Research Article

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Artificial intelligence accuracy in translating resistance literature from Arabic into English: Google Translate and ChatGPT as a model

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Abstract
Resistance literature serves as a repository for recounting the tragic experiences of injustice and persecution faced by individuals or communities, intertwining themes of resistance, freedom, and identity with profound emotional depth. This study scrutinizes the distortions inherent in translating such literature using AI, particularly Google Translate and ChatGPT, employing Berman's twelve tendencies as a framework. Focused on the short story "Until We Return," translated from Arabic to English, the research illuminates how machine-based translations, lacking nuanced understanding and context, may compromise the essence of resistance literature. The study unveils that both Google Translate and ChatGPT significantly alter the original text, demonstrating prevalent tendencies such as rationalization (36% in both), qualitative impoverishment (32% for Google Translate, 26% for ChatGPT), and destruction of rhythms (10% for Google Translate, 11% for ChatGPT). Additionally, both platforms exhibit quantitative impoverishment, destruction of linguistic patterns (7% each), and expansion (5% for Google Translate, 8% for ChatGPT). The lowest percentages are attributed to clarification (2% for both), with Google Translate lacking the destruction of underlying networks of signification and ChatGPT registering it at 3%. Ennoblement remains minimal (0% for Google Translate, 1% for ChatGPT). Conclusively, the study underscores the imperative for further exploration of alternative translation techniques for resistance literature. It emphasizes the paramount importance of preserving the integrity of the original text to ensure accurate representation and homage to the voices of the oppressed and marginalized. Prioritizing fidelity in translation is essential to safeguarding the essence of resistance literature amid technological advancements.

Keywords: Artificial intelligence, Arabic, ChatGPT, deforming tendencies, English, Ghassan Kanafani, Google Translate, resistance literature.

1. Introduction

For centuries, literature has served as a human endeavour to convey diverse life aspects across various genres, like poetry, prose, and drama. It has depicted a wide array of life dimensions, encompassing cultures, traditions, myths, and emotions. Literature, consequently, became a tool for documenting life occurrences. Literature translation involves transferring these multifaceted elements from one language to another, often viewed as a bridge connecting different worlds. Within this scope, this research delves into the function of literature in resistance, examining its portrayal of people's struggles and its reflection on their lived experiences. Unlike non-literary translation, which may involve literal word-for-word rendering, literary translation demands careful attention to multiple facets for effective delivery. Linguistic, aesthetic, and cultural elements must be meticulously considered by literary translators. These aspects demand heightened efforts and present numerous challenges to the translator. Landers (2001, p. 8) contends that literary translation encompasses the conveyance of "tone, style, adaptability, creativity, understanding of the source language culture, deciphering ambiguous meanings, an appreciation for sound, and humility."

Therefore, literary translators face the task of effectively conveying the message from linguistic and aesthetic perspectives. Their endeavour involves navigating disparate languages while also engaging with emotions and sentiments. The complexities inherent in literary translation have sparked debate among scholars. Given the distinct origins of Arabic and English, literary translation entails the transfer of not just linguistic systems but also cultural conventions and aesthetic nuances to find the most suitable equivalence. Thus, resistance literature pertains to individuals or communities grappling with mandates, dominance, or colonial rule, where writers within or outside the occupied territory document the struggles, resistance efforts, and the lived experiences of their nation under occupation. It encapsulates the realities of a group enduring colonization, persecution, and striving for a better existence amid daily hardships. In the realm of resistance literature, various authors have characterized it as literary works stemming from extraordinary circumstances like occupation, racism, or prevailing ideologies (Deshazer, 1994; LeGassick, 1971; Harlow, 2023). These texts serve as expressions of the oppression experienced by a particular community or group of individuals.

Translating resistance literature poses a significant challenge for translators, given its subject matter and profound significance. The complexity lies in determining the most appropriate translation strategies that faithfully convey the intended message. During this translation process, inadvertent distortions may occur due to linguistic and cultural disparities between Arabic and English. Additionally, intentional deviations might arise from translators' ideological perspectives. This study focuses on scrutinizing Ghassan Kanafani's short story "Until We Return," as translated by Google Translate and ChatGPT from Arabic into English. The research aims to identify and elucidate any distortions, if present, in the two translations, aligning with its objectives.

