

## RESEARCH ARTICLE

### AI Translation of the Gaza-Israel War Terminology

Prof. Reima Al-Jarf

King Saud University, Riyadh, Saudi Arabia

Corresponding Author: Prof. Reima Al-Jarf, E-mail: [reima.al.jarf@gmail.com](mailto:reima.al.jarf@gmail.com)

#### ABSTRACT

This study aimed to evaluate the accuracy of translation equivalents given by Artificial Intelligence (AI) to the Gaza-Israel War terminology and their semantic, syntactic, contextual, and orthographic inaccuracies' and the translation strategies used by both. A sample of 250 English and Arabic 2023-2024 Gaza-Israel War terminology that included names of cities, refugee camps, crossing, settlements, leaders, Palestinian Jihadist groups, war nicknames, brigades, Gaza hospitals, humanitarian organizations, military ranks, weapons, military operations and metaphors was collected from mainstream media. The terms were translated via two artificial intelligence (AI) systems: Microsoft Copilot (MC) and Google Translate (GT). Analysis of the translations yielded by MC and GT showed identical correct equivalents to 48% of the terms (Al-Yassin shell قذيفة الياسين & air power القوة الجوية). Both gave correct equivalents with a different wording and different word orders as غزو بري (MC) & التوغل البري (GT) for ground incursion; (MC) تحشيد عسكري & (GT) التعبئة العسكرية for military mobilization. MC gave more accurate equivalents than GT (29% & 23% respectively). MC and GT gave correct equivalents to 58% of the Arabic items and 38% of the English items. For some terms, MC gave an explanatory equivalent as قاذفة صواريخ متعددة الأغراض for RPG, whereas GT gave ار بي جي which is commonly used by Arabic media. Both made contextual errors as (GT) ملاط الياسين for Al-Yassin mortar; (MC) فجر اليوم for Breaking Dawn. For carpet bombing, MC gave قصف السجاد & GT gave تفجير السجاد which have semantic and syntactic errors. GT gave extraneous translations for chief of staff رئيس العمال & mortar مونة الاسمنت الكورية; MC gave وسائل الإعلام الكورية for Samsung media. Both gave equivalents with faulty word order as نظام ذو مدى أطول (MC) and نظام أبعد مدى (GT) for long-range system. GT gave definite equivalents to 20% of the terms (الفجر-5). Some equivalents have orthographic variations as (MC) هاغانا (GT), حنيبل (MC), هانيبال (GT). MC transliterated rocket arsenal أرسنال صواريخ & Sofa bush صوفا بوش. Detailed results recommendations for translation pedagogy and for improving the quality of AI translation are given.

#### KEYWORDS

Microsoft Copilot, Google Translate, artificial intelligence, AI, AI translation, Gaza-Israel War, war terminology, political terms, semantic deficiencies, syntactic deficiencies, orthographic deficiencies

#### ARTICLE INFORMATION

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#### 1. Introduction

The Arab Israeli, Palestinian Israeli and Gaza-Israel conflict has been of interest to many researchers around the world for decades. A plethora of studies have been conducted in linguistics, discourse analysis and media about the aforementioned conflicts, especially since 2023, such as European media coverage of the Israel-Gaza war using hesitant fuzzy linguistic term sets (Abuasaker, Sánchez, Nguyen, Agell, Agell, & Ruiz, 2025); the role of language in framing the Israeli-Palestinian conflict on Twitter with the escalation of violence in Gaza in May 2021 as a case study (Alashqar, 2024); a discourse analysis of the Gaza crisis and the Arabic press (Priya, 2024); a critical discourse analysis of Al Jazeera's and the New York Times' online news articles on the 'Israel Declares State of War' (Ciler, 2024); islamophobia reflection in Gaza-Israel conflict as reported by BBC (Irfan, Aqeel & Hussain, 2024); the representation of 'Israel' in the Israeli media the 2014 Israel-Gaza conflict using a triangulation of corpus-based critical discourse analysis and discourse-based interviews (Greenberg, 2022); the 2023 Israel-Palestine conflict news reporting in the Star Online, Malaysia (Hoon, 2024); BBC and New York Times' coverage of the May 2021 Israeli onslaught on Gaza (Amer, 2022);-ostentatiously

emotive language in the BBC coverage of Tūfān Al-Aqsa (Thawabteh, 2024); news headlines during conflict in the coverage of the 2023 Israel-Gaza War in the Associated Press and Qatar News Agency (Kozman & Cozma, 2024); news headlines and ideological reflections in the context of the Israel-Gaza war in the New York Times and Al Jazeera (Mesut, 2024); empirical analysis of Al Jazeera and Al Arabiya Twitter coverage of the Gaza-Israel conflict (Majzoub, 2021); impact of social media platforms on international public opinion during the Israel war on Gaza (Nasereddin, 2023); Western broadcast news posts and images of the Israel-Gaza war on Instagram ( Hamas Elmasry, 2024); the misconstruction of enemy images in war reporting (Osimen, Dele-Dada, & Osere, 2025); and insight narratives on Israel-Hamas conflict and re-narration of the Palestinian-Israeli conflict as exhibited in multimodal mediation through picture books and graphic narratives (Salama, 2025).

Other studies focused on the translation of a corpus-based account of positioning in news translation of reported conflicts (Pan & Liao, 2021); translation errors in CNN Indonesia news texts into Arabic through Perplexity.AI application (Umam, Ridlo, Al Farisi & Ali, 2024); and strategies used by artificial intelligence applications in English news translation (Lin, 2024).

In addition, translation of news and political texts, in general, and the Arab-Israeli, Palestinian-Israeli and Gaza-Israel War terminology by artificial intelligence (AI) has received limited attention from researchers. Some studies investigated the translation of a variety of news texts and editorials by different AI tools such as military text machine translation based on deep neural network (Liu, Tang, Ma & Hu, 2022); untranslatability and translation strategies in the machine-assisted translation of military texts (Yan, 2024); Arabic-English machine translation of news texts (Abdelaal, & Alazzawie, 2020); stereotyping and translation in Arabic and English news texts with reference to Islamophobia and the Arab-Israeli conflict (Askari, 2019); artificial intelligence tools in editorial tasks among Arab researchers publishing in English (Aluthman, 2024); potentials and challenges of the adoption of artificial intelligence technologies in Arab newsrooms (Harb & Arafat, 2024); and guidelines for teaching students how to translate the Gaza-Israel War terminology (Al-Jarf, 2024).

The literature review revealed two studies that compared the translation of political and media text by two AI tools. The first is titled assessing the translation of Google and Microsoft Bing in translating political texts from Arabic into English (Almahasees, 2017) and the second one is titled the effect of using AI and Google Translate on translating BBC media texts into Arabic (Kadhim, 2024).

There is a lack of studies in the literature that compare two or more artificial intelligence tools and how they translation the Gaza-Israel War terminology after October 7, 2023. Therefore, this study seeks to evaluate the accuracy of translation equivalents to Gaza-Israel War terms given by Microsoft Copilot (MC) and Google Translate (GT); to find out the percentage of terms correctly translated by GT and MC, terms for which they give correct equivalents with different wording, the translation strategies used by both (literal, partial, transliteration, deletion, explanatory equivalents, transfer of the source term ... etc) and the semantic, syntactic, contextual, and orthographic inaccuracies, as problems in translating polysemes, neologisms, metaphors, giving variant lexical translations, providing faulty definite/indefinite Arabic equivalents, faulty derivatives, word order, and agreement).

