunctions from English language into Arabic language**

Category	Acceptable	Unacceptable	Accuracy rate
Both..and		✓	14.66%
Not only..but also		✓	
Either..or	✓		
Neither..nor		✓	
Whether..or		✓	
As...as		✓	

2- Is DeepSeek application accurate in translating subordinate conjunctions in English language into Arabic language ?

**Table 4: DeepSeek application translating analysis for subordinate conjunctions from English language into Arabic language**

Category	Acceptable	Unacceptable	Accuracy rate
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After	✓		<b>85.72%</b>
Because	✓		
If	✓		
Although	✓		
So that		✓	
Than	✓		
Wherever	✓		

#### 4.1 Discussion of The Research

According to the percentages of results of the research. The accuracy of DeepSeek application translating for conjunctions as the follow:

Correlative conjunctions	percentages	Subordinate conjunctions	percentages
Both..and	0%	After	100%
Notonly..but also	0%	Because	100%
Either..or	100%	If	100%
Neither..nor	0%	Although	100%
Whether..or	0%	So that	0%
As...as	0%	Than	100%
Both..and	0%	Wherever	100%
		After	100%
	14.66%		85.72%

The table above shows the accurate answers for DeepSeek application translating for conjunctions in English language into Arabic language according to Arabic language jurors. All sentences of correlative conjunctions that translated by DeepSeek are unacceptable except (either.. or) and all sentences of subordinate conjunctions that translated by DeepSeek are acceptable except (so that).

### Chapter Five

#### 5.0 Conclusions

The researcher concluded that the average of percentages for accuracy of DeepSeek application translating from English language into Arabic language according to correlative conjunctions is 14.66% and subordinate conjunctions is 85.72% which means the English learners have to use DeepSeek application translating awareness according to correlative conjunctions and consultant Arabic language specialists to avoid ambiguous and unclear translations and have to use DeepSeek application translating according to subordinate conjunctions well in order to get benefits, costs and time.



## 5.1 Recommendations

English teachers, translators, researchers and all English learners have to use DeepSeek applications translating carefully. They should take consultants from Arabic language specialists to make sure from the most acceptable translation for correlative conjunctions.

They have ability to use DeepSeek application translating in translating subordinate conjunctions well because DeepSeek application translating for subordinate conjunctions more accurate than correlative conjunctions.

## 5.2 Future Research Directions

All English researchers who specialists in these fields have to focus on other artificial intelligence applications such as ChatGPT, Gemini and perplexity to translate correlative conjunctions and evaluate them by Arabic jurors. They can also search in translation other parts of speech by DeepSeek application and evaluate them by Arabic language jurors.

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