This paper seeks to explore two key questions:

1. What are the prevalent tendencies distorting the two translations, following Berman's (1985) model?
2. How well-suited are machine translation and artificial intelligence for translating resistance literature, considering their potential limitations and effectiveness in capturing its essence and complexities?

2. Literature review

2.1 Literary Translation

According to a definition provided by Bassnett (2014), translation is regarded as a transformative act involving the rewriting of a text into another language and culture. It's an intricate process of intercultural communication where a piece of writing is re-imagined within a different linguistic and cultural context. Concerning literary translation, Bassnett (2014), characterizes it as a creative reworking process, wherein a foreign literary text is adapted to suit a novel linguistic and cultural milieu. Thus, through its capacity to bridge linguistic and cultural divides, literary translation enriches the global literary canon, fosters cross-cultural understanding, and promotes the appreciation of cultural diversity and pluralism in the literary sphere. The objective of literary translation is to maintain the essence and artistic attributes of the source material while ensuring its adaptability for a diverse audience (Bassnett, 2014; Newmark, 2009; Wittman, 2013). This process encompasses the transfer of both meaning and style from the original language to another. Furthermore, the realm of literary translation demands the application of creativity and imagination to execute this process effectively.

2.1.1 Literary Translation Challenges

There are numerous literary translation challenges stemming from the intricate interplay of linguistic, cultural, and artistic factors inherent in the process. One significant challenge lies in the preservation of the aesthetic and stylistic nuances of the source text while ensuring readability and resonance in the target language (Venuti, 2018). Translators cope with the complexities of literary language, navigating ambiguities, wordplay, and cultural references that may not have direct equivalents in the target language (Lefevere, 1992). Moreover, the subjective nature of literary interpretation poses challenges in capturing the author's voice and intention accurately, leading to debates about fidelity versus creative adaptation in translation. Additionally, socio-political factors, such as censorship, ideological constraints, and market demands, may influence translation decisions, further complicating the translator's task (Tymoczko, 2015).

Ultimately, translators are tasked with conveying not just the literal meaning but also the artistic essence and essence of the original work. Nord (2008, p. 82) emphasizes the importance of equivalence between the source and target texts concerning "text function and text effect" in literary translation. This procedure encompasses the transfer of not only the explicit content but also the spiritual, emotional aspects, and literary components such as lexicon, tone, stylistic elements, and rhetorical techniques. Moreover, translators encounter difficulties in replicating the same rhythmic quality, which can prove challenging when moving between different languages. Thus, literary translation encompasses more than just conveying the precise meaning to the reader; it also involves capturing the aesthetic and artistic forms inherent in the source text (Landers, 2001; Levy, Corness, & Jettmarová, 2011; Nord, 2005; Reiss, 2000).

2.2 Resistance Literature

LeGassick (1971) asserts that literature serves as a reflection of the concerns and emotions prevalent within the regions where it originates. He highlights that a significant portion of Arab literary works has been influenced by what he terms "the struggle with Israel," identifying it as a central theme for many Arab writers. Furthermore, in the realm of prose and short stories, LeGassick (1971) notes that they serve as a platform for Arab intellectuals to articulate their personal responses, as well as those of their society, to this poignant issue. This viewpoint underscores literature's role as a reflective mirror capturing the language, culture, and diverse facets of life specific to a particular person. In the Arab

context, the predominant concern and focal point of writers revolve around the case and struggle of Palestine, becoming the primary subject matter for Arab literary expression. Resistance literature serves as a powerful medium for exploring and depicting the myriad ways in which marginalized voices challenge and confront dominant power structures (Shahzaib, Iqbal, & Rubab, 2023).

In her work "Resistance Literature" (1987), Harlow defines resistance literature as a genre emerging in oppressed regions like the Middle East, integral to what she terms "the organized national liberation struggles and resistance movements" (Harlow, 1987, p. xvii). She emphasizes that writers across various genres play a significant role alongside armed fighters and diplomats in confronting injustice. The essence of resistance, according to Harlow, doesn't necessitate wielding weapons; instead, it involves wielding a pen to articulate defiance and defense of one's homeland. Resistance literature encompasses narratives depicting wars, conflicts, hardships, and occupied territories, the harsh realities of colonialism, injustice, and tragic events that unfold within a particular land.