This study is significant because it raises translation instructor's and students' awareness of the strengths and weaknesses of AI translation, and where AI tools fail to provide acceptable and correct equivalents especially because translation students take Political & Media, Literary, Islamic, Medical, Scientific and Technical, Legal, Financial and Economic translation, Problems of Translation, computer-aided translation, General English-Arabic and Arabic-English Translation, & a graduation project in translation. Many students-translators resort to GT and other AI tools to look up meanings of difficult words and translate a variety of texts.

## **2. Definition of Terms**

### **2.1 Types of AI**

There are two types of artificial intelligence (AI): (i) *Chatbots* that perform tasks like answering customer questions, resolving technical issues and providing user support. (ii) *AI tools* that perform tasks as natural language processing, emotional support, data analysis, image recognition, admission management platforms, enrollment management and forecasting tools, dropout prediction tools, and resource planning systems. (iii) *AI Assistants* such as personalized learning assistants, predictive analytics, automated lesson planning and automated grading.

### **2.2 Types of Machine Translation Systems**

Several types of machine translation (MT) systems exist as Generic MT engines, Neural machine translation (NMT), rule-based machine translation (RBMT), statistical machine translation (SMT), custom MT engines and others. Examples of MT Systems are Google Translate, SDL Trados, Microsoft Translator Amazon Translate, Systran Translate, DeepL, MemoQ and lately DeepSeek.

### 2.3 Microsoft Copilot (MC) & Google Translate (GT)

*Microsoft Copilot (GitHub Copilot)* is a chatbot created by Microsoft. It was first launched as *Bing Chat* on February 7, 2023. It is Microsoft's primary replacement for the discontinued Cortana. It is a code completion tool powered by AI that uses the Microsoft Prometheus model. It uses machine learning algorithms to translate text from one language to another. Its conversational interface style is similar to that of ChatGPT. Copilot has been fine-tuned using both reinforcement and supervised learning techniques.

*Google Translate (GT)* is a free web-based translation service developed and launched by Google in April 2006. It is a machine translation tool. It translates a variety of texts and media such as words, phrases, and webpages. Originally, GT was released as a statistical machine translation service. The input text had to be translated into English first before it was translated into the selected language. Since statistical machine translation uses predictive algorithms to translate a text, it had poor grammatical accuracy. In Nov 2016, Google adopted the neural machine translation model which uses deep learning techniques to translate whole sentences at a time. Both MC and GT use deep learning techniques, but GT is not interactive like MC. GT uses a Neural machine translation model to translate text, which means that it can learn from large amounts of data to improve its accuracy.

### 3. Data Collection and Analysis

A sample of 250 English and Arabic Gaza-Israel War terminology was collected from mainstream media as Arabic RT, BBC Arabic, CNBC Arabic, Al-Jazeera, Al-Araby and Al-Ghad. 65% of the sample are English and 35% are Arabic terms. 20% are single words, 67% are Compounds, and 13% are short stretches of discourse. 29% are metaphorical and 31% are neologisms. The sample included the following thematic categories:

- **Names of cities** and refugee camps: *Sderot, Ashkelon, Beersheba, Ashdod, Al-Zaytoun neighborhood* حي الزيتون, *Jabalia* جباليا, *Rafah* رفح, *Al-Maghazi* المغازي, *Al-Nuseirat* النصيرات, *Tal Al-Zaatar*; خانونس سيناء, *Gaza outskirts*; *Sofa bush*.
- **Crossings**: *Philadelphia Axis, Rafah crossing*, معبر رفح, *Karm Abu Salem* كرم أبو سالم, *Erez* إيريز, *settlements*.
- **Leaders**: *Biden, Blinken, Netanyahu; Chief of staff, Mossad*.
- **War nicknames**: *Al-Aqsa Flood* الأقصى, *Guardian of the Walls* حارس الأسوار, *Haras al-Aqsa* حارس الأقصى.
- **Brigades**: *brigades of the Israel Defense Forces, battalion* كتيبة, *Golani Brigade* لواء جولاني, *reservist brigade* لواء الاحتياط, *the 5th reservist brigade* لواء الاحتياط الخامس.
- **Gaza hospitals**: *Al-Shifa* الشفاء, *Nasser* ناصر, *The Baptist* المعمداني, *Al-Amal* الامل, *Al-Aqsa Martyrs* شهداء الأقصى, *Kamal Adwan* كمال عدوان, *the European* الأوروبي, *Turkish* التركي, *Kuwaiti* الكويتي, *Indonesian* الاندونيسي, *Al-Rantisi* الرنتيسي.
- **humanitarian organizations**: *UNRWA, Red Cross*, أطباء بلا حدود, *World Central Kitchen*, منظمة المطبخ المركزي العالمي, *Alkhidmat Foundation; UNHCR, Ataya Relief, Human Rights Watch, Doctors Without Borders*.
- **jihadist groups**: *Palestinian Authority; Islamic Jihad* الجهاد, *Al-Quds Brigades* سرايا القدس, *Al-Qassam Brigades* كتائب القسام, *Al-Aqsa Martyrs* شهداء الأقصى, *FATAH* فتح, *Abu Ubaida* ابو عبيدة, *Masked* المثلثم, *Houthis* الحوثيون, *Iran-backed Islamic Jihad; Islamist movement*.
- **names of weapons & military operations**: *Internationally banned weapon such as white phosphorus and depleted uranium, nuclear weapon, ballistic, penetrate, nuclear warhead, rocket bursts, a witness, orbital nuclear missile, russian-made Kornet anti-tank missiles, nuclear missiles, struck by a firearm, ground invasion, conqueror 110, frigate, white phosphorus, iron dome, al-Yassin shell, cornet anti-armor, Iranian armored vehicle, Merkava, mortar, al-Yassin mortar, rpg, air power, Kalashnikov rifles (Kalashnikovs), drones, suicide drones, reconnaissance planes, F-16, marine aerial drones, US downs three Houthi drones, strikes anti-ship missiles, Fajr-5, grad and Qassam rockets, grenades, intercept a missile, iron dome, Israeli onslaught, longer-range system, military vests, missiles, Palestinian rocket strike, pre-emptive operation, rocket arsenal, ballistic missile, ballistic missiles fired from Houthi, military mobilizations, ground incursion, military solution, Hannibal's plan, mass destruction, offensive operations, confrontation, pride of Israeli industry, Zwari, Massacre, Assault, Total destruction, Genocide, Ground invasion, أرض, مسيرات وصواريخ موجهة/انقضاضية, مسيرات اشغالية/انقضاضية, صاروخ جهاد, صاروخ فلق, صليات صواريخ, صواريخ مضادة للدروع, عبوة شواظ, عبوة ناسفة, الغام بحرية = اشواك البحر, الغواصات الانتحارية, قذيفة الياسين, مسيرات اشغالية, القصف الهمجى, كواد كابتير, منطاد تجسسي, عبوة ثاقب البرميلية شديدة الانفجار, مسيرات وصواريخ موجهة/ارض, الية عسكرية, منظومة صواريخ رجوم قصيرة المدى عيار 114 ملم, هجوم مدمج بالطائرات المسييرة والصواريخ على الجليل, قنص جندي, قوات الاحتلال المتوغلّة.*
- **US Carriers**: *USS Gerald Ford* فور جيرالد, *USS Nimitz* نيميتز, *USS Ronald Reagan* ريغان, *USS George Bush* جورج بوش.
- **Metaphorical expressions**: *massacres, media war* مذبحة, *herds of settlers* قطعان المستوطنين, *biting fingers* يزوغ الفجر, *fire- belt policy*, *prison whitewashing* تبييض السجون, *Gaza outskirts* غزّة, *breaking dawn* المشي على الحبل, *walking on a rope*, *Samsung media* اعلام السامسونج, *devil's weapon* سلاح الشيطان, *target bank, carpet bombing* القصف البساطي, *David's slingshot, scorched earth, baha timing, al-Aqsa flood, saif al-quds = guardian of the walls, human animals* حيوانات بشرية, *zero distance* صفر, *fire belt* احزمة نارية, *hannibal's plan, hamas – still licking its wounds, accurate mortar shells, artificial intelligence-assisted targeting systems*.



