



**An-Najah National University  
Faculty of Graduate Studies**

# **ASSESSMENT OF INSTAGRAM TRANSLATION OF NEWS FEEDS**

**By  
Mahmoud Rashead Abuthaher**

**Supervisor  
Prof. Abdel Karim Daraghme**

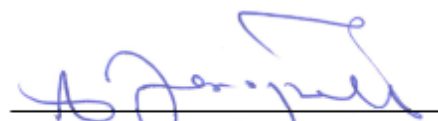
**This Thesis is Submitted in Partial Fulfillment of the Requirements for the Degree  
of Master in Applied Linguistics and Translation, Faculty of Graduate Studies,  
An-Najah National University, Nablus, Palestine.  
2025**

# ASSESSMENT OF INSTAGRAM TRANSLATION OF NEWS FEEDS

By  
Mahmoud Rashead Abuthaher

This Thesis was defended successfully on 09/04/2025 and approved by:

**Prof. Abdel Karim Daraghmeh**  
Supervisor



Signature

**Dr. Jamal Nafe'**  
External Examiner



Signature

**Dr. Rami Qawariq**  
Internal Examiner



Signature

## **Dedication**

To the blessed souls of my father and mother ... May your spirits rest in peace.

To my soul mate and companion... my wife. Your patience and support have been my source of motivation. This is as much yours as it is mine.

To the little dreamers, curious minds, and the tiny hands... my sons and daughters. You are the future, and you can shape your world.

To my sisters and brothers. Your love and shared laughter have been my fortress. Together, we celebrate triumphs.

To my teacher and supervisor ... Prof. Abdel Karim Daraghme. You taught me the principles of knowledge. Your wisdom and guidance have been valuable.

To the honest and innocent souls of children in Gaza, whose souls were tragically taken too soon. You broke our hearts. Your silenced laughter weigh heavily on the humanity's conscience. May your spirits inspire justice and peace.

## **Acknowledgements**

All praise and gratitude be to Almighty Allah for enlightening my path, and peace and blessings be upon Prophet Muhammad (PBUH).

I sincerely extend my appreciation to my supervisor Prof. Abdel Karim Daraghmech for his support, patience, and insightful direction. I am also grateful to the examining committee members, Dr. Rami Qawariq and Dr. Jamal Nafe' for their valuable comments and suggestions.

Finally, I would like to express my heartfelt gratitude to all my English teachers in the English Department at An-Najah National University who really contributed in enriching my knowledge in applied linguistics and translation studies. Thanks also goes to my colleagues and friends who contributed in bringing this thesis into fruition.

## Declaration

I, the undersigned, declare that I submitted the thesis entitled:

# ASSESSMENT OF INSTAGRAM TRANSLATION OF NEWS FEEDS

I declare that the work provided in this thesis, unless otherwise referenced, is the researcher's own work, and has not been submitted elsewhere for any other degree or qualification.

**Student's Name:**

**Mahmoud Rashead Abuthaher**

---

**Signature:**

*Mahmoud Abuthaher*

---

**Date:**

**09/04/2025**

---

## Table of Contents

Dedication.....	iii
Acknowledgements.....	iv
Declaration.....	v
Table of Contents.....	vi
List of Diagram.....	viii
Abstract.....	ix
Chapter One: Introduction and Literature Review .....	1
1.1 Background.....	1
1.2 Research Objectives.....	4
1.3 Research Questions.....	4
1.4 Literature Review .....	5
Chapter Two: Methodology.....	8
2.1 Framework.....	8
2.2 Data Collection .....	8
2.3 Statistical Analysis Methods.....	9
Chapter Three: Data Analysis.....	10
3.1 Syntactic Variations.....	10
3.1.1 Grammatical Relations: Prepositional Letter $\hookrightarrow$ [baa].....	10
3.1.1.1 The Comitative Case (Accompaniment).....	11
3.1.1.2 Adhesion .....	17
3.1.1.3 Instrumentality .....	18
3.1.1.4 Causality .....	19
3.1.1.5 Oath-taking .....	21
3.1.1.6 Quid pro quo (Exchange something for something).....	22
3.1.1.7 Contextual / Locative.....	23
3.1.1.8 Emphasis.....	24
3.1.1.9 Section Summary .....	26
3.1.2 Arabic Diacritics .....	26
3.1.3 Summary.....	34
3.2 Automated Translation of Metaphor.....	35
3.2.1 Dead Metaphors.....	36
3.2.2 Cliché Metaphors .....	40
3.2.3 Stock metaphors.....	43

3.2.4 Adapted Metaphors .....	49
3.2.5 Recent Metaphors .....	53
3.2.6 Original Metaphors .....	59
3.2.7 Summary .....	63
Chapter Four: Conclusion and Results .....	65
References.....	68
الملخص .....	ب

## List of Diagram

Diagram 1: Instagram Translation: “Elon Musk toured the Israeli prime minister ...” .	13
Diagram 2: Correct translation: “Elon Musk went for a tour with the Israeli prime minister ...” .....	13
Diagram 3: Instagram Translation: “I was very pleased to visit a Palestinian delegation...” .....	15
Diagram 4: Dorrect translation: “I was very pleased by the visit of a Palestinian delegation ...” .....	15
Diagram 5: Instagram Translation: “He broke his arms and got a beating yesterday” ..	29

# **ASSESSMENT OF INSTAGRAM TRANSLATION OF NEWS FEEDS**

**By**

**Mahmoud Rashead Abuthaher**

**Supervisor**

**Prof. Abdel Karim Daraghmeh**

## **Abstract**

The present study assesses the Instagram's automated English translation by concentrating on the translation accuracy of Arabic syntactic patterns and various types of metaphors. The research study focuses on textual coherence of selected Instagram's informative, expressive, and operative texts, and measures levels of equivalence of texts containing the different types of metaphors between the source text and the target text. It is observed that the Instagram translation model errs at the level of syntactic patterns related to agents reversing and Arabic diacritics. It is also found that whenever the dataset lacks sufficient bilingual corpora, the machine encounters serious drawbacks in the translation. However, cases of translation prove that the Instagram translation model successfully produces communicative translations whenever it relies on rich parallel texts in the dataset. Self-attention by the Instagram model is also noted where it improves cases of translation in the second time of testing the translation quality but does not generate further enhancements even if the translation outcome still incurs serious translation issues. These two aspects will explore insights into future translation studies on machine translation.

**Keywords:** Instagram; machine translation; syntactic patterns; metaphors

# Chapter One

## Introduction and Literature Review

### 1.1 Background

AI translation tools with no exception have been developing quite well since the emergence of technology in recent years. Users nowadays can have instant machine translation at hand whenever they use apps, software programs, and platforms such as google translate, Microsoft translator, DeepL etc... AI translation typically uses algorithms by analyzing the content (the source text) into segments and then generating it into translation using a set of rules and patterns. More importantly, emerging technologies of AI translation tools are now being developed and will provide smart enough and promising solutions in the future to several types of texts including idiomatic expressions, cultural understanding, and complex content (Ahmad & Khasawneh, 2023, p.9).

The social media application - Instagram is one of the Meta Family of Apps that millions of people are using to explore news feeds, advertise products, share experiences and facts, and interact with people around the world. This technology offers a massive platform of daily life events. The posts include pictures and texts as well as their translations. Instagram provides an instant AI translation feature for its users. Its surfers can translate any post with just one click on the “*see translation*” button, and they get the translation immediately.

Meta AI has built a single AI model, the NLLB-200 model (No Language Left Behind) to translate across 200 languages including Arabic, and the company also created an evaluation dataset benchmark, FLORES-200, to measure the NLLB-200’s performance in each language (Meta, 2024). This sequence-to-sequence multilingual machine translation model is based on the transformer encoder-decoder architecture (Team et al., 2022).

The Meta AI team published research explaining that the accuracy of the NLLB-200 model in language translation is the first of its kind. It open-sources models capable of delivering high quality translations using data from three sources: public bitext, mined bitext and data generated using backtranslation. The model starts processing by gathering

diverse datasets to align a text in one language with its equivalent translation in another language, and this is the mined bitext data. Then, the model proposes the generated data at a monolingual pace i.e. within a single language to enhance translation indirectly using techniques like backtranslation (Team et al., 2022).

This mechanism is illustrated by processing the translation at four paces. When a user on Instagram inputs a text, the model identifies the language and prepares the text to be compared with English language since English is always the target language in the process. In the encoding process, the input text is segmented into smaller units such as characters, words, and phrases converting them into numerical embeddings. Then, the attention mechanism uses layers to concentrate on the most relevant parts of the generated text with their relevant counterparts to generate the output. Finally, the model generates the translated text as one part in the target language (Team et al., 2022).

More significantly, the model ensures accuracy and enhances the translation quality by post-processing the translated text in an evaluation and feedback process using the Flores benchmark of evaluation dataset by relying on standardized evaluation metrics like BLEU as well as the human evaluation technique called Mixture of Experts *MoE*. This is a neural network architecture where human experts are advised to handle subsets of languages. For example, trained experts are tailored to handle datasets to emphasize Arabic and its textual structure (Team et al., 2022).

Concerning Arabic texts, users on Instagram tend to write texts at the level of one or two sentences, or they can expand their writings into full paragraphs. These texts are normally structured through the use of the seven standards of textuality in any language, which are cohesion, coherence, intentionality, acceptability, informativity, situationality and textuality. These significant standards may appear differently on social media platforms such as Instagram. For example, using a picture with a written text in a certain situation expresses an intended message by the Instagram user for the audience, therefore, if translation fails to transmit any level of textuality especially the first two standards, the generated translation product by the machine would not provide a clear and close effect in the TT as of that found in the ST.

Arabic texts contain cultural terms, images, Arabic diacritics, and syntactic structures. Professional human translators are aware of these features, and they often use indirect translation to deliver them into English. Literality and word to word correspondence by machine translation is not always a successful strategy when transferring unseen linguistic features from the source text. Moreover, lexical choice and correct grammar are highly important to maintain textuality standards. The levels of equivalence such as word to word equivalence and textual equivalence have not been observed in the Instagram translations from English into Arabic due to some recurrent errors at the level of syntax and the metaphorical language in the Instagram translation model.

Recent studies have shown non-professional translation quality in the Instagram app. Mirzaee and Parham (2017) indicate weaknesses in the translation quality of the Instagram when compared to print media. The comparison showed that the definition of translation quality in Instagram is different from its traditional conceptualization in print media in five aspects. The merit/demerit binary in Instagram is no longer taken into account. Second, the evaluators in Instagram are non-professional. Third, evaluators of printed translations publish commentaries, whereas the evaluation tool used in Instagram is likes, views, follows, shares, saves, etc. Fourth, professional evaluation of Instagram ST-TT comparison always occurs. Finally, the type of assessment in Instagram is only quantitative research. The researchers concluded that these indicators seem to give rise to a redefinition of translation quality in online social media.

Purwaningsih et al. (2020) focus on revealing the translation techniques used in the Instagram “*see translation*.” The researchers have found out that machine translation in Instagram do not perform cultural-bound terms i.e., contextual knowledge as the human translator would do. The study results show that there are three techniques applied by the Instagram translation feature namely literality, borrowing, and particularization. The study recommends that post-editing process by human translation should be involved to make the translation more acceptable, and that the machine translation should be enriched with more contextual linguistic database to provide better translation products.

Lin (2023) addresses the history of machine translation, the technical fears, and the future of human and machine translation. The study concludes that “*the relationship between*

*machine translation and human translation should be more balanced.*” In other words, in the era of artificial intelligence, we should realize that technological progress is inevitably linking machine translation with human translation. Therefore, “*translators should use technology to discover the truth while retaining their subjectivity and sense of value,*” he maintains.

## **1.2 Research Objectives**

The present study contributes to assessing Instagram’s automated translation model by concentrating on the translation accuracy of two linguistic aspects, which are the translations of the syntactic patterns and the metaphors. It assesses the Instagram translation model’s ability to deal with syntactic patterns when translating Arabic texts, focusing on challenges related to grammatical structures of agents reversing issues as well as the Arabic diacritics. The study additionally examines how effectively the Instagram translation model maintains the metaphorical meaning, exploring the six types of metaphors: dead, cliché, stock, adapted, recent, and original. Through this dual focus, the study aims at identifying specific areas of strengths and weaknesses in the Instagram translation model, and provides support for AI developers to enhance the machine translation of Instagram and its application when dealing with Arabic complex texts.

## **1.3 Research Questions**

1. How effective is the Instagram automated translational model in providing accurate translations?  
  
What types of errors occur in the syntactic patterns in Instagram translations?  
  
How accurately does Instagram translation model handle metaphors and figurative language?
2. Does Instagram translation overfit or underfit with the data? or is it the insufficiency of the dataset?
3. To what extent does the Instagram translation model generate enhancements on the translation quality?

#### **1.4 Literature Review**

There is scarcity of research studies about the Instagram translation model. Additionally, Instagram AI translation model is an emerging field of technology and keeps developing over time, therefore, it is crucial to continually evaluates its performance and accuracy. However, several studies have pointed out errors that are generated via the Instagram translation automated system.

Putri & Setiajid (2021) explains important differences between translations generated by Instagram and the human translation. These differences occur at the lexical and grammatical choices between the SL and TL which often result in a low level of accuracy, acceptability, and readability in the target language. These semantic and syntactic errors, sometimes serious ones, hinder the textual coherence between the two texts. In other words, the translation product by the Instagram translation model in certain cases has not professionally approximated the closest effect as that of the source text.

Moreover, literal translation cannot always be an effective strategy to transmit cultural-bound terms simply because one to one correspondence may not exist in the target language. Purwaningsih et al. (2020) names a few techniques used by the Instagram translation model including literal translation, borrowing, and particularization. According to this study, language and culture are inseparable aspects in the translation activity such as the translation of clothes embroidered with symbols representing messages of core values in the local culture; therefore, Instagram use of literal translation does not produce high quality renderings when it comes to local culture-loaded excerpts.

Professional translation requires using different strategies to produce accurate and fluent translations that can have the effect as closer as in the source text, however, Swarniti (2022) concludes that the Instagram translation technique only uses word for word translation 2%, literal translation 40%, faithful translation 1%, adaptation 1%, and communicative translation 56%, and skips three major strategies which are semantic, free and idiomatic translations. Therefore, the focus is basically on the form and content of the text and does not go beyond any further especially when some pragmatic use of language is used for a specific intention.

At the grammatical units, V. Putri et al. (2019) observes accuracy variation issues in the noun phrase when translated into the Indonesian language. A significant finding in this study is that the translations obey the target text rules in constructing noun phrases. The study observes that the Instagram translation technique is to some extent successful in translating short phrases which are free of any ambiguity in terms of cultural values, hidden syntactic structures, or unseen morphological features. However, when hidden morphological or syntactic changes in Arabic word combination happens in the diacritical marks, a situation calls for attention when assessing Instagram translation that the model does not capture these changes and therefore the translation will be flawed.

Compounding in languages imposes challenges to translation especially with the different forms of hyphenated compounds. Adlina (2020) finds out that the Instagram translation feature uses three strategies when translating hyphenated compounds, namely literal translation, unit shift, and explicitness change, and it is concluded that the Instagram misses translating these compounds by 22% of the total data given in the research.

Beautified and poetic language for literary texts is troublesome for Instagram's translation. Fakihi et al. (2024) examines the quality of Instagram's neural machine translation of literary texts from Arabic into English, finding out that the Instagram translation fails at translating 90% of the data from three different aspects: accuracy, fluency and style. Hence, the intended message and the sense of creativity that are implied in the source text were falsely transferred into English.

Instagram translation is more understandable when direct, formal language is used in the captions. Febriyanti & Salsabila (2022) rely their study on questioning Arab students, studying at Indonesian universities, about their experiences while using the Instagram translation feature. The study reveals that the best accepted translations are the ones written in standard language while other forms of language are understandable, but uncommon and do not usually fit the context. Therefore, it has not been able to measure whether these translations are accurate or not, resulting in unauthentic translation quality because of doubt.