2.2.1 Palestinian Resistance Literature

Numerous Palestinian writers have utilized their literary works to convey their political perspectives and align themselves with the struggle for their homeland, whether from within Palestine or abroad. Moreover, through narratives of resistance and resilience, Palestinian writers articulate the collective memory of historical injustices and traumas, highlighting the ongoing struggle against occupation and oppression (Abu-Sitta, 2016; Khalili, 2020; Hawa, 2023). Israeli writer and historian Ilan Pappe (2011) observes an increasing accessibility among writers to disseminate their views and support for what he terms as "the Palestinian struggle." Pappe contends that while these writers might not fit conventional definitions of leaders found in political sociology, their stances retrospectively proved pivotal for the community's overall existence (2011, p. 89). However, their expressions often incurred the ire of the Israeli government, leading to efforts to impede their dissemination within Palestine and considering such acts as legally accountable (Pappe, 2011).

Regarding the role of resistance literature, Kanafani (1986) asserts that cultural resistance, embodied in resistance literature, plays a crucial role alongside armed resistance in the liberation struggle. He argues that the impact of resistance literature is profound, particularly in its political effects on liberation movements. Similarly, Harlow (2023) explores the role of literature in liberation movements, especially in colonized regions like the Middle East and Africa. She highlights how literature serves as a tool of resistance, allowing oppressed peoples to bear witness to their experiences and participate actively in the liberation struggle. Harlow emphasizes the influential role of writers in promoting and encouraging resistance movements, underscoring the significance of literature in challenging colonial domination and advocating for social justice.

2.3 Artificial Intelligence Translation

Regarding the definition of Artificial Intelligence (AI) translation, also known as machine translation, it refers to the automated process of translating text from one language to another using computational algorithms and neural networks. According to Koehn (2010), these algorithms analyze bilingual corpora and learn patterns of language use to generate translations that approximate human-level fluency and comprehension. Similarly, Vaswani et al. (2017) describe machine translation as a subset of artificial intelligence (AI) that leverages neural networks and attention mechanisms to model the relationships between words and phrases in different languages. The application of artificial intelligence (AI) and machine translation in literary works has garnered attention for its potential to bridge linguistic gaps and facilitate the global dissemination of literature. Machine translation, an integral component of AI,

has evolved significantly, employing advanced algorithms and neural networks to translate literary texts across languages while striving to preserve the aesthetic, cultural, and emotional nuances inherent in the original work. Recent studies showcase the utilization of transformer models such as Google's BERT and OpenAI's GPT, demonstrating their efficacy in capturing the intricate nuances of literary language (Devlin, Chang, Lee, & Toutanova, 2018; Radford, Wu, Child, Luan, Amodei, & Sutskever, 2019).

However, challenges persist in achieving a faithful rendition of literary texts due to the complexity of linguistic and cultural nuances, stylistic choices, and context-specific elements within literary works. One significant challenge highlighted by Koehn (2010) is the difficulty in capturing the nuances and ambiguities of language, including idiomatic expressions, cultural references, and context-dependent meanings. These factors can lead to errors and mistranslations, undermining the accuracy and reliability of machine translation systems. Additionally, Vaswani et al. (2017) emphasize the challenge of maintaining coherence and fluency in translation, particularly for complex linguistic structures and stylistic features present in literary texts or specialized domains. This critical analysis delves into the evolving landscape of AI-driven machine translation in literature, exploring its current capabilities, limitations, and prospects for enhancing the fidelity and artistic essence of translated literary pieces.