Regarding the Arabic data, MC and GT gave identical translations to 58% of the Arabic items and equivalents with different wording to 26% of the Arabic items in the data. This means that MC and GT rendered more correct translations in Arabic-English translation than English-Arabic translations (See Table 2).

**Table 1: Identical English-Arabic Translation by MC and GT**

English Terms	Arabic Translation	English Terms	Arabic Translation
Air power	القوة الجوية	Herds of settlers	قطعان المستوطنين
Al-Yassin shell	قذيفة الياسين	intercept a missile	اعتراض صاروخ
Assassination	اغتيال	Israeli opposition leader Yair Lapid	زعيم المعارضة الإسرائيلي يائير لابيد
Beersheba	بئر السبع	Nuclear missiles	صواريخ نووية
Biting fingers	عض الأصابع	Nuclear warhead	رأس حربي نووي
Kalashnikov Rifles	بنادق كلاشنيكوف	Orbital nuclear missile	صاروخ نووي مداري
confrontation	مواجهة	Philadelphia Axis	محور فيلادلفيا
Cornet anti-armor	صاروخ كورنيت مضاد للدروع	Pride of Israeli industry	فخر الصناعة الإسرائيلية
Detainees	المعتقلين	Reconnaissance planes	طائرات الاستطلاع
Devil's weapon	سلاح الشيطان	Saif Al-Quds	سيف القدس
Fire belt	حزام النار	Scorched earth	الأرض المحروقة
Golani Brigade	كتيبة جولاني	UN special rapporteurs	المقررين الخاصين للأمم المتحدة
Grenades	قنابل يدوية	Walking on a rope	المشي على الحبل

**Table 2: Identical Arabic-English Translation by MC and GT**

Arabic Terms	English Translation	Arabic Terms	English Translation
أزمة إنسانية	Humanitarian crisis	عملية رفح	Rafah operation
اشتباك نوعي	Qualitative clash	عملية مركبة	Complex operation
اصبنا الهدف بدقة	We hit the target accurately	قواعد الاشتباك	Rules of engagement
الاعلام العسكري	Military media	قواعد الردع	Deterrence Rules
ثكنة	barracks	كتيبة الدفاع الاحتياطية	Reserve <b>Defense</b> Battalion
ثكنة يفتاح	Yiftah barracks	لواء احتياط	Reserve Brigade
جبهات اسناد	Support fronts	مجلس الحرب	War Council
حي الزيتون	Al-Zaytoun neighborhood	مستعمرة افيفيم	Avivim Settlement
دوميسايد = مذبحه البيوت	Domocide = massacre of houses	مستوطنة اميتاي	Amitai Settlement
سرايا القدس	Al-Quds Brigades	مناهضة التطبيع	Anti-Normalization
عبوة ناسفة	Explosive device	نهاية استراتيجية	Strategic End
العواصات الانتحارية	Suicide submarines	حماستان	Hamastan
كواد كابتير	Quad copter	فتحستان	Fatahstan
منطاد تجسسي	Spy balloon	الغام بحرية = اشواك البحر	Naval mines = sea thorns
الية عسكرية	Military vehicle	العشاء الأخير	The Last Supper
طلاب معتمدون	Protesting students	قتال الاشباح	Ghost fighting
هجوم مدمج بالطائرات المسيرة والصواريخ على الجليل	Combined Attack with Drones and Missiles on the Galilee	الطائرات الحربية الاسرائيلية تخرق جدار الصوت	Israeli Warplanes Break the Sound Barrier

Examples of terms correctly translated by MC only are: *David's slingshot* داود مقلع , *Grad and Qassam rockets* صواريخ غراد وقسام , *Iran-backed Islamic Jihad* الجهاد الإسلامي المدعوم من إيران , *Grenades* قنابل يدوية , *Assault war* هجوم , *Media war* حرب إعلامية , *Baha timing* توقيت البهاء , *chief of staff* رئيس الأركان , *ballistic* بالستي , *ballistic missile* صواريخ باليستية , *battalion* كتيبة , *Fajr-5* فجر-5 , *Frigate* فرقاطة , *genocide* إبادة جماعية , *ground, incursion* غزو بري , *ground invasion* غزو بري , *hostages* رهائن , *human animals* بشرية , *israeli onslaught* هجوم إسرائيلي , *massacres* مجازر , *military solution* حل عسكري , *military vests* سترات عسكرية , *missiles* صواريخ , *offensive operations* عمليات هجومية , *target bank* بنك الأهداف , *prison white washing* تبييض السجون , *Iron Dome* القبة الحديدية.

Examples of terms correctly translated by GT only are: *Accurate Mortar Shells* قذائف هاون دقيقة , *rocket arsenal* الترسانة الصاروخية , *Fire-belt policy* سياسة الحزام الناري , *Minister of Defense in the Israeli emergency government* وزير الدفاع في حكومة الطوارئ الإسرائيلية.

brigades, أنظمة الاستهداف المدعومة بالذكاء الاصطناعي Artificial intelligence-assisted targeting systems, طوفان الأقصى Al-Aqsa Flood, قوات الدفاع الإسرائيلية of the Israeli Defense Forces, ألوية من قوات الدفاع الإسرائيلية, Internationally banned weapon such as white phosphorus and depleted uranium, الأسلحة المحرمة دولياً مثل الفسفور الأبيض واليورانيوم المنضب, هيئة الإذاعة العامة الإسرائيلية KAN, Israeli public broadcaster, برزوغ الفجر Breaking Dawn, لواء احتياط (KAN), reserve brigade, يو إس اس جورج بوش USS George Bush, الأمن القومي National Security, يو إس إس نيميتز USS Nimitz, يو إس إس جيرالد فورد USS Gerald Ford, عسقلان Ashkelon, يو إس إس رونالد ريغان USS Ronald Reagan, سياسة التجويع Starvation policy, اخترق Penetrate, حركة الجهاد Iran-backed Islamic Jihad, الإنفاق Spending, المسافة صفر zero distance, الدمار الشامل mass destruction, الإسلامي المدعومة من إيران Total destruction, قصف صاروخي فلسطيني Palestinian rocket strike, المواد الغذائية / الإمدادات الطبية Food/medical supplies, شامل.