Lexical entries, words with meaning, are extremely important for the translation process to generate accurate translation of the source text. Any error while translating these words could lead to major failure in transmitting the essence of the message. Nadilla & Lubis

(2023) find out that the Instagram translation contains three types of errors: missing words, incorrect words, and unknown words. According to their study, these errors indicate that the Instagram machine translation cannot represent the target language and that the users ought to filter the translations before receiving them as genuine information.

When it comes to the type of texts being translated, it is often argued that micro errors at the level of morphological, lexical and syntactic features would lead to violation in transmitting the overall intended message as well as any coherent units of thought stated or implied in the source text. KOÇER GÜLDAL & İŞİSAĞ (2019) study on Google Machine Translation shows micro-level errors that cannot convey the intentionality and the textual coherence imposed in the SL when word-for-word correspondence is used.

Studies on more advanced machine translation programs have tackled the textuality standards. Abdi (2021) conducted an analytical text-type study on “google translation” assessing the quality of semantic adequacy, fluency and understandability of translated texts by machine translation. The study shows low-quality and incomprehensible translations among the informative, expressive and operative texts between the SL and TL texts. The study concludes that *“the main shortage of Google Translate was in the translation of statements that contained implied meanings, such as operative texts and idioms”* (Abdi, 2021, p. 30).

Most translations occur in highly uncontrolled conditions by users around the world. In such situations, new emerging sentences with implied cultural values or unseen morphological or syntactic features are translated by users; therefore, studying these situations, like the present study is doing, would lead to significant results in the translation quality of the Instagram translation model. This would make a promise for detecting errors and translation gaps, and also suggest solutions in dealing with Arabic instances.

## **Chapter Two**

### **Methodology**

#### **2.1 Framework**

This descriptive and evaluative study is mainly based on translation quality assessment. Since the translation of Instagram posts contain errors at the level of syntax, lexis, images, and culture, the study picks up two aspects to evaluate the translation quality of Instagram. The first chapter deals with variations at the syntactic patterns. Reiss's text-type model (1971) was adopted to measure the textual coherence (clarity and fidelity) as well as the consistency of intentionality and situationality of the source text. Reiss's model also serves to show what correlation exists between the different types of texts and the translation method that the Instagram model is employing during the translation process. The second chapter features the six types of metaphors from Peter Newmark and their translations by the Instagram translation model. The study examines if the model underfits or overfits when rendering these metaphorical senses using five criteria which are clarity, accuracy, contextual relevance, emotional valence, and persuasive power to measure the functional equivalence of the metaphors. The machine is also tested three times at different time intervals to ensure whether the Instagram translation model avoids mistakes, provides complementary data and improves the translation quality. This research highlights the deficiency of the translation model used by Instagram when translating from Arabic into English, and explores insights for future translation studies on machine translation.

#### **2.2 Data Collection**

The research data are collected from posts of different Instagram accounts. Screenshots of the original text and the translation are generated. The screenshots also show the date and time of the posts on Instagram to ensure that the study reflects the state of Instagram translation at the time these texts are collected. Other screenshots capturing the same Instagram posts are also taken after a significant period of time to check whether Instagram translation model evaluates translation quality and avoids propagation of mistakes.

The posts (texts) include various metaphors, Arabic diacritics, and the grammatical relation of agent reversing, showing the recurrence of errors found in the Instagram

generated translation, which is generated upon requesting translation by users, i.e., upon clicking the “*see translation*” button.

All the data extracted from Instagram is analyzed and compared to Arabic lexical words found in *Almuajam Alwassit*, which is a famous Arabic reference dictionary, and the structure and syntactic features with reference to *Jami' al-Durus al-Arabiyyah* (The Compendium of Arabic Lessons), which is an Arabic linguistics reference book by Mustafa al-Ghalayini.

Mustafa al-Ghalayini was a famous Lebanese scholar who was actively involved in teaching Arabic language and literature, and his most famous works are still considered cornerstones in Arabic linguistic studies.

The data, containing images and metaphors, is analyzed according to Peter Newmark’s scheme of metaphor types and their suggested translation strategies. This ensures high quality translation comparison and assessment of the Instagram AI translation techniques.

### **2.3 Statistical Analysis Methods**

The posts are carefully selected because they contain images, Arabic diacritics, or the grammatical relation of agent reversing. The detected errors are divided into three categories and are classified in two chapters. The first chapter comprises two categories to highlight the deficiency of the Instagram translation model at the level of syntax. The first category encompasses a grammatical relation that is related to a case of “sentence agent reversing.” It is observed that this is a major defect in the translation model as it falsely inverts the intended sentence subject with another overt or covert agent within the same sentence. The second category focuses on the unseen Arabic diacritics by the model including “damma,” “fataha”, “Kasrah.” When words unmarked by Arabic diacritics are translated, a mistranslation results and sometimes an entire distortion of the original message. The second chapter focuses on the third category which deals with images (metaphors) related to cultural values in the source language with reference to Peter Newmark’s scheme of the six types of metaphors. A translation quality assessment has tested the translations of the metaphors at three different time intervals to measure the functional equivalence and check for further enhancements on the translation quality.

## **Chapter Three**

### **Data Analysis**

#### **3.1 Syntactic Variations**

This data analysis section explores two distinct syntactic patterns of translation flaws noted in the Instagram translation. On one hand, we deal with a special case of a significant syntactic feature in Arabic which is the letter ب [baa]. On the other hand, there are the unseen marking Arabic diacritics which also cause a major problem for the automated translation by Instagram.

By systematically analyzing these features, the present study examines the machine translation patterns, potential causes, and consequences of translation inaccuracies. Through this examination, we aim to contribute to the broader understanding of instant translation efficacy on social media and provide insights for enhancing the quality of machine translation.

##### **3.1.1 Grammatical Relations: Prepositional Letter ب [baa]**

It is commonly known that prepositions have meanings and functions; however, the translation of prepositions is not an easy task because their use is usually context dependent. It is known in translation studies that there is no full one to one correspondence between prepositions across languages, therefore, their translations must be carefully treated, otherwise, the accurate message will be flawed, often resulting in awkward translation.

In Arabic grammar, a very significant point is that Arabic particles (letters), which Arabic prepositions fall under this syntactic umbrella, are divided into operative and non-operative types. These types are distinguished based on their effect on the syntax of the sentence. Arabic prepositions are operative particles or letters, and they affect the structure of the sentence in terms of case endings, in other words, they change the grammatical state of the word that follows. They are also called “additional letters or particles” because they add or transfer the meaning of the verbs that precede them to the nouns that follow them. Therefore, in our case here examining the letter ب [baa] we must

observe that whenever we see a case of letter ب [baa] occurring and connected with nouns, we understand that there must be a communicative value implied in the sentence. (Al-Ghalayini, 2010, p. 614).

In this section, we will discuss how the machine translation of Instagram handles a significant syntactic feature in the Arabic language which is the letter ب [baa]. This prepositional letter in Arabic syntax has 13 communicative functions (Al-Ghalayini, 2010, pp. 614-616) These functions are the comitative case (accompaniment), adhesion, instrumentality, causality, oath-taking, material exchange for something, abstract exchange for something, locative, emphasis, the partitive (from something), the spatial function (over something,) transitivity function, the topical function (about something).

We will discuss these syntactic variations of the Arabic letter ب [baa] and assess how the machine translation of Instagram, which uses the NLLB model, treats these meaningful features during the translation process.

### **3.1.1.1 The Comitative Case (Accompaniment)**

A very frequent case of a recurrent grammatical error by Instagram is the reversal of the sentence agents. The intended subject of the sentence is replaced by another covert or overt noun person within the same sentence, leading sometimes to miscommunication that is fully opposite to what is intentionally implied in the source text.

We noted wrong decoding of the prepositional letter ب [baa] when it literally means accompanying somebody in doing a certain act; in many cases, the letter is attached to certain verbs in Arabic. These verbs such as "قام" and "سَعِدَ" which mean "*went for*" and "*be pleased by*" respectively depending on the context of examples 1 and 2, do not convey sense unless they are connected with other verbs in the form of action nouns by adding this letter ب [baa]. The communicative value of these verbs allows the author or the speaker to assign a communicative function as for instance to begin the communication with the subject of the sentence as the most important part of conversation, or simply to attract the readers' attention about a communicative value.

Upon examining the translation of this case, it was noted that the Instagram translational model wrongly interprets this case when there are two participants involved in the action whether the participants are covertly or overtly stated as we shall see in examples 1 & 2.

However, the Instagram source texts are informative, plain and direct statements which convey one action or event with intended communicative purpose of the message. In the case of informative texts, the accurate communication of the information load is one important factor in judging the quality of the translation. The following two examples show overt and covert participants to illustrate these cases of mistranslations:

**Example 1 (a case of overt agents: two participants in a sentence):**

1. Source Text: " قام ايلون ماسك بجولة مع رئيس الوزراء الإسرائيلي بنيامين نتنياهو اليوم الاثنين في كيبوتس ...بالقرب من الحدود مع غزة"
2. Instagram Translation as of date 28 November 2023: "Elon Musk toured the Israeli Prime Minister Benjamin Netanyahu on today Monday in Kibots near the borders in Gaza..."
3. Lost features:  
Sentence agents are reversed: the one who is touring the other gets reversed.  
Reason: verb "قام" is deleted.  
Informative text is "Situationally" incoherent with both TT and ST.  
Slight changes between the two translations, yet the same mistake is still there.
4. Correct Translation: Elon Musk went for a tour with the Israeli Prime Minister today in a Kibbutz near the borders with Gaza.

**Text Identity Card According to Text Type:**

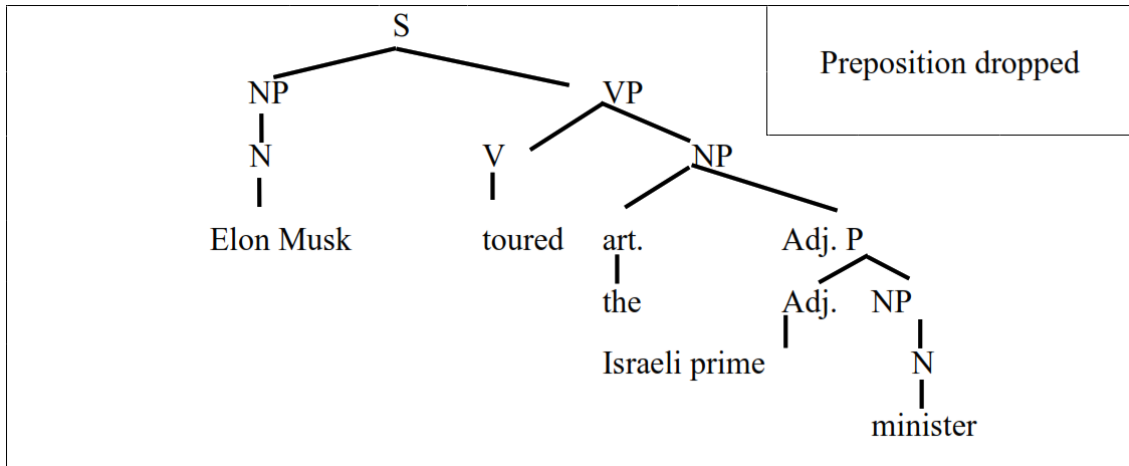
1. Context: Plain communication of facts
2. Linguistic level: Semantic-syntactic
3. Aspect of message: Topic
4. Text type: Informative

5. Translation strategy: Transmit the original information in full

The following tree diagrams 1 and 2 show major syntactic differences between Instagram translation and correct translation.

**Diagram 1**

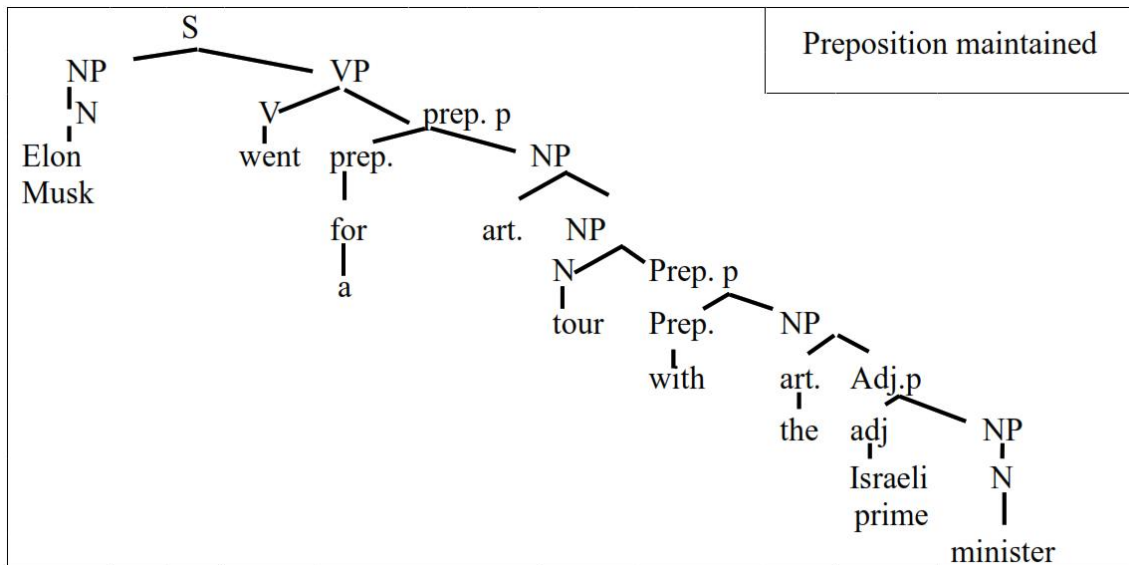
*Instagram Translation: "Elon Musk toured the Israeli prime minister ..."*



Note: S: sentence, NP: noun phrase, N: noun, V: verb, art.: article, Adj. P: adjective phrase.

**Diagram 2**

*Correct translation: "Elon Musk went for a tour with the Israeli prime minister ..."*



Note: S: sentence, NP: noun phrase, N: noun, V: verb, art.: article, Adj. P: adjective phrase, prep. p: prepositional phrase.

Example 1 shows a syntactic variation between the “Instagram translation” and the ‘correct translation,’ i.e., overt agents are reversed. This informative exposition has a rhetorical purpose: that is “*indicating that Elon Musk visited Israel to be accompanied for a tour around Gaza for some reason.*” We can see through the Instagram translation that the one who “toured” is Elon Musk, which does not subscribe to the principle of situationality, the time, place, and occasion given in the original sentence.

In comparison with the correct translation, the accompaniment function of the letter ب [baa] is maintained properly by compensating the case with an appropriate preposition in the English language, i.e. “with” which achieves closer equivalence with the source text while maintaining a well-structured media language.

**Example 2: (A Case of Covert and Overt Agents: two participants in a sentence):**

1. Source Text: سعدت جداً بزيارة وفد فلسطيني يضم ممثلين عن سلطة النقد الفلسطينية وهيئة أسواق رأس المال...
2. Instagram Translation as of date 18 October 2023: “I was very pleased to visit a Palestinian delegation including representatives from the Palestinian Monetary Authority, Capital markets Authority...”
3. Lost features: Agents reversed; translation has reversed the sentence agents or participants.
4. Correct Translation: I was very pleased with the visit of Palestinian representatives from the Palestinian Monetary Authority ...