The intersection of artificial intelligence (AI) translation and machine translation in the context of resistance literature stands as a promising avenue for preserving and disseminating narratives of dissent, protest, and social upheaval across linguistic boundaries. Resistance literature, inherently imbued with ideological complexities and contextual nuances, presents a unique challenge for translation due to its emphasis on cultural, political, and historical dimensions. Machine translation, leveraging sophisticated algorithms and neural networks, aims to capture the essence and nuances of resistance literature while navigating the intricacies of language. Recent advancements in transformer models like BERT and GPT have shown promise in capturing subtleties and emotional undertones embedded in these texts (Devlin, Chang, Lee, & Toutanova, 2018; Radford, Wu, Child, Luan, Amodei, & Sutskever, 2019). Thus, algorithmic translation technologies often struggle to capture the subtleties of language, including idiomatic expressions, cultural references, and context-dependent meanings, leading to inaccuracies or loss of meaning in translation (Robert-Foley, 2024). However, the translation of resistance literature encounters inherent challenges in conveying the cultural and contextual subtleties that underpin acts of resistance, demanding a delicate balance between linguistic accuracy and preserving the ideological essence of the original texts.

3. Methodology

The study primarily centers on two translations of Ghassan Kanafani's Arabic short story «إلى أن نعود» "Until We Return." The translations under scrutiny are sourced from two distinct methods: the first being a machine translation via Google Translate, and the second an artificial intelligence translation facilitated by ChatGPT. The researchers systematically gather and analyze instances of textual distortions present in each translation. The study employs a methodology that integrates both qualitative and quantitative approaches. The quantitative method determines the frequency of specific tendencies and identifies the most prevalent deforming tendencies in the target texts. Numeric symbols and statistical data are presented to illustrate these findings. Moreover, the qualitative method is employed to thoroughly analyze and scrutinize the compiled data. The data extracted is systematically presented in tables categorized according to the twelve tendencies. Each table aligns and numbers the translated sentences in correspondence with the source sentences. The original instances are denoted as ST, while Google's translation is marked as TT1, and ChatGPT's translation is marked as TT2.

3.1 Investigated Data

For the purpose of this study, one short story will be selected, namely, *«□□□ □□ □□□□»* *"Until We Return."* Initially published in (1982) as part of the collection "The Stolen Shirt."

Until We Return

The short story "Until We Return" tells of a freedom fighter who infiltrates to carry out operations deep within the enemy territory as vengeance for his land and wife, both ruthlessly killed by the enemy. Persistently, he returns to strike the enemy after each safe return to the responsible figure supplying him with explosives, despite his extreme fatigue. When asked how long he will continue on this path, he answers resolutely: "Until we return." This story embodies a lesson in resistance and hope for reclaiming the stolen land. It encompasses a compelling narrative style and sensitive vocabulary pertaining to resistance, elements that might risk distortion when translated by machine translation, which lacks awareness of the narrative nuances crucial in translating resistance literature.

3.2 Research Procedures

After defining the subject and choosing the source and target texts, the researcher employs structured research procedures. This involves aligning the Arabic text with its two corresponding English translations to establish connections and coherence. Furthermore, a comparative analysis is conducted between these translations. The researcher thoroughly examines both the original and translated texts, identifying and classifying instances of distorted sentences based on Berman's twelve tendencies. Statistical analysis is then applied to reveal the most recurrent tendencies present across both translations. Finally, a comprehensive discussion ensues, delving into expert perspectives using Antoine Berman's translation model and its twelve tendencies as a framework for in-depth analysis and interpretation.