Both MC and GT gave correct equivalents with a different wording (15%) as (MC) غزو بري & (GT) التوغل البري (MC) for ground incursion, (MC) الإفراج عن المعتقلين/الإفراج عن الرهائن (GT) for military mobilization, release hostages (MC) تحشيد عسكري (MC) إطلاق سراح المعتقلين/إطلاق سراح الرهائن, (GT) إطلاق سراح المعتقلين/إطلاق سراح الرهائن, (MC) طائرات بدون طيار للحوثيين وتضرب صواريخ للسفن أسقطت الولايات المتحدة ثلاث طائرات مسيرة للحوثيين, وضربت صواريخ, (MC) طائرات بدون طيار للحوثيين وتضرب صواريخ للسفن انفجارات صواريخ Rocket bursts (GT) طائرات بدون طيار البحرية (MC) الطائرات البحرية بدون طيار Marine aerial drones (GT) مضادة للسفن ألوية من قوات الدفاع الإسرائيلية, (MC) كتائب قوات الدفاع الإسرائيلية brigades of the Israeli Defense Forces (GT) انفجارات صاروخية (MC) (GT) accurate mortar shells حركة الجهاد الإسلامي المدعومة من إيران (MC) الجهاد الإسلامي المدعوم من إيران (MC) Iran-backed Islamic Jihad (GT) وزير الدفاع في Minister of Defense in the Israeli emergency government (MC) قذائف هاون دقيقة (MC) قذائف المدفعية الدقيقة (GT) (MC) ضربة صاروخية فلسطينية Palestinian rocket strike (GT) حكومة الطوارئ الإسرائيلية وزير الدفاع في (MC) الحكومة الإسرائيلية الطارئة صواريخ كورنيت (MC) صواريخ مضادة للدبابات من صنع روسي Russian-made Kornet anti-tank missiles (GT) قصف صاروخي فلسطيني (GT) أطراف غزة (MC) ضواحي غزة Gaza outskirts (GT) إصابات (MC) ضحايا Casualties (GT) الروسية الصنع المضادة للدبابات رئيس أركان قوات الدفاع الإسرائيلية, Chief of Staff of the Israeli Defense Forces, Herzl Halevy (GT) إظهار القوة (MC) عرض قوة strength (MC) أكد الخبير العسكري والإستراتيجي اللواء المتقاعد فايز الدويري (GT) رئيس أركان جيش الدفاع الإسرائيلي هرتسي هاليقي (MC) هيرتسي هاليقي (MC) as Military and Strategic Expert, Retired Major General Fayeze Al-Duwairi, confirmed that Palestinian fighters used "deception traps" in confronting the Israeli occupation forces in the northern Gaza Strip. It was translated by GT as Retired Major General Fayeze Al-Duwairi, an expert in military and strategic affairs, confirmed that Palestinian fighters used "deception traps" against the Israeli occupation forces in northern Gaza Strip. وأوضح أن المقصود بـ"شراك الخداع" هو استخدام حشوات توصل بطريقة مموهة وتوضع في أماكن. (MC) and he explained that the meaning of 'deception traps' is the use of charges connected in a camouflaged manner and placed in specific locations that are very difficult to detect. Once the occupation soldiers enter, they are detonated. GT translated it as He explained that what is meant by "deception traps" is the use of charges that are delivered in a camouflaged manner and placed in specific places that are very difficult to detect, and as soon as the occupation soldiers enter, they are detonated. Both MC and GT translated these stretches of discourse with correct lexical variations.

Findings of the current study are consistent with findings of other studies conducted by the author on the use of AI in translating medical and technical terms from English to Arabic and Arabic to English (Al-Jarf, 2024d; Al-Jarf, 2021a; Al-Jarf, 2016a). Compared to the percentage of identical equivalents to Gaza-Israel terms in the current study, MC and GT gave accurate translation equivalents to 68.6% and 74.5% of the medical terms, respectively (Al-Jarf, 2024d). As in the translation of the Gaza-Israel terminology, MC and GT gave more correct equivalents to medical terms in Arabic-English than English-Arabic translation.

Contrary to findings of the current study, human translators in Al-Jarf's (2022d) found Arabic-English interpreting more difficult for advanced students, whereas beginners had comparable abilities in both directions (English-Arabic and Arabic-English).

## 4.2 Semantic Inaccuracies in MC and GT Translation

### 4.2.1 Translation of Polysemes

Semantic errors occur when the meaning of an original term is not accurately conveyed by the translation equivalent. GT gave more faulty equivalents than MC, especially in the case of polysemous words. Errors in translating polysemous terms constituted 18% of the sample in the current study. GT gave equivalents that are not related to the Gaza-Israel War context. This resulted in funny and extraneous translation as it translated them literary. For example, GT gave the equivalent شجيرة أريكة for Sofa bush rather than أكراس صوفا which is a city in Saudi Arabia for Baha timing; مونة الاسمنت for mortar (which is more used in building and construction context); غسيل السجن باللون الأبيض for prison whitewashing which is a metaphor (which means clearing prisons by releasing all Palestinian prisoners). GT also mistranslated carpet bombing تفجير السجاد, which is metaphor, as bombing means not تفجير and the full equivalent should be القصف السجادي which means "dropping a large number of bombs over a wide area, with the intent of causing extensive damage and destruction". Unlike precision bombing, which aims to hit specific targets, carpet bombing covers an entire area, often without regard to exact targets within that zone. GT gave توقيت الباحة for Baha timing instead of توقيت البهاء which is a metaphorical expression referring to the martyred Palestinian Resistance leader named Bahaa Abul-Ata. GT translated chief of staff as رئيس العمال instead of الرئيس الأركان which does not fit a war context. MC translated

*Breaking dawn* as بزوغ الفجر not فجر اليوم. It seems that MC and GT do not know when such metaphorical expressions were invented and following which incident. MC mistranslated *Al-Aqsa flood* as فيضان الأقصى rather than طوفان الأقصى because flood is a polysemous word. *أسلحة محظورة دولياً* was given by MC for *Internationally banned weapon such as white phosphorus and depleted uranium* instead of *الأسلحة المحرمة دولياً*.

In other faulty translations of polysemous terms and compounds, MC did not give equivalents that are commonly and typically used in Arabic media and Arabic news reporting. For example:

- *أنظمة الاستهداف المساعدة بالذكاء الاصطناعي* was given by MC for Artificial intelligence-assisted targeting systems rather than المدعومة بالذكاء الاصطناعي.
- *الدمار الشامل* was given by MC for Total destruction, and *دمار جماعي* for mass destruction instead of *الدمار الكلي*.
- *أسلحة محظورة دولياً* مثل الفسفور الأبيض واليورانيوم المستنفد was given by MC for *Internationally banned weapon such as white phosphorus & depleted uranium* instead of *الأسلحة المحرمة دولياً*.
- *درونات بحرية جوية* was given by MC for *marine aerial drones* instead of the Arabic equivalent *مسيرات*. Here MC transliterated the English term *drones* درونات.
- MC translated all items containing *brigade* as *كتيبة/كثائب* rather than *لواء/ألوية* because *كتيبة* is usually smaller than *لواء*. *لواء* usually consists of 2-5 *كتيبة*.
- MC translated *accurate mortar shells* as *قذائف المدفعية الدقيقة* rather than *قذائف هاون دقيقة*.
- *استعراض القوة* was given by MC and *إظهار القوة* was given by GT for *show of strength* instead of *القوة*.
- MC translate *Casualties* as *ضحايا* & GT translated it as *إصابات*. Both are used in Arabic media depending on the context. The same applies to *Gaza outskirts* which was translated to *ضواحي غزة* by MC and *أطراف غزة* by GT depending on the context.