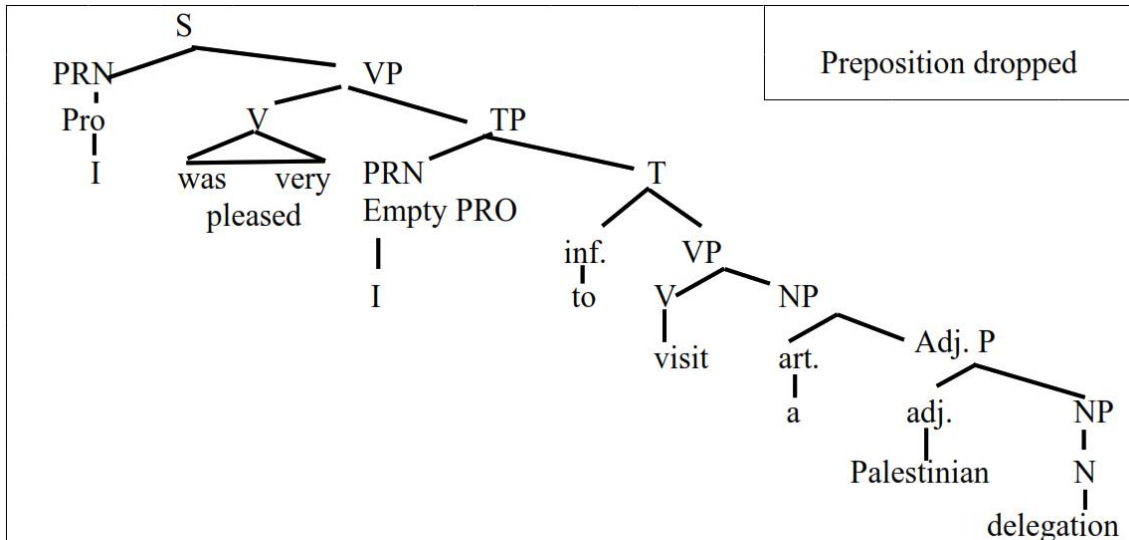
**Text Identity Card According to Text Type:**

1. Context: Plain communication of facts.
2. Linguistic level: Semantic-syntactic.
3. Aspect of message: Topic.
4. Text type: Informative.
5. Translation strategy: Transmit the original information in full.

The following tree diagrams 3 and 4 show major syntactic differences between Instagram translation and correct translation.

### Diagram 3

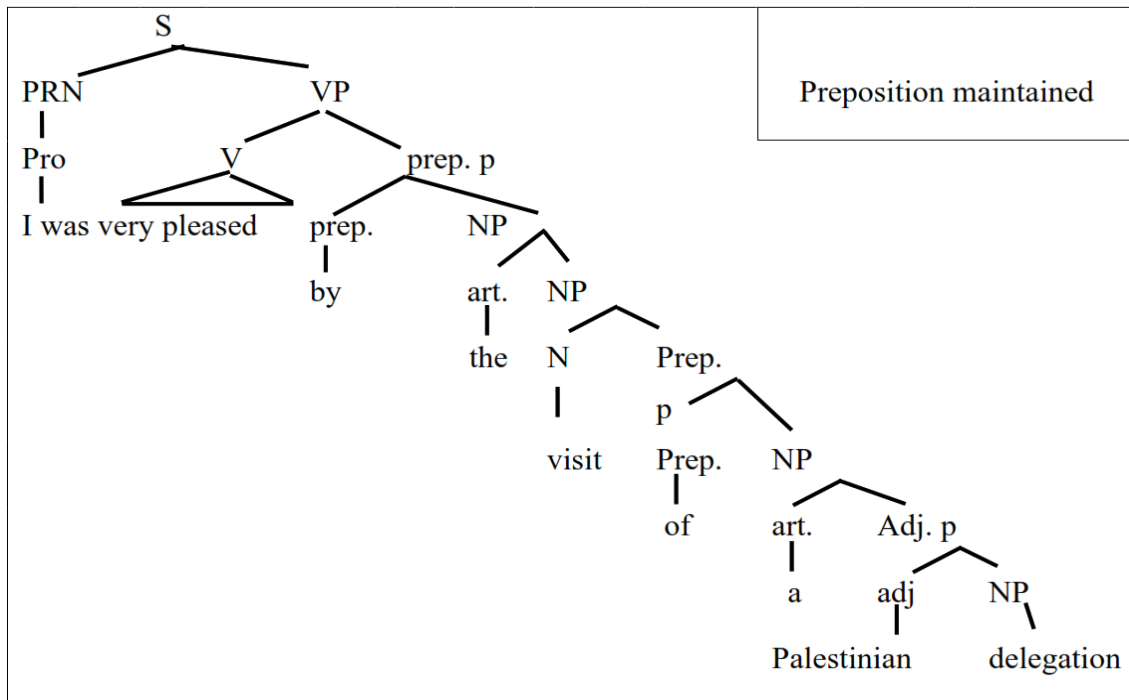
Instagram Translation: "I was very pleased to visit a Palestinian delegation..."



Note: S: sentence, PRN: pronoun, Pro: pronoun, TP/T: infinitival phrase VP: verb phrase, NP: noun phrase, N: noun, V: verb, art: article, Adj. P: adjectival phrase, inf.: infinitive.

### Diagram 4

Correct translation: "I was very pleased by the visit of a Palestinian delegation ..."



Note: S: sentence, NP: noun phrase, N: noun, V: verb, art.: article, Adj. P: adjective phrase, prep. p: prepositional phrase.

Example 2 has covert and overt agents. A reverse in the grammatical structure occurs in the Instagram translation. A change in agency happens by assigning agent role to the speaker “I” which is totally the opposite grammar of the source text as shown in the *correct translation*. Therefore, there is a breach in the accuracy of information.

The two examples are clearly informative media texts. In such cases, the communicative effect of the translated material conveys the basic content but reverses the agency. As it stands, users of Instagram translation will rely on their own knowledge of the world to reach an accurate message, i.e. they will need to recover elements like time, place and occasion to be able to reach the information load. This is obvious in example 1 when the post’s writer starts the sentence with the subject “Elon Musk,” which is in fact not the intended subject, assuming that the readers already have the necessary knowledge about this famous person, are aware of the situation at hand, and will then interact accordingly.

It is also plain in example 2 that the post writer is showing some courtesy being honored with a visit by a group of people. However, the translations did not transmit such intentionality yet rather reversed the agents of the sentence.

To this end, we can conclude that there is minor failure in example 1 because the communicative effect of the translated content preserves the essential message but reverses the agency of the two participants. Consequently, Instagram translation users will depend on their prior knowledge of context to accurately interpret the message. Specifically, they will need to infer details such as time, location, and context in order to fully comprehend the informational content, and major failure in example 2 to achieve coherence in translations because it appears as if it is intertextually coherent in the target language which is not the intentional purpose of the message’s producer.

Since Instagram is a communicative platform, we can judge that the degree of communicative and functional effect of *some* translated texts is low as a result of intra-textual and intertextual incoherence. Moreover, it is clear in a matter of a communicative platform such as Instagram that there is an important restriction on the ways in which sentences are translated to reserve the communicative function and the adequate purpose that are implied in the original texts since it is a machine translation service with the aim to help people communicate and understand each other clearly.

It is also noteworthy to say that there is some translation deficiency in the Instagram's translation model since the communication of most posts and their translations, regardless of some errors, are to some extent effective and interpretable by the recipient. However, these translations could be better if the translation model is enhanced and motivated by more enriched bilingual database so that it may well "see" and analyze the texts' features more effectively.

### 3.1.1.2 Adhesion

It is the original meaning of the letter ب [baa]. Adhesion can be concrete or figurative. Concrete adhesion (example 3.1 below demonstrates the case) means closely attaching something with another or associating something with something else. Figurative adhesion (example 3.2 illustrates the phenomenon) means "with somebody or something", therefore, it could have different equivalences in the English language depending on the context. Moreover, the figurative adhesion also means "passing by somebody or someplace," as in "مررت بأحمد" "I passed by Ahmad," but this is very formal, standardized Arabic, and it is not used by users of social media apps. Examples 3.1 and 3.2 are posts written by Instagram users, and they show cases of concrete adhesion and figurative adhesion respectively using the letter ب [baa].

#### Example 1: (Concrete and Figurative Adhesion of Letter ب [baa]):

##### 1. Source Text:

- فستان بف مطرز بالورد. قياس 38-40-42.
- للمرة الأولى منذ 33 عاما .. عشرات من زعماء الدول الناطقة بالفرنسية يجتمعون في فرنسا بقمة الدول  
"الفرانكوفونية"

##### 2. Instagram Translation:

- Flower embroidered puff dress. Size 38-40-42.
- For the first time in 33 years.. Dozens of leaders of French-speaking countries meet in France at the summit of "Francophone" countries.

3. Lost features: No lost features
4. Correct Translation: Same translation

**Text Identity Card According to Text Type:**

- Context: 1. Advertisement 2. News reporting.
- Linguistic level: Syntactic.
- Aspect of message: Topic.
- Text type: 1. Operative 2. Informative.
- Translation strategy: Transmit the sense.

Like many examples on Instagram, the adhesive type of letter ب [baa] is dealt with communicatively in a way that sometimes it does not appear literally in the translation, i.e. “with.” The automated translation of the adhesive function, whether concrete or figurative, is quite successful. In the examples provided, it recognizes passive adjectival phrases as equivalent expressions for the adhesive use of the letter, delivering the exact meaning as structured in the source text.

**3.1.1.3 Instrumentality**

One of the major uses of the preposition ب [baa] in Arabic is that it is used to indicate instrumentality as a means or tool with which the action is performed. It carries the meaning of the preposition “with” and “by” in English language as in “*write with a pen,*” or “*go by car.*” According to Fillmore’s Theory about grammar cases, instrumental prepositions in English language are “with” and “by.” The following examples from Instagram will demonstrate the case.

**Example 1 (one instrumental use of Letter ب [baa], different successful Instagram translations):**

1. Source Text:

- سنحارب بالقلم والألوان ونشر الحقائق والدعاء...

- حاكم إقليم دارفور: مقتل العشرات جراء قصف الدعم السريع بالمدفعية الثقيلة منازل المواطنين...

## 2. Instagram Translation:

- We will fight with pen and colors and spread the truths and prayers...
- Governor of Darfur Region: Dozens were killed by heavy artillery bombing citizens' houses ...

## 3. Lost features: No lost features.

## 4. Correct Translation: Same translation.

### Text Identity Card According to Text Type.

- Context: Expressing feelings, Political.
- Linguistic level: Syntactic.
- Aspect of message: Topic.
- Text type: 1. Expressive 2. Informative.

The structure of example 4.1 is well formulated by the Instagram machine translation because the use of the preposition “with” in this context is the best equivalence, and is also a widely known and commonly used expression in English language, and so is the use of “by” preposition within the context of example 4.2, even though it is a different preposition for the same prepositional letter in Arabic, but the structure requires the “by + tool” constituent since it is followed by a passive agent.

These useful prepositions serving as tools in language are very important for speakers, and luckily the machine translation of Instagram is dealing well with these prepositions from Arabic into English using communicative translation. This can be seen in the different uses of the prepositions (*with* and *by*) in the previous examples even though it is the same preposition letter ب [baa] in Arabic.

### **3.1.1.4 Causality**

Letter ب [baa] in Arabic also expresses causality, indicating the reason, purpose or conditions for actions. It is linked with the cause of the action and has different forms in the English language such as “because”, “due to,” “for,” “by,” “as a result of,” “from,” etc.... depending on the text formulation. It might also be compensated by using

adjectival phrases that carry the cause and effect meaning. Examples 5.1 and 5.2, as many alike on Instagram, show different structures for the causality function of letter ب [baa].

**Example 1 (Causality Function: Different Structures, Same Meaning):**

1. Source Text:

- ماتوا بسبب قصف طائرة إسرائيلية من صناعة أمريكية للبيت الذي كانوا فيه.
- شعور الطفل بالجوع: معلومات تهمةك (للمواعيد اذهب للبايو او اتصل ...).

2. Instagram Translation:

- They died by an American-made Israeli plane bombarded the house they were in.
- A child's feeling hungry: information that interests you (for appointment go to the bio, or call ...).

3. Lost features: No lost features.

4. Correct Translation: Same translation.

**Text Identity Card According to Text Type:**

- Context: 1. News reporting 2. Promotional.
- Linguistic level: Syntactic, semantic.
- Aspect of message: Topic.
- Text type: 1. Informative 2. Appellative.

Causality in Arabic and English languages may have different forms, therefore, our case of using the letter ب [baa] for this particular purpose is structure and context dependent. In Example 5.1, the preposition “by” is meaningful enough to be used to indicate reason of the action within the “cause and effect” context without explicit use of the term “بسبب” “because of,” Example 5.2 expresses cause and effect context without using any causal prepositions. Instead, Instagram automated translation uses an adjectival phrase with an implied meaning of “causality.”

After careful investigation of different examples from Instagram about this case, it is found out that the Instagram machine translation is successfully treating the causality case communicatively and contextually with no problems.

### 3.1.1.5 Oath-taking

In most of the cases, oath taking in Arabic can have a typical form by adding “God” or “Lord” after the word “swear اقسم” using the letter ب [baa] linked with the word “God, الله” to indicate that the swearer is using his/her religious intent to be honest for what he/she is saying. Example 6 illustrates this case using real examples from Instagram.

#### Example 6 (Oath-taking Using Prepositional Letter ب [baa]):

1. Source Text:

اقسم بالله شففت الناس بتتحرق قدامي " .. صالح يروي تفاصيل اللحظات الاولى لقصف الاحتلال خيام توي نازحين داخل مستشفى ش&اء الاقصى بدير البلح وسط قطاع غزة.

2. Instagram Translation:

I swear to God, I've seen people burn in front of me." .. Saleh narrates the details of the first moments of the occupation bombing of tents sheltering displaced people inside Sh&A Al-Aqsa Hospital in Deir Al-Balah, central Gaza Strip.

3. Lost features: No lost features.

4. Correct Translation: Same translation.

#### Text Identity Card According to Text Type:

- Context: Swearing, telling the truth.
- Linguistic level: Syntactic.
- Aspect of message: Topic.
- Text type: Informative.

In fact, oath-taking may have different forms in Arabic language as well as in English, however, this particular form as shown in example 5 only demonstrates the case of using

the preposition ب [baa] for oath-taking purposes. Therefore, all examples that include such expression have the same good translation by the Instagram. The automated translation by Instagram successfully encodes the translation of oath-taking function by the use of letter ب [baa].

### 3.1.1.6 Quid pro quo (Exchange something for something)

This type of letter is directly linked with valuable noun things as a compensation for something else. It carries the meaning of the word “for,” “in return for,” and “against” in economic English when relating to an amount of money or other valuable items put forward to compensate something for something especially in money transactions (Example 7.1 shows this meaning).

However, this function can also mean an exchange for abstract things with no money returns or valuable items such as love, peace ... etc. Example 7.2 clarifies this specific function. Therefore, English prepositions for such instances are “with,” “against,” “for,” “in return for,” “in exchange for.” Example 7.1 and 7.2 from Instagram clarify the cases.

### Example 7 (Letter ب [baa] Functions of Material Exchange and Abstract Exchange):

#### 1. Source Text:

- ابراج مجمع الصفا السكني يتيح لك الفرصة بالحصول على شقتك السكنية وبمقسط أقصاه (1,100.00) مليون ومئة دينار عراقي...
- بعض الاحيان الحياة تكون اخذ وعطاء .. واحيانا نعطي بمقابل راحة البال.

#### 2. Instagram Translation:

- Towers of Al-Safa Residential Complex allows you the opportunity to get you residential apartment with an installation of a maximum (1,100.00) million and one hundred Iraqi dinars.
- Sometimes life is all about take and give. Sometimes we give in exchange for peace of mind.

#### 3. Lost features: No lost features.

#### 4. Correct Translation: Same translation.

### **Text Identity Card According to Text Type:**

- Context: 1. Advertisement 2. Expressing feelings.
- Linguistic level: Semantic – syntactic.
- Aspect of message: Topic.
- Text type: 1. Operative 2. Expressive.

Example 7.1 shows the use of the prepositional letter ب [baa] in “يقسط” for the function of material exchange of money as compensation for something buyable. Luckily, Instagram automated-machine translation invites an acceptable equivalent expression, in “with an installation of,” for the Arabic structure in the source text.

Example 7.2 demonstrates the case of using the letter ب [baa] in “بمقابل راحة البال” which is an abstract exchange for something. Again, it shows successful machine translation by Instagram using other acceptable English expressions for the purpose of exchanging.

#### **3.1.1.7 Contextual / Locative**

The locative function of letter ب [baa] in Arabic indicates the place and time of which the action happens. Possible equivalent place and time prepositions in English are “at” as in “at night” or “in” like “in the school.” The following table has two different examples demonstrating the machine translation of the locative case by Instagram.