4.   **Findings and Discussion**

4.1 Findings

Upon a comprehensive analysis of the data, the study reveals that Google's translation exhibited seven out of twelve tendencies, accounting for 114 cases of deformation. In ChatGPT's translation, nine tendencies were identified, totaling 197 cases. For more illustration, consider the following charts which show, in detail, the frequency and the percentage of the twelve deforming tendencies in both translations.
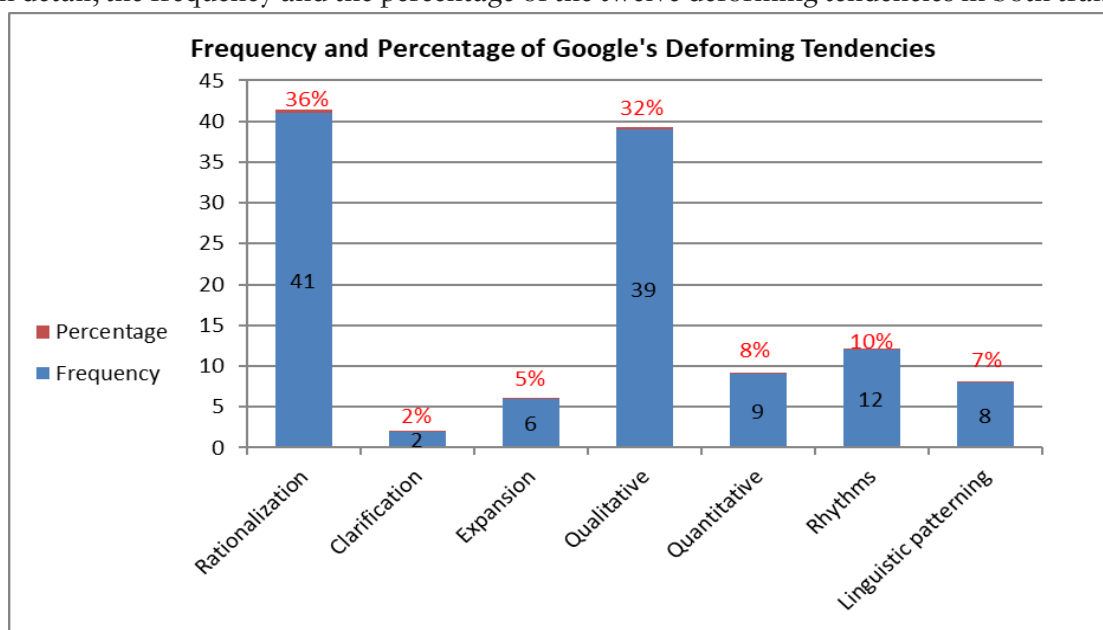

Figure 1: The frequency and percentage of the twelve deformation tendencies in Google's translation

Google Translate exhibited seven of the twelve deforming tendencies, with five types absent: ennoblement, destruction of underlying signification, destruction of expressions and idioms, destruction of vernacular networks or their exoticization, and effacement of the superimposition of language. The total count of distorted sentences reached 117 cases, some displaying multiple tendencies, often exceeding three types in a single instance. Rationalization emerged as the most frequent tendency, with 41 instances constituting 36% of occurrences. Qualitative impoverishment followed closely, identified in 39 cases, comprising 32% of the total. Destruction of rhythms ranked third, found in 12 instances, accounting for 10%. Lastly, quantitative impoverishment was noted in nine cases, representing 8% of occurrences. This analysis underscores the challenges in machine translation, particularly in maintaining linguistic nuances and contextual accuracy. On the other hand, Figure 2 below shows the frequency of the twelve deformation tendencies in ChatGPT's translation
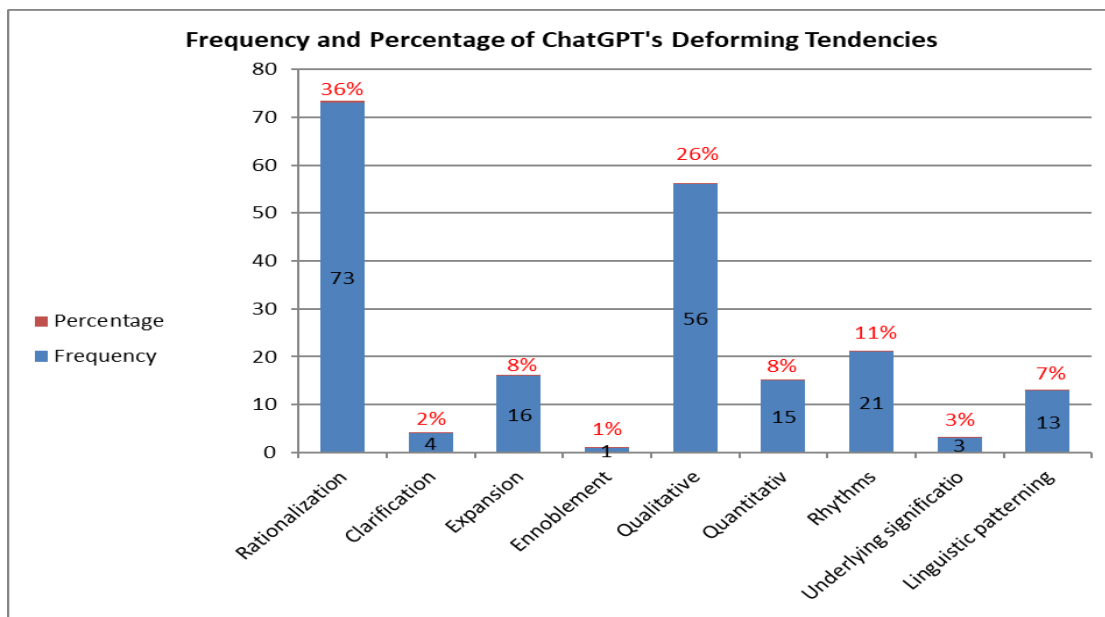