Furthermore, there are lexical variations in MC and GT Translation, i.e. two correct equivalents to a source term whether it is English or Arabic. For instance:

- *Release hostages* has two variant lexical translations for each word: *إطلاق سراح الرهائن/المعتقلين* by MC and *الإفراج عن الرهائن/المعتقلين* by GT.
- *Hamas – still licking its wounds* has two variant lexical translations: *لا يزال يلحس جراحه* by MC and *يلعق جراحه* by GT.
- *Palestinian rocket strike* has two variant translations: *ضربة صاروخية فلسطينية* by MC and *قصف* by GT.
- *Total destruction*: *الدمار الكلي* by MC and *دمار شامل*.
- *Military mobilizations*: *تحشيد عسكري* by MC and *التعبئة العسكرية* by GT.
- *مسيرات اشغالية/ انقضاضية* has two variant translations *distraction/assault drones* by MC and *occupational marches* by GT.
- *فرس رهان*: *betting horse* by MC and *racehorse* by GT.
- *التواطؤ مع الصهاينة* has two variant translations: *Collaboration with the Zionists* by MC and *collusion with the Zionists* by GT.
- *تفجير عبوات*: *Explosion of charges* by MC and *detonation of explosive devices* by GT.
- *صواريخ*: *Missile salvos* by MC and *rocket barrages* by GT.
- *مضادة للدروع*: *Anti-armor missiles* by MC and *anti-tank missiles* by GT. In all compounds and short stretches of discourse, *صواريخ* was translated as *missiles* by MC and as *rockets* by GT.
- *قصف*: *Bombing* by MC and *bombardment* by GT in all examples containing *قصف*.
- *قوات الاحتلال المتوغلة*: *infiltrating occupation forces* by MC and *invading occupation forces* by GT.

The errors made by MC and GT in translating polysemous words in the Gaza-Israel terminology in the sample are similar to errors made by human translators in translating polysemes from English to Arabic and Arabic to English. Student translators overgeneralize the equivalent they know to all contexts, not the one suitable for a particular context/domain. They also overgeneralized the same equivalent to all contexts, although each shade of meaning has a different equivalent. Faulty translation of polysemic words may be due to inadequate L1 competence, lack of proficiency in EFL, i.e. limited vocabulary knowledge; unfamiliarity with specialized meanings and lack of world knowledge (Al-Jarf, 2022a).

The variant lexical equivalents given by MC and GT to some media and Gaza-Israel War terms in the current study are partially similar to the multiplicity of Arabic equivalents to English medical terms found by (Al-Jarf, 2018). Al-Jarf, 2018 showed numerous reasons for the multiplicity of equivalents in Arabic such as the use of an Arabized term, a loan word, a synonym, an explanatory compound, an explanation, use of derived forms expressing different shades of meaning and used in different contexts, regional varieties used in different countries, synonyms, a descriptive (explanatory) word or phrase, an eponym, two or more names used for the same disease, an old term and a modern one, a technical term and a common word, calques, and re-wording of phrases and compounds. But in the case of the Gaza-Israel War terms and compounds, the multiplicity of equivalents given by MC and GT to certain Gaza/Israel War terms is mainly due to one too many equivalents of polysemous terms, the variant usage by different

media and because the source terms have different shades of meaning, each of which has an equivalent, especially that the terms were translated in isolation without any clarifying contexts.

#### 4.2.2 Translation of Metaphors

Although 29% of the data consisted of metaphorical expressions, MC and GT gave correct and identical translations to 60% of the Gaza-Israel War metaphorical expressions in the sample such as *biting fingers* عض الأصابع; *conqueror 110* الفاتح 110; *devil's weapon* سلاح الشيطان; *fire belt* حزام النار; *Hamas – still licking its wounds* حماس - لا يزال يلحس جراحه; *herds of settlers* قطعان المستوطنين; *Saif Al-Quds* = سيف القدس; *scorched earth* الأرض المحروقة; *walking on a rope* المشي على الحبل; *guardian of the walls* حارس الجدران; *Hamastan* فتحستان; *Fatahstan* فتحستان; *naval mines, sea thorns* = اشواك البحر; *the last supper* العشاء الأخير; *ghost fighting* قتال الاشباح; *MC gave correct translation equivalents to metaphors such as target bank* بنك الأهداف; *David's slingshot* قذيفة الياسين; *Al-Yassin mortar* قذيفة الياسين; *مقلع داود* *Betting horse* فرس رهان; *Jihad rocket* صاروخ جهاد; *Falaq rocket* صاروخ فلق; *Al-Yassin shell* قذيفة الياسين; *Shouaz charge* عبوة شواظ.

On the other hand, both MC & GT gave faulty equivalents to the following metaphorical expression: *Carpet bombing* قصف السجاد by MC & *تفجير السجاد* by GT instead of *القصف السجادي*. *Samsung media*: وسائل الإعلام سامسونج by MC and *وسائل اعلام سامسونج* by GT instead of *وسائل الاعلام سامسونج*. This metaphorical expression appeared when President Mursi passed away. Now it refers to the bad coverage of the military media. MC mistranslated *Al-Aqsa flood* as فيضان الأقصى rather than طوفان الأقصى because flood is a polysemous word. Both deleted *عبوة ثاقب* from the translation of *Highly explosive barrel-piercing charge* by MC & *High Explosive Barrel-Bomb* by GT). MC translated *Hannibal's plan* as *حلاف حنيبعل*; *Breaking Dawn* as فجر اليوم; instead of *بزوغ الفجر* & *خطة* respectively. Likewise, GT translate the nicknames *Al-Yassin mortar* as *ملاط الياسين* & *David's slingshot* as *بنك الأهداف* & *مقلع داود*, *قذيفة الياسين* instead of *البنك المستهدف* as *target bank* and *مقلع ديفيد* as *David's slingshot*.

#### 4.2.3 Translation of Neologisms by MC and GT

MC and GT were able to translate most of the neologism in the samples, with few errors made as *عبوة شواظ* ثاقب، *انفجار عين نفق*، *Al-Aqsa Flood*، *Al-Yassin shell*، *Carpet bombing*، *Conqueror 110*، *David's slingshot*، *Devil's weapon*، *Fire-belt policy*، *Guardian of the Walls*، *Hannibal's plan*.

Neologisms constituted 31% of the terms and compounds in the sample, many of which are metaphorical expressions (compounds). The correct translations of Gaza-Israel War terms in the sample is probably due to the frequent occurrence of such terms in the English and Arabic media for more than 500 days. This means that both MC and GT have a good parallel corpus of such terms. Like metaphors and neologisms in the current sample are transparent in meaning with the exception of few cases as in *Samsung media* and *Baha time* although the equivalents are literal translations of both.