#### **Examples 8 (Locative Use of Prepositional Letter ب [baa]):**

##### 1. Source Text:

- المحل فاتح من الساعة 9:30 صباحاً الى الساعة 9:30 بالليل. اهلا وسهلا .
- جانب من مشاركة طالبات مدرسة نوتنجهام وتلبية الدعوة لزيارة المسجد الكبير تحت اشراف قسم التربية الإسلامية بالمدرسة.

##### 2. Instagram Translation:

- The store is open from 9:00 in the morning to 9:30 at night. Welcome.

- A part of the participation of the students of the British Nottingham school and fulfilling the invitation to visit the Grand Mosque under the supervision of the Islamic Education Department in the school.
- 3. Lost features: No lost features.
- 4. Correct Translation: Same translation.

#### **Text Identity Card According to Text Type:**

- Context: 1. Advertisement 2. Reporting.
- Linguistic level: Syntactic.
- Aspect of message: Topic.
- Text type: 1. Operative 2. Informative.

Example 8.1 has an Arabic structure of using the letter ب [baa] for the use of adverb of time "بالليل" which the Instagram automated translation gives the exact equivalence in English "at night." Example 8.1 shows an adverb of place by structuring the prepositional ب [baa] with a locative place "بالمدرسة" and the automated translation of Instagram effectively provides a common adverb of place expression in the English language "in the school." The locative case of the letter ب [baa] as shown in the Arabic examples in the table above are the only form of using the preposition ب [baa] for purposes of adverb of place and time, and we can see that their equivalent translations by Instagram have successfully communicated their cases.

#### **3.1.1.8 Emphasis**

One of the quite interesting functions of prepositional letter ب [baa] in Arabic is emphasis on how the action is performed, therefore, this function carries the meaning of the adverb of manner in English or just simply the adverb in its regular form [adjective + ly], or the irregular one. Other phrases and language forms other than adverbs can also be used to indicate emphasis in English, but they give the meaning just as an adverb gives it. These forms of language include adjectival, prepositional, or adverbial phrases. Therefore, the

emphasis structure of the prepositional letter ب [baa] may have different shapes and equivalences in the English language.

The slight difference of this function between the English and Arabic languages is just the naming itself where the Arabic language categorizes the prepositional ب [baa] as a function of emphasis on how the action is done, while English language just names it as an adverb of manner in its different forms. The following examples illustrate the case.

### **Example 9 (Adjectival and Prepositional Phrases of Emphasis):**

#### 1. Source Text:

- عادة ما تتدلع الأوبئة بسبب الفيروسات المحمولة جوا والتي تنتشر بسرعة، بما في ذلك الأشخاص الذين قد لا تظهر عليهم الاعراض.. اما جدري القروء ينتشر من خلال ملامسة الجلد للجلد...
- "نامي بسلام ماما" .. تفاعل واسع مع رسالة مؤثرة من أم غزاوية الى طفلتها الشهيدة..

#### 2. Instagram Translation:

- Epidemics are often caused by fast-spreading airborne viruses, including people who may not be asymptomatic... monkey pox spread skin-to-skin contact...
- “Sleep in peace mama” ... wide interaction with a touching message from Gazan mother to her martyr child.

#### 3. Lost features: No lost features.

#### 4. Correct Translation: Same translation.

### **Text Identity Card According to Text Type:**

- Context: 1. News reporting 2. Mourning.
- Linguistic level: Syntactic, semantic.
- Aspect of message: Topic .
- Text type: 1. Informative 2. Expressive.

It is quite interesting to see that Instagram translation technique uses different forms to express equivalence of the emphasis function of letter ب [baa] by using communicative

translational techniques. Instagram Arabic examples 9.1 and 9.2 have the same structure of using letter ب [baa] to imply emphasis in the words “بسرعة” and “بسلام.” While their equivalent expressions by the Instagram machine translation show different forms. In other words, example 9.1 shows adjectival phrase whereas example 9.2 has a prepositional phrase, but both phrases indicate manner about how the action is carried out.

### **3.1.1.9 Section Summary**

To conclude the assessment of Instagram translation of this polysemous prepositional function of the letter ب [baa], we can judge that Instagram machine translation wrongly encodes one function which is the implied meaning of the accompaniment function of the prepositional letter, however, it translates eight functions successfully by relying on rich bilingual corpora in the dataset. These eight functions are “adhesion”, “instrumentality”, “causality”, “oath-taking”, “material exchange for something”, “abstract exchange for something”, “locative”, and “emphasis.”

As for the other four functions of the prepositional letter ب [baa], there are no posts that carry these functions posted by users on their Instagram accounts because they are very formal in the Arabic language and are not used in social media contexts. These functions include the partitive “from something”, the spatial function “over something,” transitivity function, the topical function “about something.”

### **3.1.2 Arabic Diacritics**

In this section, we will discuss a special case where Instagram machine translation mistakenly encodes into the automated translation process resulting in major failure in translation. This case is connected to the known Arabic diacritics, “Damma,” “Fataha,” “Kasrah,” and “Sokoun.” These are types of inflection in the Arabic language, and they are put on words to distinguish their syntactic states in the sentence. The basis on which these words are inflected depends on the speaker’s accurate sound utterance, or the writer’s careful placement and transmission of these features upon words (Al-Ghalayini, 2010, p. 30-32).

Words in Arabic can have different interpretations according to the different uses of these diacritics within their specific contexts. Now, if these featured words are neither controlled by the speaker's accurate utterance, nor by the writer's careful placement of the Arabic diacritics in writing, the meaning of the whole sentence becomes distorted with the context.

Arabic native speakers can communicate successfully through speaking or writing using these features unconsciously, and they generally understand each other. For example, the word “كَتَبَ” with the three letters “ك - ت - ب” does not only have the meaning of the word “wrote” in past tense, but it may also have other inflections using the Arabic diacritics like “كُتِبَ” which means “books.” The word features different syntactic variations using the same order of the three letters because of different Arabic diacritics. More words from the same order of the three letters with different syntactic variations are also possible.

Arabic language users can freely use these different forms of the word in different situations without exerting any efforts to place any featured diacritics. These features are mostly used and placed upon words in formal writings such as books, educational materials, newspapers and so on, however, most of the posts on social media platforms such as Instagram are written by the users without the placement of the Arabic diacritics on specified, featured words. Social media users are not obliged to do so since they generally understand each other depending on the context.

Based on the given information, there are two important points that should be kept in mind before analyzing real examples from accounts of Instagram users. First, Arabic diacritics can only be recognized throughout hearing the words and their different tone frequencies, and throughout their occurrences on the words, or depending on the context which the latter can be figured out by native speakers of Arabic. Second, machine translation has neither the choice of hearing the words nor the occurrences of these diacritics upon the words, therefore, it has difficulties in interpreting words featured with these diacritics especially when they are not placed upon them. Instances of such claims will be clarified and analyzed upon real examples from Instagram. Example 1 shows this case.

### **Example 1 (Unrecognized Informative Passive Structure and Adverb of Manner):**

1. Source Text: Posted on 28 November 2023:

كسرت يده وتعرض للضرب المبرح ... التلفزيون العربي يلتقي الطفل الأسير المحرر محمد نزال.

لمزيد من الاخبار زوروا حسابنا على انستغرام @alarabytv

2. Instagram Translation as of date 28 November 2023:

He broke his arms and got a beating yesterday. Arab TV meets the freed prisoner child Mohammad Nazzal. For more news, visit our Instagram account @alarabytv.

3. Instagram Translation as of date 30 November 2024:

Broke his hands and got hit yesterday. Arab TV meets the freed captive child Mohammad Nzal. For more news, visit our Instagram account @alarabytv.

4. Lost features:

- Passive structure is not recognized contextually, and wrong replacement of unseen word “المبرح”.
- Same syntactic and lexical errors between two translations.
- No further development on translation quality except for the word “captive” instead of “prisoner.”

5. Correct Translation: They broke his arms and beat him violently. Arab TV meets the freed detained child Mohammad Nazzal.

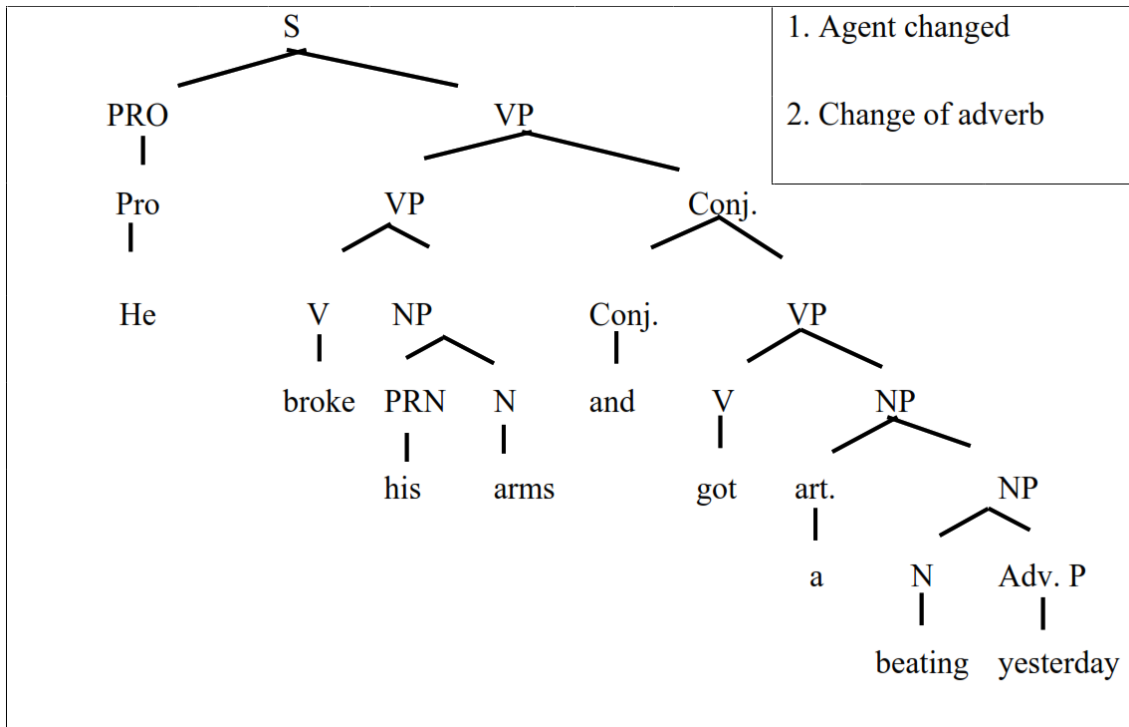
### **Text Identity Card According to Text Type:**

Example 1 shows a translation error by the Instagram machine translation resulting from unseen diacritical features upon the words “كسرت” and “المبرح.” The words “كسرت” and “المبرح” in formal Arabic writing ought to have been featured with Arabic diacritics to be as “كُسِرَتْ” and “المُبْرَح” in order to be distinguished by the machine translation, however, it is not necessary to write this formal writing by the Instagram user since it is generally understood by the post readers that there are supposed to be diacritics placed upon these

words, but can be read though without them. The following is an analytical tree diagram of the syntactic structure of the Instagram translation.

**Diagram 5**

*Instagram Translation: “He broke his arms and got a beating yesterday”*



Note: S: sentence, PRO: pronoun, PRN: pronoun, NP: noun phrase, N: noun, V: verb, art.: article, adv. P: adverb phrase.

With deep analysis of the syntactic structure of the source text, we can understand that the agent is not stated clearly in the first sentence because the source text sentence has a passive structure, however, it can be obviously figured out from the second sentence “they” referring to “the Israeli occupation army.” Moreover, we can also see that the Instagram machine translation replaces “المبرح” which means “violently or strongly”, with the word “yesterday.” This is due to the wrong interpretations and encoding of the word because of unseen features that are supposed to be placed upon the word, consequently, Instagram automated translation replaces the word with the nearest possible equivalence “yesterday” depending on the combination of letters of a different Arabic word “امبارح.”

Generally, Instagram machine translation violates two important concepts through the wrong replacements of the words “He” and “yesterday.” We can judge that the machine

translation has processed the translation at the level of one sentence, however, these two words ought to be interpreted after investigating the real agent and the way the action is carried out from the second sentence.

It is commonly known that informative texts, such as example 1 above, should transmit the information of the source text in full sense. However, the two sentences are incoherent and inconsistent with each other depending on the situational context and the real world of knowledge, therefore, readers of the Instagram automated translation get confused about the real agent and manner of the action, and so the translation becomes incomplete, lacking the essential elements to fully capture the sense of the text as a “cohesive whole.”

### **Example 2 (Unseen Expressive Term Featured with Diacritics):**

1. Source Text: Posted on 21 October 2024:

كم تسنيم وكم ابراهيم!! وكم أخ وأخت وأم وأب وعائلة تلقت خبر ارتقاء احد افرادها!!! غزة جميعها.

2. Instagram Translation as of date 22 October 2024:

How much Tasnim and how much Abraham!! And how many brothers, sisters, mothers, fathers and families received the news that one of their members was promoted!!! Gaza all of them

3. Instagram Translation as of date 30 November 2024:

How much Tasnim and how much Abraham!! And how many brothers, sisters, mothers, fathers and families received the news that one of their members was promoted!!! Gaza all of them

4. Lost features:

- Identical translation as above. No changes in any words.
- Unseen diacritical feature on word “ارتقاء”.
- The whole meaning is changed and different.
- Updated translation has the same translation mistakes.

5. Correct Translation:

How many like Tasnim and Ibrahim!! How many brothers, sisters, mothers, fathers and families received the news that one of their members has descended to heaven!!! Everyone from Gaza.

### **Text Identity Card According to Text Type:**

- Context: Agony, expressing sad feelings.
- Linguistic level: syntactic, semantic.
- Aspect of message: Convey the author's emotional and artistic intent
- Text type: Expressive

Instagram automated translation has failed to capture the contextual meaning of the word “ارتقاء” because of unseen diacritical features upon the word, and hence it has used the word for word translation technique resulting in major translation failure and absolute change of meaning. The word “ارتقاء” is an Arabic noun has different base verbs with different meanings. These base verbs include “تَرَفَّى” “*promoted a degree*” and “ارْتَقَى” “*descended to heaven*” (Al-Mu’jam Al-Waseet, 2004, p. 367) Unfortunately, Instagram machine translation has not considered the second meaning of the word, and has not linked its contextual meaning with the situation happening in the Gaza Sector at that moment of time, which resulted in critical translation error.

### **Texts Analysis:**

The structure of the Arabic source text expresses the author's deep emotions of shock and pain because of ongoing violence and suffering of families' loss of their loved ones. However, Instagram translation of the given source text has softened and tempered the emotional weight for a reader unfamiliar with the situation by using the expression “promoted,” and it has even ambiguated the text by inviting less explicit structure “Gaza all of them,” i.e., all families in Gaza or Gaza itself. Consequently, the Instagram machine translation has interpreted more abstract translation which requires more cognitive processing effort by readers outside the region in order to feel the agony of the author's emotional intent.

On the other hand, the correct translation directly suggests a spiritual ascent by using the expression “descended to heaven” adding a more religious and emotive aspect for the readers familiar with sacrifice and honor of martyrdom. It also expresses collective suffering of the people of Gaza by using a more explicit structure “Everyone from Gaza.” The correct translation evokes more empathy for the audience to feel an immediate connection.

### **Example 3 (Loss of Promotional Intended Expression):**

1. Source Text:

تصاميم مميزة مطلية ذهب بجودة عالية مع احجار كريمة مميزة. للتواصي ابعثولنا رسالة.

2. Instagram Translation as of date 22 October 2024:

Special gold plated designs of high quality with special gem stones. For recommendations send us a message.

3. Instagram Translation as of date 30 November 2024:

Special gold plated designs of high quality with special gem stones. For recommendations send us a message.

4. Lost features:

- Wrong interpretation of the word “تواصي”.
- Both Instagram translations are identical.
- No further development on translation quality.

5. Correct Translation: Special gold-plated designs of high quality with special gemstones. For delivery, send us a message.