Unlike MC and GT that made few errors in translating neologism in the current study, human translators have difficulty in translating neologisms. Translation students had difficulty recognizing, understanding the meaning of, and translating English neologisms to Arabic. They tended to translate neologisms literally rather than conceptually and gave single-word equivalents rather than a borrowing, periphrasis or explanatory equivalent. Translation students' difficulties with English neologism were due to unfamiliarity with the neologisms, lack of background knowledge, and inability to infer the meaning of neologisms from context (Al-Jarf, 2010).

#### 4.2.4 Partial Translation

In less than 1% of the data, partial translation was used when MC and GT failed to access and provide the equivalent of a word in a compound. Here, MC and GT either transferred the English source term to Arabic (kept the unfamiliar word in English, transliterated it in the TL or deleted it. For example, MC transferred the unfamiliar word to Arabic and kept it in English script as in *USS George Bush*, *USS Gerald Ford*, *USS Nimitz*, *USS Ronald Reagan*; *جورج بوش* *USS*, *جيرالد فورد* *USS*, *نيميتز* *USS*, *رونالد ريغان* *USS*.

#### 4.2.5 Transfer of the Source Term

In some cases, MC and GT transferred the English word to Arabic but transliterated it in Arabic script as in:

- *David's slingshot* gave *مقلع ديفيد* by GT
- *rocket arsenal* *أرسنال صواريخ* by MC
- In *Sofa Bush*, MC transferred *Sofa* to Arabic and transliterated it.
- *David's slingshot* *مقلع ديفيد* by MC
- GT transliterated *USS* and translated the second part correctly *يو إس إس جورج بوش* *USS*, *يو إس إس جيرالد فورد* *USS*, *نيميتز* *يو إس إس* *USS*, *رونالد ريغان* *يو إس إس* *USS*.
- *Sofa bush* was transliterated in Arabic by MC (*صوفا بوش*) but was transferred as it is in English by GT (*Sofa bush*).
- In *Marine aerial drones*, MC transferred *drones* to Arabic (*درونات بحرية جوية*), but added the Arabic Feminine Sound Plural suffix {-a:t} to it as it is the case with foreign words borrowed in Arabic (Al-Jarf, 2024b).



#### 4.2.6 Deletion

Furthermore, MC and GT deleted the unfamiliar word as in:

- In translating مدمر ١١٤ ملم , GT deleted *Rajum* from the equivalent *Short-range mortar rocket system caliber 114 mm*
- In translating عبوة ثاقب البرميلية شديدة الانفجار, both MC and GT deleted ثاقب which is the name of the *barrel-bomb*.
- In translating انفجار عين نفق as Tunnel explosion where *eye* was deleted.
- In translating *Russian-made Kornet anti-tank missiles*, MC deleted *Kornet* in the Arabic translation صواريخ مضادة للدبابات من صنع روسي.

#### 4.2.7 Giving and Explanatory Equivalent

MC gave an explanatory equivalent for RPG قاذفة صواريخ متعددة الأغراض without giving the acronym RPG, which is commonly and typically used by Arabic Media.

The semantic anomalies in translating the Gaza-Israel terminology by MC and GT are similar to the semantic anomalies in the shop names coined by humans in Saudi Arabic. 14% of the shop names have semantic anomalies and some compound shop names are meaningless because the two elements of the compound are incongruous (*Operation Falafel* فلافل; *Rude Shake* رود شيك). They use constituents in the compound with the same meaning from two foreign languages (*THE BEAU WOW*). They split words into syllables or two parts كس و ريز (*Accessories*) or combine two words and spelling them as one lexeme (شرمبشاك) (Al-Jarf, 2023).

### 4.3 Syntactic Problems

Data analysis of the Gaza-Israel Terminology in the sample showed that MC and GT made syntactic errors in the Arabic definite article attachment, choosing wrong derivatives, disagreement of the part of speech of the source word with that of the equivalent, faulty word order, and faulty agreement. They are explained in detail below.

#### 4.3.1 Faulty Definite Article Attachment/Detachment

In 20% of the data, there were errors in the Arabic definite article {al-} attachment. GT gave more definite Arabic equivalents than MC, i.e. the Arabic definite article {al-} is attached to the equivalents whether it is a single word, a compound and long stretches of discourse, as these are used in isolation and they have a generic reference. For example, GT gave definite equivalents to *ballistic missile* الباليستية, *battalion* الكتيبة, *fajr-5* الفجر-5, *frigate* الفرقاطة, *genocide* الإبادة الجماعية, *Israeli onslaught* الهجوم الإسرائيلي, *ground incursion* التوغل البري, *ground invasion* الغزو البري, *hostages* الرهائن, *human animals* الحيوانات البشرية, *media war* الحرب الإعلامية, *military mobilizations* التعبئة العسكرية, *military solution* الحل العسكري, *military vests* السترات العسكرية, *missiles* الصواريخ, *nuclear warheads* الرؤوس الحربية النووية, *offensive operations* العمليات الهجومية, *target bank* البنك المستهدف; Conqueror 110 الفاتح 110 instead of فاتح

Similarly, MC gave faulty definite equivalents to two examples only: *Drones* الطائرات بدون طيار; *suicide drones* الطائرات بدون طيار الانتحارية.

On the contrary, MC and GT gave faulty indefinite equivalents (without the Arabic definite article). For instance, both MC and GT are *Merkava* ميركافا instead of الميركافا; *Zwari* زواري instead of الزواري; *zero distance* مسافة صفر instead of المسافة صفر; *Haganah* هاغانا instead of الهاغانا. An example of multiple faulty definite/indefinite equivalents within the same compound are: *Samsung media* وسائل إعلام سامسونج instead of وسائل الإعلام سامسونج. When terms are translated in isolation, most Arabic equivalents should be indefinite except in the case of some proper nouns and some definite fixed phrases as *الميركافا* الزواري الهاغانا mentioned above.

Findings regarding the attachment of the Arabic definite article to single terms and compounds in the equivalents given by GT are similar to the incorrect attachment of the Arabic definite article in product names translated by humans. The definite article {al-} was used in two-word product names. Human manufacturers seem to be unaware of the rules of adding or not adding the Arabic definite product names, especially those with a generic and ubiquitous reference as opposed to those referring to specific and unique entities as in oil names (Al-Jarf, 2024a). As in product names, no transfer of definiteness/indefiniteness from English was made. As in the English product names printed on the box or container which are usually indefinite, the English Gaza-Israel War Terms are also indefinite in the source term, without the definite article "the".

In Arabic, nouns and adjectives are marked for definiteness or indefiniteness. An Indefinite noun refers to a non-specific entity, whereas a definite refers to a specific entity as in many proper nouns, when an indefinite noun is apposed to a definite nouns referring to a genus and is all-inclusive, or specific. The definite noun has a specific reference that is known to both the speaker

and listener. A definite noun with {al-} also refers to something or someone that is unique (Al-Jarf, 1996; Al-Jarf, 1994a; Al-Jarf, 1994b; Al-Jarf, 1990).