### **Text Identity Card According to Text Type:**

- Context: Advertisement.
- Linguistic level: Semantic, syntactic.
- Aspect of message: Promotional.
- Text type: Operative

The Arabic source text is an advertisement that has a certain featured language and is aimed to promote and sell a product on a social media platform. The Instagram automated translation system introduces the first sentence with a fine advertising language. However, in the following sentence, the term “للتواصي” has been misinterpreted resulting in an incomplete and misaligned translation with the intended purpose of the Arabic source text.

The reason behind this translation problem is that the term “للتواصي” is an Arabic noun that is derived from the word “وصية” and has different meanings with reference to different base verbs. These base verbs include “وصى” which means “connect or deliver,” and “أوصى” which means “giving a strong recommendation or command” (Al-Mu’jam Al-Waseet, 2004, p.1038).

It is clear that the Instagram machine translation has considered the second meaning without paying attention to either the different diacritical features of the word in its different base verbs, nor to the textual meaning of the expression which is the best solution in this instance.

### **Text analysis:**

The Instagram translation approximates the original advertisement message but has not invited its intended purpose. Instead of encouraging the audience to purchase the product, it uses “recommendation” in place of “delivery” obstructing the ad’s promotional intent. This wording choice hinders the connection to the real world of knowledge that is crucial for the post’s viewers to act upon and may order for buying the product. On contrast, the correct translation directly refers to the intended purpose by using the word “delivery” which promotes the audience engagement in purchasing the product.

### **Section Summary:**

Instagram automated translation struggles to see the Arabic diacritics as they are used by users in social media contexts, therefore, it relies heavily on literal translation techniques that can distort the sender’s intended message and impact the three main text types: informative, expressive and operative.

For informative texts, as shown in example 1 above, we can see that the Instagram machine translation invites incomplete and inconsistent translation that does not cohere a unified message, separating the two sentences from each other because of ignoring the Arabic diacritics, nor linking the post's textual features with the real world of knowledge. Moreover, the stylistic and aesthetic elements in the expressive text of example 2 is stripped away due to dependency on literal translation. It is also problematic for cultural richness such as the expression "descended to heaven." Operative texts are also highly affected. These texts, as example 3 shows, are promotional, and they motivate and persuade the audience to take commercial actions. However, Instagram translation fails to introduce the intended outcome, making the ad less effective in achieving its purpose.

Instagram automated translation without handling the Arabic diacritical features or contextual awareness undermines the accuracy and effectiveness of Arabic different text types and weakens their intended impact on the audience.

### **3.1.3 Summary**

This chapter examined the translation of Instagram model when dealing with two significant cases related to syntactic variations between English and Arabic languages. In the case of the grammatical relations of the 13 communicative functions of letter ب [baa], it was observed the machine wrongly encodes one functional meaning which is the accompaniment function where the translation model reverses the sentence agents or participants resulting in misinformation between the source and target text. However, the machine translation succeeds to render eight functions which are adhesion, instrumentality, causality, oath-taking, quid pro quo material and abstract exchange something for something, contextual or locative, and emphasis. It quite significant to conclude that the Instagram translation model has rendered all these communicative functions successfully using parallel texts generated from the dataset to suit the functional equivalence of these syntactic parameters.

It was also observed that no posts on Instagram contain the partitive "from something", the spatial function "over something," transitivity function, the topical function "about something." These functions are unlikely to be used by users on Instagram because they are strictly formal and can only be found in standardized Arabic texts like the Holy Quran.

Concerning the Arabic diacritics, a situation requires close observation when the Instagram translation model has failed to translate all cases featured with the Arabic diacritical markers (damma, fataha, and kasrah). It became apparent that whenever an Arabic word is featured with these case endings to imply a specific meaning, the machine falls short to address the right equivalence. The analysis also finds that these diacritical markers can only be figured out throughout the context of the given text since users on Instagram are not likely to place diacritics on words, nor they will utter them.

### **3.2 Automated Translation of Metaphor**

Metaphors are indirect associations of human language and thought. People express their emotions and cultural identities through using metaphorical language. They are often culture-bound and contextualized concepts which impose translation challenges; this is specially the case in automated translation such as Instagram NLLB's translation model. Therefore, assessing the efficiency of Instagram translation is necessary to identify the gaps and to examine if the automated translation is constantly adapted by the machine. It is also quite significant to give feedback on the constant updates of the Instagram's FLORES evaluation of translation quality at different time intervals to observe whether the Instagram translation model really detects the errors, avoids the propagation of mistakes, and improves the translation quality.

Instagram invites visual storytelling with short captions that altogether express metaphors to engage the readers in the situation allowing them to think of implied meanings. A concise message with an expressive image such as "drain the swamp," will require uncovering the underlying cultural significance, the linguistic parameters, and the context of the message to convey a similar effect in the target language. Since metaphors are interlinked with culture and social values, Instagram machine translation does not often succeed in finding direct equivalents in other languages.

Accuracy of metaphor translation on Instagram is highly required in some usages, e.g. the social influencers, businessmen and women, and political figures. There is a verified badge on Instagram accounts which indicates that the names of these accounts have been confirmed for the authentic presence of that person or brand. Therefore, cases of underfitting and overfitting by the translation model will yield errors. Hence, it will create a state of misunderstanding, great loss of meaning, and they can result in even offensive

language, especially in political contexts. For brands in business, weak translations of metaphors may obstruct the marketing strategy and dilute brand messaging, leading to ineffective engagement in the post and reduce global reach.

In this chapter, we collected Instagram translations of different types of metaphors. These metaphorical instances were classified according to Peter Newmark's scheme of the six types of metaphor: dead, cliché, stock, adapted, recent, and original metaphors. We examined if the Instagram translation model underfits or overfits with the training data when processing these metaphorical instances. Each type of metaphor was assessed using five criteria, which are clarity, accuracy, contextual relevance, emotional valence, and persuasive power. These criteria will ensure that the translated metaphors will convey their original meaning and resonate properly with the authentic values and contextual framework of the SL.

It has been indicated earlier in this thesis that the Instagram translation model prevents propagation of mistakes and runs an evaluation to the translation outcome and constantly adjusts it based on new feeds. Therefore, it is also important to assess the updated translations and compare them to the previous versions to measure the extent to which self-attention is performed by the machine. By this way, we highlight the limitations of Instagram automated translation in relation to the metaphor type. The findings here will assist postediting practicing by pointing to the types of metaphors in which machine upgrades rarely yield similar effects.

### **3.2.1 Dead Metaphors**

Dead metaphors, according to Newmark, relate to universal terms of space, time, objects and general human activities. Normally, these types of metaphor are not difficult to translate because they have become so common and are no longer noticed as figurative (Newmark 1988, pp. 106-107). In this section, we will present three translated dead metaphors that imply contextual relevance, emotional valence and persuasive power. We will process an assessment to the Instagram's multiple translations at different times to look for any accuracy enhancements in each update on translations.

The following example is extracted from an Instagram account and contains several types of metaphors to convey factual data. We will focus on the translation of the dead metaphor

“الشاشة *the screen*.” The metaphor refers to a TV news broadcasting channel (Al-Jazeera). In media, it is commonly known that the word “screen” is figuratively used to symbolize TV broadcasting as a referent to the physical object where images are projected.

**Example 1 (First Time Translation on 5 April 2024: Translation of a contextual referent dead metaphor):**

1. Source Text:

خديجة بن قنة: أعود اليوم إلى الشاشة بعد أسابيع قضيتها بين أهلي في القدس...

2. Instagram Translation:

khadija\_benganna: I return to the screen today after weeks spent with my family in Jerusalem...

Instagram translation has succeeded in reproducing the same image in the TL. The original image here is better transferred in its aesthetic form because the image does not only refer to Al-Jazeera channel, but it is also connected with the writer’s personality as a TV broadcaster. In this way, literal translation of such metaphor is best for adding enrichment information in the target language.

Two further tests on the translation quality were conducted, and it was noticed that the translation remained the same. Therefore, it is observed that the Instagram translation succeeded in translating the original metaphor “the screen” from the first time of translation.

The next example below is characterized by the dead metaphor “*limitless world*” in a promotional advertisement. The metaphor is associated with endless varieties of products to show many purchase possibilities. The metaphor in this example resonates with persuasive power to engage the audience in a business deal. The translation in the table is the first Instagram translation.

**Example 2 (First-time Translation on 12 November 2024: persuasive dead metaphor):**

1. Source Text: ندعوكم لزيارتنا في معرضنا الجديد لاستكشاف عالم بلا حدود من السيارات .
2. Instagram Translation: We invite you to visit us in our showroom to explore the limitless world of cars.

The original Arabic text is an advertisement and announcement that aims to promote cars with prospective customers. The image conveys the idea of endless possibilities or opportunities, often used to evoke a sense of limitless options in the imagination of the recipient. Instagram translation has kept the same implied visual image of the metaphor as it has a direct equivalent in English.

The Instagram translation maintains the same image with no change in meaning or style. Therefore, we can ensure that Instagram translation has maintained all important elements of the metaphor “عالم بلا حدود” “*limitless world*” by preserving the meaning and purpose of the promotional business message, i.e., inviting customers to visit the car dealer's new location.

As a result, the translated text ensures accuracy and persuasive power with the original intent. Moreover, further second and third tests on the translation of this example in two months later approved that the Instagram translation of the metaphor remained the same.

The following example features the dead metaphor “*magician*” expressively in sports. The metaphor evokes a sense of emotional valence in the minds of the readers. It associates emotiveness through outstanding playing skills in sports.

**Example 3 (First-Time Translation on 12 November 2024: emotionally expressive Dead Metaphor):**

1. Source Text:

المصري عمر مرموش ساحر الركلات الحرة.. تنفيذ رائع وناجح في ثلاث مباريات متتالية. هل سيصبح واحد من أبرز متخصصي الركلات الحرة؟ بأي لاعب يذكرك؟

## 2. Instagram Translation:

The Egyptian Omar Marmoush, the magician of the free kicks. Excellent and successful performance in three consecutive games. Will he become one of the most prominent free kick-specialists? Which player does he remind you of?

The text features a dead metaphor to highlight the skill and beauty in the player's performance. The metaphor “ساحر” “*magician*” figuratively describes the player’s skills in free kicks. This is a typical emotional image to increase engagement and positive valence among followers on Instagram.

Instagram translation used a natural and direct equivalent since the word “magic” is a popular metaphor in English language when describing talented skills. The same image has also been appropriately reproduced in the target text with an equivalent level of appeal. The metaphor is clear enough to be conventionally transferrable across different cultures and languages.

Furthermore, two consecutive tests on the translation quality were run in two months later. It was found out that the same translation was still occurring. This indicates that Instagram translated the metaphor accurately from the first time of translation.

### **Section Summary:**

Instagram translation of the three dead metaphors “*the screen, limitless world, and magician*” were reproduced with equivalent aesthetic figurativeness and with the accuracy level of persuasion and arousal. By relying on large corpora of bilingual inputs like these dead metaphors, Instagram automated translation has not encountered translation issues, particularly when using literal translation techniques to invite the most accurate, persuasive and emotional translations, aligning appropriately with the metaphors’ functions. Moreover, machine self-attention is also noted in cases where the translation instances of the three dead metaphors in the three translation tests remained the same.

### 3.2.2 Cliché Metaphors

These types of metaphor are overused across cultures that they have lost their originality; yet they still convey figurative meaning. They are used emotively as substitutes for clear thought. The source text writer, especially in informative texts, tries to obtain a specific reaction from the recipients; hence, according to Newmark the translator has a choice between reducing the metaphor into sense to clarify its intent, or replacing it with a fresher and more original metaphor that conveys the same idea with stronger emotional impact. (Newmark 1988, p. 107).

Three cliché metaphors were selected from Instagram feeds to examine how Instagram machine translation responds to this type of metaphors. The first example is characterized by multiple images. We will focus on the translation of the cliché metaphor “*الصمود الأسطوري* *legendary resistance*” which describes the steadfastness of a certain group of people against difficult life circumstances. The cliché metaphor here features contextual relevance, i.e. Palestinian context.

#### **Example 1 (First Time Translation on 5 April 2024: Translation of a contextually relevant cliché metaphor):**

##### 1. Source Text:

خديجة بن قنة: أعود اليوم إلى الشاشة بعد أسابيع قضيتها بين أهلي في القدس. أعود محملة بصور الصمود الأسطوري في وجه آلة البطش الإسرائيلية، ورسائل الحب للجزيرة التي تزين شاشتها البيوت والمحلات في كل مكان.

##### 2. Instagram Translation:

khadija\_benganna: I return to the screen today after weeks spent with my family in Jerusalem. I come back loaded with pictures of legendary resistance in the face of the Israeli washing machine, and with messages of love to the island whose screen adorns houses and shops everywhere.

The Arabic text in example 1 contains multiple images relating of the Palestinian context. Instagram translation has succeeded in translating the cliché metaphor “*legendary resistance*”, a rhetorical expression which connotes repeated instances of resilience noted by the speaker. The literal translation of Instagram succeeds in reproducing similar mental associations in the target language.

A second time investigation was processed on the translation of the same metaphor after five months. It was observed that it has been changed into “*legendary resilience*,” which implies that the translation has been enhanced because the word “*resilience*” fits well for the Palestinian context. The word connotes in English “*the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioural flexibility and adjustment to external and internal demands*” (APA Dictionary of Psychology).

From this definition, we can notice that Instagram translation has improved to clarify the sense of the Arabic metaphor “الصمود” even better, moving from its physical sense “*resistance*” to its psychological impact “*resilience*”. This has proved that the Instagram translation has been attentive enough to stimulate alterations that fit more accurately with the metaphor’s contextual function.

Then, we ran a third time investigative test on November 30, 2024. It was translated again as “*legendary resilience*,” thus indicating that the upgraded translation has not extended further than the second translation in the second test.

[https://dictionary.apa.org/resilience?\\_gl=1\\*1yw5g88\\*\\_ga\\*MTE5OTgzMzk1MS4xNzMzOTc4NDEx\\*\\_ga\\_SZXLGDJGNB\\*MTczMzk3ODQxMC4xLjAuMTczMzk3ODQxNS42MC4wLjA.\\*\\_gcl\\_au\\*MTg3NDA2Nzc2MC4xNzMzOTc4NDE1](https://dictionary.apa.org/resilience?_gl=1*1yw5g88*_ga*MTE5OTgzMzk1MS4xNzMzOTc4NDEx*_ga_SZXLGDJGNB*MTczMzk3ODQxMC4xLjAuMTczMzk3ODQxNS42MC4wLjA.*_gcl_au*MTg3NDA2Nzc2MC4xNzMzOTc4NDE1)

The next example vividly employs a negative emotional metaphor “*بوحشية brutally*.” The image aims to evoke intense negativity in the minds of the readers to highlight oppression and injustice. The image is associated with the Palestinian context.

**Example 2 (First-Time Translation on 2 October 2024: Translation of an emotional cliché metaphor):**

1. Source Text:

قوات الاحتلال تعتدي بوحشية على المرابطات المبعديات في طريق باب السلسلة، تزامنا مع تأمينها اقتحام أكثر من ألف مستوطن للمسجد الأقصى منذ الصباح.

2. Instagram Translation:

The occupation forces brutally assault the remote checkpoints in Bab Al-Silsa Road, in conjunction with its security, more than a thousand settlers have broken into Al-Aqsa Mosque since morning.

The Arabic text includes metaphors loaded with emotiveness. The text producer conveys negative images about the harsh treatment and severe actions by the Israeli occupation forces through using multi-layered images.

The cliché metaphor “بوحشية” “brutally” is associated with violence, aggression, and cruelty. The image embodies a concept that is universally understood. The Instagram Translation has preserved the meaning and has accurately clarified the same image in the TL.

After running second and third tests on the translation quality in three months later, it was found out that the translation instances were as similar as in the first test. Therefore, it is noteworthy to observe that the machine translation is fit and attentive enough to bring in a similar cliché metaphor for the given image from the first time of translation. It has also maintained clarity, accuracy and emotional valence in the target text.

The third example below is shaped by a persuasive cliché metaphor. The image “تخطيط الاسعار smashing prices” is aimed at conveying the idea of prices being reduced to promote the exceptional value of the offer. It resonates with persuasiveness to involve the readers in a business deal.

**Example 3 (First-Time Translation on 15 October 2023: Translation of a persuasive cliché metaphor):**

**1. Source Text:**

عرض تحطيم الأسعار بس 420 شيقل. جهاز البسكليت المنزلي .

**2. Instagram Translation:**

Smashing prices offer only 420 shekels. Homemade bicycle device.

Instagram translation has successfully reproduced the persuasive image in the TL. The metaphor “smashing prices” is directly translated. The image preserves the impactful imagery to convey significant discounts. It also appeals appropriately to the audience engagement in the offer, emphasizing affordability which is a persuasive element.

More significantly, it was noticed that the translation of the metaphor in the two following tests was maintained as in the first translation instance. Thus, it is clear that the Instagram translation succeeded to preserve the meaning of the metaphor from the first time of translation.

**Section Summary:**

Like in the case of dead metaphors, the machine introduced the three cliché metaphors “*legendary resilience, brutally, and smashing prices*” successfully into the target language from the first time of translation, aligning their contextual relevance, emotional valence and persuasive power. Moreover, it was observed that the metaphor “legendary resilience” was even more contextually enhanced in the second test. This indicates that the Instagram translation model is fitting well with the original data in the source text, and has been attentive enough to preserve and even enhance the translation in the second run.

**3.2.3 Stock metaphors**

Newmark defines a stock metaphor as “*an established metaphor ... covering a physical and/or mental situation both referentially and pragmatically*” (Newmark, 1988 p. 108). These metaphors often reflect cultural and social values which require careful handling to avoid misinterpretations. Stock metaphors can be tricky since they may carry universal elements or culture-specific meanings that are affected or used by a certain type of users.

In translation, this poses a challenge especially to machine translation if it basically uses literal translation to uncover both referential and pragmatic aspects of the metaphor.

Instagram's translation of four stock metaphors were selected for examination. The translations were examined at different time intervals to see if new feeds are helping improve the quality of the translations. Comparisons are also made with the quality of translations of the two previous types of metaphors.

The first example illustrates a metaphor where cultural relevance is highly demanding. The stock metaphor “المرباطات المبعديات” steadfast, banned women” highlights an Islamic Palestinian context.

**Example 1 (First-Time Translation on 3 October 2024: Translation of a referent stock metaphor):**

1. Source Text

قوات الاحتلال تعتدي بوحشية على المرباطات المبعديات في طريق باب السلسلة، تزامنا مع تأمينها اقتحام أكثر من ألف مستوطن للمسجد الأقصى منذ الصباح.

2. Instagram Translation:

The occupation forces brutally assault the remote checkpoints in Bab Al-Silsa Road, in conjunction with its security, more than a thousand settlers have broken into Al-Aqsa Mosque since morning.

3. Correct Translation:

The occupation forces brutally assault steadfast, banned women near AL-Silsila Gate Road, while facilitating the entry of more than a thousand settlers to break into the Al-Aqsa Mosque since morning.

The Arabic text contains a double-layered stock metaphor. First, the word المرباطات is a common Arabic metaphor that has Islamic origins in the Holy Quran; it evokes the purpose of women who steadfastly devoted themselves to sacrifice for guarding a sacred place, while المبعديات triggers the meaning of women who are banned from accessing the place.

As expected, the Instagram translation misses contextual load. The image “المربطات” “steadfast women” refers to a specific context (women who devote themselves to stay in place performing prayers at a holy site in defiance of Israeli settlers’ attacks on Al-Aqsa Mosque. Moreover, Instagram translation has also failed to grasp the image of “المبعدات” “banned women”, i.e. forced out to leave the holy place through the power of military or court orders. However, Instagram uses a misfitting equivalent “the remote checkpoints”, thus rendering a confusing, unclear version of the original text.

After running a second test on the Instagram translation on 12 November 2024, we noticed that the machine translation slightly changed some linguistic units in the text, but still kept the translation error. On the second run, it was translated into “the remote links.” A third time test was conducted on 14 December 2024 to check if the Instagram has adjusted the translation of the metaphor, but it was found out that Instagram translation has brought the second translation with no changes on any linguistic units. This result confirms that the Instagram translation model failed in the three tests to introduce the right equivalence for the stock metaphor. The metaphor translation outcome is unclear, inaccurate and contextually irrelevant within the source text.

In the following example, we will run three investigation tests on two stock metaphors to double check Instagram’s efficiency in avoiding translation mistakes and improve translation quality.

The first metaphor “آلة البطش oppressive machine” associates negative emotiveness in the readers’ minds. It intensifies military violence, carrying out severe actions against a group of people. The image is associated with the Palestinian context. The second metaphor “الجزيرة Al-Jazeera” is a referential image to a famous TV news broadcasting channel.

**Example 2 (First-time translation on 5 April 2024: translations of two emotional and referent stock metaphors):**

1. Source Text

خديجة بن قنة: أعود اليوم إلى الشاشة بعد أسابيع قضيتها بين أهلي في القدس. أعود محملة بصور الصمود الأسطوري في وجه آلة البطش الإسرائيلية، ورسائل الحب للجزيرة التي تزين شاشتها البيوت والمحلات في كل مكان - لن أنسى ذلك الستين يذا الطاقية السوداء الذي وقف منتصب القامة عند رصيف بالبلدة القديمة عندما كان يستعد الزميل المصور إيثار للبت، وثم انحنى أمام ميكروفون الجزيرة وقبله قبله المحب وقال لولا الجزيرة ما تكشفت للعالم أهوال غزة.

2. Instagram Translation:

khadija\_benganna: I return to the screen today after weeks spent with my family in Jerusalem. I come back loaded with pictures of legendary resistance in the face of the Israeli washing machine, and with messages of love to the island whose screen adorns houses and shops everywhere. I will never forget that sixty-year-old black-necked man who stood erect at the pavement in the old Town when a fellow cameraman was preparing to broadcast, and then he bowed down in front of the island microphone and kissed the lover and said: "If it wasn't for the island, the horrors of Gaza would not have revealed to the world."

3. Correct Translation:

I return to the screen today after weeks spent with my family in Jerusalem. I come back loaded with photos of legendary resilience in the face of the relentless Israeli-oppressive machine, and with messages of love for Al-Jazeera, whose screen adorns houses and shops everywhere. I will never forget that sixty-year-old man with a black cap, who stood upright at the pavement in the old Town as my colleague cameraman, Ithar, was preparing to go live, and then he bowed down in front of Al-Jazeera microphone, kissed it with heartfelt reverence and said: "If it weren't for Al Jazeera, the horrors of Gaza would have never been revealed to the world."

The Arabic text embodies two stock metaphors including “آلة البطش” and “الجزيرة,” which can be translated into “*Israeli-oppressive machine*,” and “*Al-Jazeera*” respectively. These two metaphors resonate negative emotiveness as well as brand name references and require contextual understanding to refer to the right equivalent terms. Here is the translation analysis of the two stock metaphors in division of three-time tests.

The first metaphor “آلة البطش” “visualizes an image of the Israeli violent and oppressive actions being compared to a machine. The automated translation has not replaced the image with a clear and accurate TL counterpart. Instead, it has brought a weird and awkward expression “Israeli washing machine” which fails to associate the image with its negative valence. The second stock metaphor is represented in the referential association of the brand name “الجزيرة.” The word connotes a public well-known brand name “Al-Jazeera,” which is a famous news broadcasting channel. Instagram translation has not recognized the brand name, yet it has replaced it with “the island,” which appears to be out of place and disconnected from the text. Both images so far are relevantly disassociated with their right equivalences.

A second test was performed on 30 November 2024. The findings demonstrated that the machine translation did not pass the test once again. The stock metaphor “آلة البطش” was replaced with the English term “*peeping machine*,” and the brand name “الجزيرة” was not processed well to fit its right equivalence. A third test two weeks later showed that no changes occurred in the translation. The experiment with stock translation has revealed that with this type the machine has proven to be insensitive to the context and therefore has rendered an incorrect, decontextualized target text that is neutralized on any emotive load.

The third example below features the stock metaphor “لحق حالك don’t miss out.” This imagery expression serves as a compelling metaphor of persuasive power to effectively evoke a sense of emotional response among the readers. The metaphor highlights its association with promotional business.

**Example 3 (First-Time Translation on 12 November 2024: Translation of a persuasive stock metaphor):**

1. Source Text:

ترقبوا .. لحق حالكم .. خصومات تصل لغاية 50%. المهرجان الاكثر طلبا حصريا بفرع مجموعة حيدر مراد  
المصدر

2. Instagram Translation:

Stay tuned ..Catch up on your case .. Discounts that reach the end 50%. The most demanded festival exclusively at the branch of Haider Murad Al-Masdar Group.

3. Correct Translation:

Stay tuned... Don't miss out... discounts up to 50%. The most popular festival exclusively at the branch of Haider Murad Al-Masdar Group.

This metaphorical expression is designated to transmit a state of readiness and anticipation by using a figurative tone to indicate a sense of attention and awaiting. Instagram automated translation has failed to capture the sense of the metaphor by inviting an awkward expression “catch up on your case.”

In the second time of translation on 29 November 2024, we noticed that the metaphor did not survive to pass the test once again and was as the same as the first translation instance. More importantly after conducting a third test on December 15, 2024, the findings were identical with the second translation and did not show any alterations on translation. It still struggles to capture the emotional and appellative sense of the stock metaphor “don't miss out,” resulting in misinterpreted translational outcome.

**Section Summary:**

Inconsistent with the dead and cliché metaphors, it is observed that Instagram machine translation did not survive to capture the contextual relevance as well as the emotive and appellative sense of the all four stock metaphors. Self-attention is also noted that the four translation instances were not adjusted to their right equivalences. As expected, these metaphors require careful handling of referential and pragmatic mental situations since they reflect cultural and social values.

### 3.2.4 Adapted Metaphors

Adapted metaphors are well-known to the audience from a particular culture. The sense of adapted metaphors like “carrying coal to Newcastle” is clear in the source culture and is generally understood among the source text readers, but they may impose translation challenge because if they were translated literally by the machine, the translation outcome may ‘err’ on the side of caution and comprehension (Newmark, 1988, p. 111).

This section introduces three adapted metaphors which were translated by Instagram automated machine. Instagram was tested to examine how cultural references, emotiveness, and persuasive power in adapted metaphors are preserved or altered during the translation process.

The first example is characterized by the adapted metaphor “قبله قبله قبله المحب” “kissed it softly.”

The metaphor describes a man kissing the microphone of Al-Jazeera channel as if he kisses his lover. It is a common Arabic metaphor to show tenderness and emotional feelings for a person. The pronoun “it” here personifies a lover.

#### **Example 1 (First-time translation on 5 April 2024: translation of an emotional adapted metaphor):**

##### 1. Source Text:

خديجة بن قنة: لن أنسى ذلك الستيني ذا الطاقية السوداء الذي وقف منتصب القامة عند رصيف بالبلدة القديمة عندما كان يستعد الزميل المصور إيثار للبيت، وتم انحنى أمام ميكروفون الجزيرة وقبله قبله المحب وقال لولا الجزيرة ما تكشفت للعالم أهوال غزة.

##### 2. Instagram Translation:

khadija\_benganna: I will never forget that sixty-year-old black-necked man who stood erect at the pavement in the old Town when a fellow cameraman was preparing to broadcast, and then he bowed down in front of the island microphone and kissed the lover and said: “If it wasn't for the island, the horrors of Gaza would not have revealed to the world”.

### 3. Correct Translation:

I will never forget that sixty-year-old man with a black cap, who stood upright at the pavement in the old Town as my colleague cameraman, Ithar, was preparing to go live, and then he bowed down in front of Al-Jazeera microphone, kissed it softly and said: “If it weren’t for Al Jazeera, the horrors of Gaza would have never been revealed to the world.”

The Arabic text incorporates an adapted metaphor “قبله قبلة المحب” “kissed it softly.” The metaphor is in the form of a sentence in the Arabic language, and it enhances poetic quality to convey its deeper meaning and emotional intensity, i.e. kissing the microphone to symbolize love and tenderness. Instagram Translation has introduced a misinterpreted language structure “*kissed the lover*” which does not fit the meaning and emotional intent of the image in the source text.

Instagram translation has not identified the grammatical relations of the adapted metaphor’s combination of words to invite the correct literal translation “kissed it a lover’s kiss.” It has not either reduced the metaphor into sense like “kissed it softly” to introduce an acceptable TL language structure. It is observed that the machine has erred on the side of caution to produce a literal equivalence for the adapted metaphor.

After conducting a second translation test, it was found that the Instagram translation has replaced the expression “*kissed the lover*” with “*kissed him by a lover.*” Testing the machine for the second time indicated that the adapted metaphor was altered but was inaccurately translated once again. Moreover, the last third test also showed that Instagram translation has sufficed itself with the second translation, resulting in failure to reproduce the adapted metaphor into its appropriate equivalence in the SL.

The second example below features a contextually relevant adapted metaphor “تأمينها” providing cover.” The image functions dual agency connecting two actions of active harm for one group of people while simultaneously active facilitation for another group. The author is morally tensed in the narrative to describe injustice against Palestinian women.

**Example 2 (First-Time Translation on 3 October 2024: Translation of a contextual relevant adapted metaphor):**

1. Source Text:

قوات الاحتلال تعتدي بوحشية على المرباطات المبعديات في طريق باب السلسلة، تزامنا مع تأمينها اقتحام أكثر من ألف مستوطن للمسجد الأقصى منذ الصباح .

2. Instagram Translation:

The occupation forces brutally assault the remote checkpoints in Bab Al-Silsa Road, in conjunction with its security, more than a thousand settlers have broken into Al-Aqsa Mosque since morning.

3. Correct Translation:

The occupation forces brutally assault steadfast, banned women near AL-Silsila Gate Road, while providing cover of more than a thousand settlers to break into Al-Aqsa Mosque since morning.

The author in the original text describes violent actions by forces against a certain group while at the same time facilitating severe, negative actions for another group. The adapted metaphor “providing cover” is contextually relevant because its pragmatic implication can be figured out throughout reading the source text.

The Instagram translation model translates the phrase-adapted metaphor into “*with its security*” which does not correspond to the source image’s accurate intended message. The word “*security*” denotes “*the activities involved in protecting a country, building, or a person against an attack.*” Oxford Dictionary. Introducing such an equivalence is not successful in this case since the word “*security*” does not conform with the text features and metaphorical language. In other words, the word contradicts with the words “*brutally,*” “*assault,*” and “*break into.*” These are negative and violent words. It could be better translated as “*providing cover ...*” as shown in the correct translation in the table above.

We notice here that the Instagram translation model has not employed the accurate image of the adapted metaphor in the source text from the first time. More significantly, we ran second and third tests on the machine translation on November 24, 2024, and December

14, 2024, but the translation remained the same. The result concludes that the machine translation does not prioritize the clarity and accuracy of the adapted metaphor with the text's wording, which has negatively influenced the translation quality in relation with the original text.

The third example below is characterized by a persuasive adapted metaphor “خصومات ترقبوا .. لحق حالك .. خصومات تصل لغاية 50%.” The image resonates an expressive metaphoric tone to engage the readers in a business deal.

**Example 3 (First-Time Translation on 12 November 2024: Translation of a persuasive adapted metaphor):**

1. Source Text:

ترقبوا .. لحق حالك .. خصومات تصل لغاية 50%. المهرجان الاكثر طلبا حصريا بفرع مجموعة حيدر مراد  
المصدر

2. Instagram Translation:

Stay tuned .. Catch up on your case .. Discounts that reach the end 50%. The most demanded festival exclusively at the branch of Haider Murad Al-Masdar Group.

3. Correct Translation:

Stay tuned... Don't miss out... discounts up to 50%. The most popular festival exclusively at the branch of Haider Murad Al-Masdar Group.

The Arabic text uses metaphorical language to deliver a promotional, retail business message to the audience to invite them to join the promotion festival. The text contains a persuasive adapted metaphor that requires understanding of the cultural effect for prompting urgency and immediate action by the readers.