### 4.3.2 Faulty Derivatives

Taking into consideration that Arabic is a derivational language, where a variety of forms (agents, patients, names of tools, place, participles ... etc) are derived from triliteral and quadrilateral verbs, it was found that in less than 1% of the data, MC and GT gave equivalents with faulty derived forms that do not match the source term in part of speech, nor the correct derived form. For example, MC translated *penetrate* (V) into اختراق (N) instead of اخترق (V); *starvation* (N), الجوع which means *hunger* and *starvation policy* as سياسة الجوع rather than سياسة التجويع; *show of strength* (N) عرض قوة instead of اتسعرض القوة; *National Security* (N) الأمن القومي rather than الأمن القومي; Rocket (N functioning as an adj); bursts انفجارات صواريخ (N) rather than انفجارات صاروخية; *Fire-belt policy* النار الحزام instead of سياسة الحزام الناري; *Settlers: violence and destruction activities* gatherings of Arab Al-Malehat Bedouins جمع عرب المليحات البدوي (MC).

Similarly, GT did not choose the correct derived form in translation. For example *show of strength* (N) was translated as اظهار القوة; *extended truce* as هدنة ممتدة; *target bank* as البنك المستهدف rather than بنك أهداف; *ballistic* باليستية instead of بالسستي; *Iron Dome* قبة الحديد rather than القبة الحديدية; *longer-range system* نظام أبعد مدى instead of نظام بعيد المدى; *sniper of a soldier* instead of *sniping*.

There was a variation in choosing the verb tense as in يرسم سيناريوهات which was translated as *drawing scenarios* by MC and *draws scenarios* by GT. The choice between the progressive tense and the simple tense depends on the context.

### 4.3.3 Faulty Word Order

Both MC and GT gave equivalents with the correct word order, whether in two- or three-word compounds or longer phrases probably because the word order in those units in the SL and TL are similar. Despite that, examples of faulty word order exist as (GT) for long-range system instead of نظام ذو مدى أطول; suicide drones طائرات بدون طيار الانتحارية (MC); طائرات (MC) الطائرات بدون طيار الانتحارية instead of طائرات انتحارية بدون طيار (GT) instead of تجمع عرب المليحات البدوي; *Bedouin Arab Al-Malihah Gathering* by (GT) instead of *Gatherings of Arab Al-Malehat Bedouins*; اعمال العنف والدمار تجمع عرب المليحات البدوي (MC) instead of (Violence and destruction unite Arabs of Al-Malihah Bedouin by GT).

In English-Arabic translation, human translators made subject + Verb + Object (SVO) word order errors, i.e., the students calqued the English SVO order. The sentence subjects were misplaced before the verb when the head noun was embedded in a long or complex NP; when they were separated from the controlling verbs by a relative clause or the head noun; or when they were embedded in a long noun phrase (Al-Jarf, 2007). Unlike human translators, MC and GT did not misplace subjects and verbs in long stretches of discourse in the sample. The errors made by MC and GT were made in the word order of some compounds only.

### 4.3.4 Faulty Agreement

In some examples in the data, there is no agreement in case. MC made errors in the accusative/genitive case form of the Masculine Sound Plural Nouns as in *detainees* المعتقلين; *UN special rapporteurs* المقررین الخاصین للأمم المتحدة instead of المقررون & المعتقلون. In addition, both MC and GT made agreement errors in definiteness and in noun-adjective agreement as in *carpet bombing* قصف التفجير السجادي (N+Adj). MC gave أرسنال صواريخ as an equivalent to *rocket arsenal* which sounds awkward in Arabic because MC transferred the same English word because it could not access the Arabic equivalent ترسانة. Both MC and GT gave equivalents with a masculine verb although the antecedent (Hamas) is Feminine as in لا يزال يلحق جراحه by GT for *Hamas – still licking its wounds rather than* لا تزال تلحق جراحه by MC and *Hamas – لا يزال يلحق جراحه* by MC. MC used a masculine adjective for a feminine antecedent as *Iran-backed Islamic Jihad* by MC instead of المدعومة. MC made gender agreement errors in translating *Iran-backed Islamic Jihad* as *الجهاد الإسلامي المدعوم من إيران* for *Iran-backed Islamic Jihad* by MC instead of المدعومة. GT made one agreement error in translating the 5th reserve brigade اللواء الاحتياط الخامس.

The agreement errors produced by MC and GT were very few compared to the grammatical agreement errors in adjective + modified noun, verb + subject and referent pronoun + antecedent that human translators made in L1/L2 translation (Al-Jarf, 2000).

In translated shop names in Saudi Arabia, 69% of the Arabic transliterations of compound shop nouns in the sample have syntactic and/or semantic anomalies including 22% having syntactic anomalies, and 23% having both semantic and syntactic anomalies combined. Some have faulty word order (*Mama Batata* قوركان شيف; *ماما بطاطا*), faulty use of the definite article, and adding the English plural /-s/ to Arabic words as in ملهم in *Max Molhams* ماكس ملهم (Al-Jarf, 2023). In the current study, the Arabic plural suffix {a:t} was added to the borrowed and transliterated English word drone درونات.

#### 4.4 Orthographic/Transliteration Variations and Inaccuracies

MC and GT gave different spellings of the Arabic equivalents to *Haganah* and *Grad* which MC spelled with غ and GT spelled with ج as these two graphemes are usually used in transcribing English proper nouns and words containing the phoneme g as in *Greenwich* غرينيتش, *Chicago* شيكاغو and *Golden* جولدن. *Ashdod* and *Ashkelon* are the English version of the original Arabic city names عسقلان & اسدود. The transliterated city name *Ashdod* اشدود was used by both MC & GT. The correct Arabic name عسقلان was given by GT. In other words, MC transliterated *Ashdod*, *Ashkelon*, and *arsenal*, whereas GT transliterated *Ashdod* and *David's slingshot* ديفيد هنيبال. MC transliterate *Grad* as الجراد, whereas GT transliterated it as غراد. It seems that when MC and GT do not know the Arabic equivalent, they transliterate the English version. However, MC knows the Arabic equivalents to *Hannibal* حنيبال and *David* داود, whereas GT knows the Arabic equivalent to *Ashkelon* and *arsenal*.

دوميسايد & دوميسايد show the Arabic transliteration of the English words. However, MC and GT could not recognize the loanwords in Arabic script and could not associate them with their corresponding English spelling. MC and GT made a faulty back transliteration of مذبحة المدن = اوريسايد and مذبحة البيوت = دوميسايد as *Domocide* by MC and *Orbide* and *domesside* by GT.

In addition, there were variations in transliterating some Arabic words in English as عرب المليحات (*Malehat* by MC & Arab *Al-Malihah* by GT; عبوة شواظ *Shouaz* by MC & *Shawaaz* by GT).

MC spelled the compound كواد كابتير as two separate words *Quad copter*, whereas Gt spelled the compound as an agglutinated unit *Quadcopter* which is the correct spelling.

The variant and faulty transliteration of Arabic and English terms by MC and GT, in the current study, are similar to those made by humans in transliterating personal names on social media (Al-Jarf, 2022b). In translating medical terms, there were some errors spelling and transliterating medical terms by MC and GT (Al-Jarf, 2024d).