The purpose of the original text attains the customers' attraction and resonates an expressive metaphoric tone to create a sense of business exclusivity with great deals. Awkwardness and loss of metaphor by the literalness of the Instagram translation fails to capture the sense of the adapted metaphor “خصومات تصل لغاية 50%” “discounts reach the end 50%.” Unnecessary words “*reach the end*”, resulted from literal translation, are used

to describe the sense of the adapted metaphor leading to structuring an ill-formed language of business that is unclear and does not match the accuracy of the English promotional language.

After testing the machine translation for the second time on November 29, 2024, the findings discovered a change in translation. The structure of the adapted metaphor was altered to “*discounts up to 50% off.*” It is clear that the Instagram translation model has modified the translation to suit a more appropriate and accurate metaphorical language that is commonly used in business English.

To ensure the stability of the Instagram translation, we did a third test on December 15, 2024. The results showed that the translation “*discounts up to 50% off*” remained identical. We conclude that the Instagram automated translation has succeeded in translating the adapted metaphor from the second time of translation, and did not incur any changes afterwards.

### **Section Summary:**

It is observed in the analysis that the machine translation has not succeeded to provide the right equivalences for two adapted metaphors in the three translation tests, however, it has successfully maintained the third adapted metaphor after the second time of translation. Like in the case of stock metaphors, the machine’s lack of semantic depth did not invite effective translations for two adapted metaphors. This result contradicts the cases of translating dead and cliché metaphors where surface-level correspondences brought successful instances in the TL. However, the machine has succeeded to introduce an equivalent for the third adapted metaphor in the second translation test when it has reduced the metaphor to its sense to suit the target language.

### **3.2.5 Recent Metaphors**

Newmark defines recent metaphors as new, anonymously coined neologisms that have spread rapidly in the source language, and they often designate objects or processes that renew themselves in language, or they can be considered a metonym, which is one-word image that replaces an object, if they designate recent current objects (Newmark, 1988, pp. 111-112).

Recent metaphors can be exported properly if they are treated with reference to their referents and the metaphorical level of language. In other words, an object like ‘greenback’ symbolizing US currency note could be misinformed if its surface level were translated literally into other cultures. However, when the machine relies on training data that is diverse and rich in contextual references and deep semantic correspondences, the translation outcome can yield commendable results.

Three recent metaphors containing shared sense, coined objects, and universal elements were selected. These three metaphors resonate persuasive power, emotional valence and contextual relevance. We will run three tests on the machine translation to assess the translation quality at each time of translation and compare response to recent metaphors with the other types.

The first example features a persuasive recent metaphor whose sense has been spread across cultures. The image “ترقبوا stay tuned” creates a sense of readiness for an upcoming event. Both Arabic and English terms are common in their cultures. The metaphorical sense of the image is used to involve the readers in a business activity.

**Example 1 (First-Time Translation on 12 November 2024: Translation of a persuasive recent metaphors):**

1. Source Text:

ترقبوا .. لحق حالك .. خصومات تصل لغاية 50%. المهرجان الاكثر طلبا حصريا بفرع مجموعة حيدر مراد  
المصدر.

2. Instagram Translation

Stay tuned ..Catch up on your case .. Discounts that reach the end 50%. The most demanded festival exclusively at the branch of Haider Murad Al-Masdar Group.

3. Correct Translation:

Stay tuned... Don't miss out... discounts up to 50%. The most popular festival exclusively at the branch of Haider Murad Al-Masdar Group.

The metaphorical expression “ترقبوا stay tuned” is designated to transmit a state of readiness and anticipation by using a figurative tone to indicate a sense of attention and awaiting. Instagram automated translation has succeeded in maintaining the metaphor “ترقبوا” properly into an English equivalent “stay tuned” from the first time of translation. The machine has also preserved the metaphor’s features of emotional resonance and persuasive power.

In the second time of translation on 29 November 2024, we noticed that the Instagram translation kept the successful translation of the recent metaphor “stay tuned,” and after conducting a third test on December 15, 2024, the findings were identical with the second translation and did not show any alterations on translation. This indicates that the Instagram translation model has brought a deep semantic correspondence for the metaphor in the TL from the first time of translation.

The second example below is demonstrating the recent metaphor “المستديرة football.” The image is an object that symbolizes the ball shape in the football game. The metaphor connotes passion among Arab fans in football.

### **Example 2 (Unsuccessful Translation of emotional recent metaphor):**

1. Source Text:

إذا كنت من عشاق المستديرة، فأنصحك بمتابعتي.

2. Instagram Translation:

If you are a fan of the round, I recommend you to follow me.

3. Correct Translation:

If you are a fan of football, I advise you to follow me.

The Arabic text in example 2 above is extracted from an Instagram page that focuses on sports events and passion. The message producer aims to engage the target readers in the page’s content to get as many followers as possible by inviting humorous cultural expressions in the context of football game, using metaphors already used by football TV

commentators to draw attention and passion. An imagery language is used to raise a tone of emotional valence among the followers.

The word “المستديرة” refers to the “football game,” which is a commonly recognized expressive metaphor in the Arab society. This figurative image is drawn from the ball shape, and it symbolizes the football game itself. The one-word image is recent and is intended to replace an object in sports games. Therefore, it should have a natural and more adapted equivalence in the English language to preserve its intended meaning, clarity, and emotiveness.

However, Instagram translation does not convey the metaphorical sense since the term “*the round*” is not a metaphor in the English language in sport contexts. The machine translation has not either reproduced the image with an adapted cultural equivalence; therefore, it confuses the translated text readers.

On November 12, 2024, the second test highlighted the Instagram automated translation again misinterpreted the word “المستديرة” with the same literal equivalent “the round.” And on December 15, 2024, the third test assured that the Instagram translation kept the same translation.

The results of the three tests revealed that Instagram translation incorrectly renders the term literally causing confusion and unfamiliarity for the translated text readers, ultimately leading to disengagement in the Instagram post. On the other hand, the correct-revised translation accounts for the cultural metaphor by mediating the term to its specific jargon, i.e. “football.”

By this way, the word “football” here is vital for maintaining the text’s meaning and intent. Moreover, cultural terms of the word “المستديرة” in English-speaking communities, particularly in sports, have no direct equivalences with similar effect because it is a new and recent metaphor that is commonly used by Arab fans of football.

The third example below introduces the recent metaphor “loaded with pictures” i.e. “images” within the context of Palestinian conflict to associate many instances of

resilience by the people of Palestine. The metaphor associates mental processes of long-lasting impact of these images on the person.

**Example 1 (First Time Translation on 5 April 2024: Translation of a contextually relevant recent metaphor):**

1. Source Text:

خديجة بن قنة: أعود اليوم إلى الشاشة بعد أسابيع قضيتها بين أهلي في القدس. أعود محملة بصور الصمود الأسطوري في وجه آلة البطش الإسرائيلية، ورسائل الحب للجزيرة التي تزين شاشتها البيوت والمحلات في كل مكان -

2. Instagram Translation:

khadija\_benganna: I return to the screen today after weeks spent with my family in Jerusalem. I return loaded with pictures of legendary resistance in the face of the Israeli washing machine, and with messages of love to the island whose screen adorns houses and shops everywhere.

3. Correct Translation:

I return to the screen today after weeks spent with my family in Jerusalem. I come back loaded with images of legendary resilience in the face of the relentless Israeli-oppressive machine, and with messages of love for Al-Jazeera, whose screen adorns houses and shops everywhere.

The recent metaphor “*loaded* with images” stands for plenty of mental images to stress the long-lasting impact of these many images on the person. This figurative metaphor acts like a physical memory loaded with images, which is a recent imagery expression that fits well with common media and technology discourse.

Instagram translation has partially reproduced the metaphor in the target language. We notice here that Instagram automated translation has accurately invited an equivalent imagery in the TL when introducing the word “loaded,” however, the word “pictures” still has to have a second attempt to introduce the right equivalence of the mental images. The Instagram machine translation has partially succeeded in translating the image from the first time of translation.

In the second attempt, Instagram translation brought in an even worse representation which is “loaded with photos.” It replaced the word “pictures” with “photos.” The word “photos” is a more physical word and it is used to refer photographs being stored on a hard drive. On the third run, it was observed that the machine translation stopped to look for the right equivalence and kept the second translation “loaded with photos.” This indicates that the Instagram machine falls short to fully convey the intended sense since it did not invite its conceptual and mental figurativeness, and so it has partially succeeded in reproducing the recent metaphor, however, readers with contextual knowledge can still infer the comprehensible message.

### **Section Summary:**

Like in the cases of stock and adapted metaphors, the machine translation has not succeeded to provide the right equivalences for one recent metaphor in the three translation tests due to its aesthetic cultural connotation. However, this conclusion is inconsistent with the cases of the all dead and cliché metaphors where literalness has succeeded to present accurate translation instances.

On the other hand, it has not fully conveyed the metaphorical sense of the metaphor “loaded with photos,” yet the translation outcome is still comprehensible among the target text readers. By relying on literal translation techniques, we can conclude that this result aligns with the findings of the dead and cliché metaphors.

However, it has successfully maintained the cultural sense of the third recent metaphor “stay tuned” after the first time of translation. This result is neither consistent to stock and adapted metaphors, nor to the dead and cliché ones because Instagram translation relied on communicative translation techniques by inviting an adaptive cultural equivalence.

It is also significant to conclude that self-attention by the machine did not survive to present a cultural coined image as in the case of the ball shape in the three tests, while it has brought a partial successful representation for one recent metaphor. However, it captured the sense of a persuasive recent metaphor from the first time of translation.

### 3.2.6 Original Metaphors

Original metaphors, according to Newmark, are created or quoted by the SL writer. In authoritative and expressive texts, these should be translated literally, whether they are universal, cultural or obscurely subjective since original metaphors contain the core of an important writer's message, his personality, his comment on life. They may have a more or less cultural element that must be transferred neat. In operative texts, the metaphor could be modified to its impact on reality or reduced to sense by its practical effect (Newmark, 1988, p.112).

In this section, we will introduce three original metaphors. We will examine the clarity, accuracy, contextual relevance, emotional valence and the persuasive power of each metaphor. Three tests on the machine translation will also be generated to measure the Instagram translation quality.

The first example highlights two original metaphors that resonate contextual relevance and emotiveness. The first metaphor “man with a black cap” is characterized by its cultural richness representing an image of grief, resilience and heroism. The image is simple in its form, but carries a deep metaphorical figurativeness of cultural sensitivity. The second original metaphor is represented in the expression “stood upright.” The image evokes a sense of composure, dignity and self-assurance. Both metaphors are interlinked together to symbolize confidence and resilience of the Palestinian people.

#### **Example 1 (First-time translation on 5 April 2024: translation of two original metaphors):**

##### 1. Source Text:

خديجة بن قنة: أعود اليوم إلى الشاشة بعد أسابيع قضيتها بين أهلي في القدس. أعود محملة بصور الصمود الأسطوري في وجه آلة البطش الإسرائيلية، وبرسائل الحب للجزيرة التي تزين شاشتها البيوت والمحلات في كل مكان - لن أنسى ذلك الستيني ذا الطاقة السوداء الذي وقف منتصب القامة عند رصيف بالبلدة القديمة .

##### 2. Instagram Translation:

khadija\_benganna: I return to the screen today after weeks spent with my family in Jerusalem. I come back loaded with pictures of legendary resistance in the face of

the Israeli washing machine, and with messages of love to the island whose screen adorns houses and shops everywhere. I will never forget that sixty-year-old black-necked man who stood erect at the pavement in the old Town.

### **3. Correct Translation:**

I return to the screen today after weeks spent with my family in Jerusalem. I come back loaded with images of legendary resilience in the face of the relentless Israeli-oppressive machine, and with messages of love for Al-Jazeera, whose screen adorns houses and shops everywhere. I will never forget that sixty-year-old man with a black cap, who stood upright at the pavement in the old Town.

Instagram translation has not transmitted the first original metaphor “man with a black cap” into its right equivalence in the TL although it only requires rendering surface-level patterns to transfer its aesthetic originality in the target text. Instead, the machine translation has replaced the metaphor with “black-necked man,” inviting contextually irrelevant phrase that is totally different from the original imagery expression.

However, the machine survived to convey a close equivalence for the second metaphor by introducing the phrase “stood erect,” even though its sense of emotiveness still has not been captured well, therefore, it deserved a second attempt of translation.

On November 30, 2024, the second round of testing the machine highlighted some changes in translation. The first original metaphor “ذبا الطاقية السوداء” has been altered to “the black-energy man” which again demonstrated a failure in translation. However, the second original metaphor changed to “stood up,” which is a better metaphorical sense because the act of ‘standing up’ conveys strength, dignity and a refusal to be defeated or silenced.

Two weeks later, a third test showed that the translation of the original metaphor was as identical as shown in the second test of translation. We can draw up a conclusion here that the Instagram translation has not survived in transmitting the accuracy and contextual relevance of the first original metaphor “man with a black cap” to its intended meaning, yet it has succeeded in the second run to improve the translation quality for the second metaphor “stood upright.”

The following example employs a persuasive power represented in the original metaphor “blemished products.” The image highlights electrical products with minor defects but do not impact their functionality, and they are offered at discounted prices to provide exceptional value for customers.

**Example 2 (First-Time Translation on 12 November 2024: Translation of a persuasive original metaphor):**

1. Source Text:

ترقبوا .. لحق حالك .. خصومات تصل لغاية 50%. المهرجان الاكثر طلبا حصريا بفرع مجموعة حيدر مراد المصدر. انتظرونا الجمعة الساعة الثانية والنصف بخصومات حصرية. الفترة من 25-5 لغاية 1-6 على اصناف معروضة ومختارة ومضروبة من الاجهزة الكهربائية. الكميات محدودة حصريا في فرع المصدر

2. Instagram Translation:

Stay tuned .. Catch up on your case .. Discounts that reach the end 50%. The most demanded festival exclusively at the branch of Haider Murad Al-Masdar Group. Wait for us on Friday at 2:30 with exclusive discounts. Period from 25-5 to 1-6. On offer, selected, and beaten varieties of electrical products. Limited quantities exclusively in Al-Masadar branch.

3. Correct Translation:

Stay tuned... Don't miss out... discounts up to 50%. The most popular festival exclusively at the branch of Haider Murad Al-Masdar Group. Join us on Friday at 2:30 for exclusive discounts. From May 25th to June 21<sup>st</sup>. Enjoy amazing deals on a wide variety of on sale, selective, and blemished electrical products. Limited quantities exclusively in Al-Masdar branch.

In the context of promotional advertising, this example is characterized by a metaphorical language to introduce a persuasive power of a retail business. The Arabic original text features an original metaphor represented in the Arabic term “إصناف مضروبة” *blemished products*” which explains that products have slight defects due to return on sale or small defects on the on-sale items. The metaphor implies a great opportunity for a large discount.

However, Instagram Translation has failed to reproduce the image in the TL from the first time of translation since it does not have a direct equivalence in the target language. Instagram translation, instead, has employed a literal translation technique through introducing the term “*beaten varieties*,” causing illogical or misleading image in English. “*Beaten*” is a physical action which is not the promotional intent that is represented in large sales on discounted products.

After testing the machine in the second time, the results revealed that the translation remained the same with no further improvements on the translation quality of the original metaphor. We also did a last time testing on the machine translation on December 15, 2024, and it was clear that the original metaphor still had the illogical translation.

This highlights that Instagram struggles with metaphors with more cultural-bound terms. The text has lost its appealing and structured language of business since it has removed the promotional and persuasive power of business, leading to disengagement consequences by the target text readers. It is also noted that self-attention mechanism failed to capture the sense of the metaphor in the three translation tests.

### **Section Summary:**

As observed in comparable findings with the stock, adapted and recent metaphors, Instagram translation failed to capture the metaphorical senses of two original metaphors because of cultural nuances. This outcome underscores that the machine translation has not been attentive enough to validate data containing cultural disparities to interpret the intended meaning of the metaphors.

However, it was observed that the Instagram translation succeeded to capture the sense of one original metaphor by inviting the right equivalence. While this result aligns with the cases of successful translations of one adapted and one recent metaphor, it proves that the machine has rendered already learned data to yield successful translation results.

On the other hand, literal translation in the case of the persuasive original metaphor has not been successful. Based on this result, these findings contrast the results of earlier investigations in the cases of dead and cliché metaphors where literal translation maintained the metaphorical senses of all metaphors.

### 3.2.7 Summary

This chapter examined data collected from Instagram on the translation of six types of metaphors being characterized by accuracy, contextual relevance, emotional valence, and persuasive power to identify the translation gaps of each type of metaphor and its authentic values and assess the efficiency of Instagram's NLLB-200 translation model and to examine if the Instagram's FLORES evaluation model is constantly detecting the translation errors, avoids the propagation of mistakes, and improves the translation quality.

The results show that the Instagram translation models render successful translations from the first time of translation, enhances the translation quality from the second time of translation, and yield major translation errors in the three tests.

Significant findings revealed that Instagram NLLB-200 model has maintained from the first time of translation all the three dead and three cliché metaphors successfully whenever they are characterized by different metaphorical functions. This result draws upon the fact that these types of metaphors like “*magician*” and “*legendary*” contain surface level patterns, elements or concepts that are used widely and across cultures. Therefore, their frequent occurrences are high in the training data which makes them comprehensible for the machine. Moreover, the analysis also finds that the Instagram model responded creatively from the first time of translation to render one recent metaphor “*stay tuned*” where it has shown ability to produce a successful communicative translation.

The analysis also reveals strengths in the translation quality in the second time of translation. The FLORES evaluation model has been successful to enhance the translation quality for one adapted metaphor “*discounts up to 50%*” and one original metaphor “*stood up.*” This proves that the Instagram evaluation model has been attentive to stop the translation errors and provide successful complementary data to invite more communicative translation instances for these two metaphors resonating well with their functional equivalences. However, a situation calls for concern when the Flores model has yielded an even worse translation quality in the second run when it replaced the translation of the recent metaphor “*loaded with pictures*” i.e. images with a more physical word “*photos*” where it was necessary to invite its figurative sense.

In contrast, both Instagram translation models, NLLB-200 and Flores, failed in the three translation tests to introduce successful renderings of all four stock metaphors, two adapted metaphors, one recent metaphor and two original ones. The machine has not been attentive enough to capture the functional equivalences of these metaphors because the dataset is not fed with enough training data. Hence, the machine uses limited portions of vocabulary which led to failure in preserving the metaphorical senses of these cultural connotations.

Based on the previous conclusions, we can say that Instagram's translation model resorts to literal translation whenever the dataset lacks sufficient bilingual corpora resulting in high bias and high variance in the translation outcome. However, this literalness is a successful technique to some types of metaphors whose sense is quite predictable because of high frequent usages in the training data, but it ends up with translation issues related to clarity, accuracy, persuasiveness, emotiveness, and contextual relevance to other types of metaphor where the metaphorical depth required richness in vocabulary in the dataset to yield their implied or figurative intent.

It is also noteworthy to conclude that the Instagram translation model does not avoid the propagation of mistakes in the error detection and feedback process after the second time of testing the translation quality. This result indicates that the Instagram translation model is set to measure the translation quality of each post on Instagram for just one attempt in which it tries to improve the translation quality. Afterwards, it does not generate any further testing even if the translation of the post still encounters major issues.

## Chapter Four

### Conclusion and Results

This thesis is conducted to assess the translation quality of the Instagram translation model. The thesis objectives were achieved to address two aspects. On one hand, there are the Arabic syntactic variations of the grammatical use of the preposition letter ب [baa] and its 13 communicative functions and meanings in Arabic syntax as well as the marking features of Arabic diacritics (Damma, Fataha, and Kasra) and their reflections on the meanings of words. On the other hand, there are the six types of metaphors from Newmark being rendered by the Instagram machine translation.

At the level of Arabic grammatical units, unnecessary deletion of words as well as unseen Arabic linguistic variants resulted in dropping out a key functional preposition. It is observed that Instagram machine translation misses the accompaniment function of the 13 communicative functions of the letter ب [baa] where the machine has reversed the sentence agents, leading to misinterpretation of the message. On the contrary, the machine passes eight functions successfully using literal and communicative translation strategies.

On the other hand, a situation calls for attention when the machine translation starts to deal with Arabic diacritics. In consistent with Fakhri et al. (2024) a complete distortion of message resulted from wrong renderings of words featured with the Arabic diacritical markers. The Instagram machine translation undermines the accuracy and effectiveness of these syntactic features and their conceptual propositions in the texts and weakens their impactful intent on the audience.

At the level of metaphors, the results show strengths and weaknesses of the Instagram machine translation when translating the six types of metaphors from Newmark. The machine has successfully translated all the six dead and cliché metaphors from the first time of translation. Metaphors like “*magician*,” “*legendary*,” and “*limitless*” are easy to capture by the machine translation because of their high tendencies in the training data. Moreover, literal translation is suitable for these types of metaphors since they are characterized by universal elements and are commonly understood across different cultures. Other translations rather than literalness could lead to misinterpretations.

Significant findings also reveal that whenever the Instagram automated machine relies on rich bilingual corpora in the dataset, it produces communicative instances to process the translation and improves the translation quality. One recent metaphor “*stay tuned,*” was rendered successfully from the first time of translation as well as one adapted metaphor “discounts up to 10%” and one original metaphor “stood up” were enhanced in the second time of translation. These successful translation instances suit the functional equivalence of the metaphors.

However, Instagram automated translation has not survived to render all four stock metaphors, two adapted metaphors, one recent metaphor, and two original ones. All these unsuccessful renderings of metaphors stem from differing cultural values. More significantly, the machine inability to reproduce these metaphorical images into their similar equivalences is also influenced by the occurrence of unrecognized words by the machine. Words such as “المرباطات المبعدات” steadfast, banned women,” “الطاقية cap” and “مضروبة blemished” seem to be weird to the machine due to their absence in the training data. This result aligns with the generic findings with Fakhri et al. (2024).

It is concluded in the chapter results, similar to Purwaningsih et al. (2019), Swarniti (2022), and Adlina (2020), that literality and word to word correspondence by Instagram machine translation is not a successful strategy when transferring Arabic terms with syntactic variations and diacritical markers, or when characterized by cultural values from the source text. This literalness though has been successful to some terms and expressions that contain surface level linguistic patterns because of their high frequent occurrences in the training data.

Consistent with Swarniti (2022), it is also found out that Instagram translation model does not solely use literalness during the translation process, nevertheless, many instances are translated communicatively using common terms and expressions from real life experiences. This result indicates that Instagram automated translation produces successful renderings by relying on bilingual corpora of contextual linguistic database. However, the machine resorts to literal translation when such database lacks similar equivalences, inviting awkward translations resulted from word-to-word correspondences.

The research thesis has also revealed significant effects on text type and the overall textuality standards. Errors at the micro level has negatively impacted the interplay between the linguistic precision and the functional adequacy of the translated texts, by introducing ambiguities and disruptions in the narrative flow. These results corporate with the conclusions of KOÇER GÜLDAL & İŞİSAĞ (2019).

In informative texts, where the factual data is paramount, wrong syntactic and lexical renderings between the SL and TL have undermined the communicative purpose. The case of agents reversing, for instance, has comprised the logical connection that is critical for the readers comprehension. The macro level objectives of the text are also important for the text coherence. In the case of the Instagram translation “*he broke his arms yesterday,*” the machine has disconnected the first sentence from the second one where it is critical to find the intended agent “the Israeli forces broke his arms”.

Persuasive power is also minimized due to inaccuracies of lexical entries and misinterpretation of imagery expressions. Replacing the term “*for delivery*” with “*for recommendation*” results in changing the whole operative intent of the promotional advertisement. Also, awkwardness by inviting expressions such as “*catch up on your case,*” and “*beaten varieties*” diminishes acceptability among the translated text readers and disengage their interaction in the retail business deal.

Furthermore, stylistic elements and emotional valence are deeply affected because of micro errors. Translating the word “المستديرة football” as “the round” disrupts the expressive tone and fails to preserve the metaphorical sense of the image. Such error distorts the text’s originality and its creative intent and undermines its informativity and acceptability among the translated text readers.

The research thesis finds that the Instagram translation error detection and feedback does not stop the propagation of errors after the second time of testing. In other words, it is observed that the machine has only one attempt to evaluate the translation. The results show that all translations in the third test were as identical as in the second one. This indicates that the machine does not generate further enhancements on the translation quality after the second time of testing even if they still contain serious errors.

## References

- Abdi, H. (2021). Considering Machine Translation (MT) as an Aid or a Threat to the Human Translator: *Journal of Translation and Language Studies*, 2(1), 19–32. <https://doi.org/10.48185/jtls.v2i1.122>
- Adlina, N. (2020). Analysis on The Translation of Hyphenated Compound Adjectives by Instagram Caption Translation Tool. *Research Gate*, April. <https://doi.org/10.13140/RG.2.2.23179.23847>
- Ahmad, M., & Khasawneh, S. (2023). The Potential Of Ai In Facilitating Cross-Cultural Communication Through Translation. *Journal of Namibian Studies*, 37, 107–130. <https://orcid.org/0000-0002-1390-3765>
- Al-Ghalayini, M. (2010). *Collection of Arabic Lessons (in Arabic)* (1st ed.). Resalah Publishers, Beirut, Lebanon. <https://www.noor-book.com/كتاب-جامع-الدروس-العربية-pdf>
- Al-Mu'jam Al-Waseet. (2004). *مجمع اللغة العربية - المعجم الوسيط* (Al Muajam Al Wassit - Al Muj'am Al Wasit)-مكتبة الشروق الدولية- (2004) (4th ed., Issue 4th). Shorouk Book Stores.
- Fakih, A., Ghassemiazghandi, M., Fakih, A. H., & Singh, M. K. M. (2024). Evaluation of Instagram's Neural Machine Translation for Literary Texts: An MQM-Based Analysis. *GEMA Online Journal of Language Studies*, 24(1), 213–233. <https://doi.org/10.17576/gema-2024-2401-13>
- Febriyanti, U., & Salsabila, T. A. (2022). Instagram Translation Machine: Does It Help Arabic Students to Know Arabic-Indonesian Translation Well? *LISANIA: Journal of Arabic Education and Literature*, 6(1), 14–31. <https://doi.org/10.18326/lisania.v6i1.14-31>
- KOÇER GÜLDAL, B., & İŞİSAĞ, K. U. (2019). A comparative study on google translate: An error analysis of Turkish-to English translations in terms of the text typology of Katherina Reiss. *RumeliDE Dil ve Edebiyat Araştırmaları Dergisi*, 367–376. <https://doi.org/10.29000/rumelide.606217>
- Lin, Y. (2023). The relationship between machine translation and human translation in the era of artificial intelligence machine translation. *Applied and Computational Engineering*, 5(1), 133–138. <https://doi.org/10.54254/2755-2721/5/20230547>
- Meta. (2024). *200 languages within a single AI model: A breakthrough in high-quality machine translation*. <https://ai.meta.com/blog/nllb-200-high-quality-machine-translation/>
- Nadilla, R., & Lubis, S. (2023). Lexical Errors Made by Instagram Machine Translation in Translating the Account of “CNN Indonesia” News Article. *LingPoet: Journal of Linguistics and Literary Research*, 4(1), 30–45. <https://doi.org/10.32734/lingpoet.v4i1.10455>

- Parham, F. (2017). *A Conceptual Analysis of Translation Quality in Instagram*.  
<https://www.researchgate.net/publication/360079702>
- Purwaningsih, D. R., Sholikhah, I. M., & Wardani, E. (2019). Revealing Translation Techniques Applied in the Translation of Batik Motif Names in See Instagram. *Celt: A Journal of Culture, English Language Teaching & Literature*, 19(2), 287–301.  
<https://doi.org/10.24167/celt.v20i1.2090>
- Purwaningsih, D. R., Sholikhah, I. M., & Wardani, E. (2020). Revealing Translation Techniques Applied in the Translation of Batik Motif Names in See Instagram. *Celt: A Journal of Culture, English Language Teaching & Literature*, 19(2), 287.  
<https://doi.org/10.24167/celt.v20i1.2090>
- Putri, A. T., & Setiajid, H. H. (2021). INSTAGRAM TRANSLATE AND HUMAN TRANSLATION IN THE ENGLISH CAPTIONS OF JOKOWI'S ACCOUNT: AN ANALYSIS OF KOPONEN'S ERROR CATEGORY. *ELLiC (English Language and Literature International Conference) Proceedings*, 4.
- Putri, V., Maya, C., & Sari, I. (2019). TRANSLATION SHIFT AND ACCURACY OF NOUN PHRASE IN INSTAGRAM CAPTION TRANSLATION. *Humaniora Scientia: Online Journal on Linguistics*, 05(01), 2355–5742.
- Swarniti, N. W. (2022). Translation of wise words found in instagram captions. *International Seminar (LITERATES) Linguistics, Literature, Culture, Arts, 1965*, 39–47.
- Team, N., Costa-jussà, M. R., Cross, J., Çelebi, O., Elbayad, M., Heafield, K., Heffernan, K., Kalbassi, E., Lam, J., Licht, D., Maillard, J., Sun, A., Wang, S., Wenzek, G., Youngblood, A., Akula, B., Barrault, L., Mejia Gonzalez, G., Hansanti, P., ... Wang, J. (2022). No Language Left Behind: Scaling Human-Centered Machine Translation. *Meta AI, UC Berkeley, Johns Hopkins University*.  
<https://github.com/facebookresearch/fairseq/tree/nllb>.



جامعة النّجاح الوطنيّة  
كلية الدراسات العليا

## دراسة تقييمية لترجمة منشورات الانستغرام

إعداد

محمود رشيد محمد ابو ظاهر

إشراف

أ. د. عبد الكريم دراغمة

قدمت هذه الرسالة استكمالاً لمتطلبات الحصول على درجة الماجستير في اللغويات التطبيقية والترجمة  
بكلية الدراسات العليا في جامعة النجاح الوطنية في نابلس، فلسطين.

2025

## دراسة تقييمية لترجمة منشورات الانستغرام

إعداد

محمود رشيد محمد ابو ظاهر

إشراف

أ. د. عبد الكريم دراغمة

### الملخص

تقيم الدراسة الحالية ترجمة الانستغرام الآلية للغة الانجليزية من خلال التركيز على دقة الترجمة لأنماط التركيب النحوي العربي وانواع الاستعارات التشبيهية المختلفة. وتركز الدراسة على التماسك النصي لنصوص مختارة من منصة الانستغرام وتشتمل على نصوص اعلامية وتعبيرية واعلانية. كما وتقيس الدراسة مستويات تكافؤ النصوص التي تحتوي على انواع مختلفة من الصور البلاغية بين النصوص المصدرية والنصوص المترجمة. ولقد لوحظ ان نظام ترجمة الانستغرام يخطئ في مستويات التركيب النحوي المرتبطة بقلب الفاعل والمفعول به في الجملتين المركبتين وايضاً في الحركات العربية من ضمة وفتحة وكسرة. وقد تبين ايضاً أنه عند غياب مجموعة كبيرة من النصوص الثنائية في قاعدة البيانات يؤدي إلى إحداث عيوب كبيرة في الترجمة. ومع ذلك، تبين وجود حالات ترجمة تثبت بأن نظام ترجمة الانستغرام ينتج ترجمات تواصلية وتوافقية بشكل ناجح عندما يعتمد النظام على بيانات كافية من النصوص الثنائية في قاعدة البيانات. وقد لوحظ ايضاً بعد إجراء فحص للترجمة للمرة الثانية بأن تقنية تصحيح الأخطاء في نظام ترجمة الانستغرام تحسن من نوعية الترجمة، ولكنها لا تجري اي تحسينات اضافية بعد المرة الثانية حتى لو كانت الترجمة في المرة الثانية تحتوي على أخطاء جسيمة. أن جانبي التركيز على التركيب النحوي والصور البلاغية يفتحان آفاقاً مستقبلية في مجال الترجمة الآلية.

الكلمات المفتاحية: الترجمة الآلية؛ التركيب النحوي؛ الصور البلاغية.