#### 5. Conclusion and Recommendations

MC and GT provide Arabic and English equivalents to the Gaza-Israel War terminology that have semantic, contextual, syntactical, and orthographic errors and variations. GT provides Arabic equivalents that are mostly definite, i.e., attached to the Arabic definite article {al-}. The exact Arabic equivalent that is commonly used in the Arabic media is not given especially when an element of a compound is polysemous. In some cases, there is a lack of agreement between the source term and its meaning in number, gender, case and part of speech.

The AI (MC and GT) translation weakness found in this study is consistent with findings of prior studies in the literature as Kadhim (2024) who compared the effect of using ChatGPT and Google Translate in translating BBC media texts into Arabic. Results showed various types of semantic, lexical, morphological, and syntactic errors in the translated output. Most translation errors were major errors in both MT and ChatGPT. Another study by Umam, Ridlo, Al Farisi & Ali (2024) examined the translation errors of CNN Indonesia's news entitled "*House of Senior Hamas Commander in West Bank Leveled by Israeli Military*" into Arabic through the Perplexity.AI application to explore the morphological, syntactic, and semantic weaknesses. Results showed that the translation from Indonesian into Arabic using the Perplexity.AI application is not fully accurate, because Perplexity.AI yields many errors, with semantic errors as the most frequent and syntactic and morphological errors as the least frequent. A third study by Lin (2024) examined the strategies that AI uses in translating English news. She indicated that AI applications face many challenges in translation accuracy, contextual and cultural understanding, and data privacy and security. An older study by Almahasees, (2017) compared Google and Microsoft Bing translation of political texts from Arabic into English. The researcher found that Google Translate gave a better translation than Microsoft Bing in comparison with human-referenced translation. He concluded that MT is still far from reaching a fully automatic translation with a quality comparable to that of human translators.

Furthermore, findings of the current study are consistent with findings of a study by Al-Jarf, 2024d which showed that MC and GT make semantic, contextual, syntactic and orthographic inaccuracies in translating medical terms from English to Arabic and Arabic to English with literal translation as the most common translation strategy that MC and GT utilized in translating medical terms. MC and GT utilize the same literal translation strategy in translating the Gaza-Israel War Terms. Interestingly, the percentage of medical terms that were accurately translated by MC and GT was 68.6% and 74.5%. These percentages are higher than that in translating the Gaza-Izrael War terminology (both languages together 48%, English 38%, & Arabic 58%) probably because the corpus of medical terms and their equivalents is more comprehensive and more established than that of the Gaza-Israel War terminology, which has been more common in the media for the past 15 months only.

Compared to the percentage of technical terms in computer science, technology, astronomy, politics, economics, linguistics, psychology, and literature accurately translated from English to Arabic by GT, it was lower than that of medical term translation

(Al-Jarf, 2021a; Al-Jarf, 2016) probably because now GT is a neural machine translation, whereas before it was a statistical machine translation. Moreover, the translation accuracy of GT and the semantic, syntactic, contextual and orthographic errors that GT makes in translating a sample of technical terms. As in the translation of medical terms and Gaza-Israel War Terms, GT rendered the same semantic, contextual, syntactic and orthographic inaccuracies and followed the same translation strategies.

Translation quality by AI tools and assistants depends on the quality of the dataset, a well-behaved aligned corpus, and the evaluation technique used. Terminology in Arabic is not standardized. Variations in the lexical translation of the same lexical items may exist in different media due to Mistranslations even exist in some Arabic dictionaries from which AI tools collect its corpus.

Translation gaps, irregularities, and translation inaccuracies by AI can be due to the poor Arabic content on the Internet compared to other languages. There is an inadequate amount of Arabic-English and English-Arabic media, military, political documents, glossaries, and dictionaries in the corpus which results in gaps, and translation inaccuracies.

Although AI and machine translation tools have made remarkable improvements in English-Arabic and Arabic-English translation in the past few years, there is still some semantic, contextual, syntactic, morphological and orthographic shortcomings. The enhancement of AI translation requires the enrichment of the Arabic media content on the Internet and compiling accurate English-Arabic political and military and media parallel corpora. Updating English-Arabic media dictionaries.

To solve the semantic problems, Jusoh and Alfawareh (2011) proposed a framework for a semantic-based translation in English-Arabic MT. Ahmed and Nurnberger (2008) proposed a word sense disambiguation approach consisting of a natural language processing method that deals with the rich morphology of the Arabic language and word sense disambiguation. This method adapts the Naive Bayesian approach with new features that consider the Arabic language features and the exploitation of a large parallel corpus to find the correct sense based on its cohesion with words in the training corpus. Moreover, Tillmann and Zhang (2008) proposed a new online relevant set algorithm for a linearly scored block sequence translation model. This online algorithm introduces "seed" block sequences which enable the training to be carried out without a gold standard block translation.

To construct a good parallel corpus from Internet archives, we must have good English-Arabic and Arabic-English bilingual dictionaries. To build a good bilingual dictionary, an algorithm to automatically extract an English/Arabic bilingual dictionary from parallel texts that exist in those Internet archives must be used. A team of media, political and military specialists, computational linguists, and lexicographers should revise, add and supervise media, political and military terms included in English-Arabic Dictionaries. A good MT system requires a good English-Arabic and Arabic-English parallel corpus. Internet medical, military, and political archives contain a lot of parallel media, military and political documents especially during the Gaza-Israel Wars, Arab Spring and the like.

Due to the widespread use of technology and AI tools, especially in language translation, translation students should be trained to use all kinds of technologies in translation as Trados, OmegaT translation memory, speech recognition software, online specialized dictionaries, terminology databanks, online resources, and online translation tools in translation (Al-Jarf, 2017; Al-Jarf, 2022e; Al-Jarf, 2020; Al-Jarf, 2014; Al-Jarf, 2009).

Translation students who take media, political and military translation courses should use AI in translation with caution. They should first check the definition of media, political and military terms in an English dictionary and check the equivalents in an English-Arabic or Arabic-English dictionary such as Al-Maany Online Dictionary. They should revise the AI translation, fix the word order, check the definite articles, ensure there is an agreement between the constituents of a compound and the source term and its equivalent in number, gender, case and part of speech and correct the spelling/transliteration.

It is important to familiarize the students with specialized media, political, and military terminology such as names of weapons (grenades, mortar, drones, missiles, Merkava, Cornet anti-armor, mortar shells), toponyms (Maghazi, Khan Younis, Ashkelon, Sderot), crossings (Rafah, Erez), Jihadist groups and brigades (Islamic Jihad, Golani), military actions (bombing, incursion, shelling, displacement, genocide,) war metaphors (carpet bombing, target bank, fire belt, scorched earth, Hannibal's plan Philadelphia Axis,), (Gaza hospitals, UNRWA, humanitarian, starvation) and others. English and Arabic texts can be collected from mainstream media as Al-Jazeera and Al-Ghad, Al-Araby, RT, BBC, CNN and so on. Students should use Google Translate and artificial intelligence (AI) with caution and should read the same news story in both English and Arabic to get used to the terminology and their equivalents (Al-Jarf, 2024c).

Translation students' ability to detect semantic, syntactic, contextual, morphological, and orthographic accuracies in the translation of texts and terminology by a variety of AI tools and machine translation systems is still open for further investigation in the future.

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**ORCID ID:** <https://orcid.org/0000-0002-6255-1305>

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