Figure 2: The frequency and percentage of the twelve deformation tendencies in ChatGPT's translation

The analysis of the ChatGPT translation highlights rationalization as the most prevalent tendency, constituting 36% of occurrences, followed by qualitative impoverishment at 26%. Destruction of rhythms ranks third at 11%, and both expansion and quantitative impoverishment account for 8%. Nine out of twelve deforming tendencies are observed in ChatGPT, with three absent: destruction of expressions and idioms, destruction of vernacular networks or their exoticization, and effacement of the superimposition of language. These tendencies are not applicable due to the absence of vernacular networks, exoticization, or multiple languages in the original text. The total count of distorted sentences in ChatGPT amounts to 202, potentially exhibiting multiple deforming tendencies. This sheds light on the nuanced challenges in machine translation, particularly in preserving linguistic nuances and cultural contexts.

4.2 Discussion

Based on the findings shown above, this paper bases the organization of the discussion on the most recurrent deforming tendencies of the English translation of the Arabic short story «إلى أن نعود». The examples included in this section are discussed based on the twelve deforming tendencies proposed by Berman (2000) and are presented in tables of three columns; the first one for the source text (ST), the second for Google translation(TT1) and the third one for ChatGPT translation(TT2).

4.2.1 Rationalization

This tendency entails altering the original syntactic structure, which includes modifications to sentence structure, punctuation, and the overall order of syntax. Berman (2000) emphasizes that rationalization primarily focuses on punctuation, highlighting it as the most significant and adaptable element within a written prose.

Table 2: Rationalization examples

ST	TT1	TT2
في تلك الليلة.. شنق قنن اليهود **زوج** على الشجرة العجوز بين الساحة والجبل.. أن لبحل منه يراها مدلالة عارية تمامأ.. كان شعرها محلوق و مربوط إلى عنقها وينزف من فمها دم اسود لعامل..	That night...the Jews hanged his **wife** on the old tree between the square and the mountain. He saw **her** hanging completely naked...**her** hair was shaved and tied to **her** neck, and shiny black blood was bleeding from **her** mouth...	On that nigh**t,** the Jews hanged his **husband** on the old tree between the courtyard and the mountain, making **his** appear like a completely naked scarecro**w. His** hair was shaved and tied to **his** neck, and black shiny blood dripped from **his** mouth**.**

In the provided example, Kanafani skillfully portrays the harrowing moments of the protagonist wife's hanging by the Jews, capturing them with intricate detail as perceived through the protagonist's eyes. It becomes evident that TT2 presents a significantly inaccurate rendition, primarily due to its misunderstanding of the Arabic term "زوجه" which specifically denotes "wife." TT2 translates this term literally as "husband," resulting in a complete misinterpretation of the Arabic feminine pronouns. Consequently, phrases such as "شعرها، عنقها، فمها" are erroneously translated as "his hair, his neck, his mouth," respectively. Conversely, TT1 accurately renders "زوجه" as "his wife," thereby ensuring the correct translation of all pronouns. This issue extends beyond mere semantic accuracy to encompass syntactical errors present in both translations, distorting various elements of the original text. Additionally, as syntax plays a crucial role in rationalization, both translations exhibit inappropriate alterations to the punctuation of the source text, resulting in a diminished intensity compared to Kanafani's deliberate structuring and use of punctuation tools.

The misuse of punctuation marks and Arabic feminine pronouns can be attributed to the vast differences between the Arabic and English languages. As a result, accurate use of these elements can only be achieved through machine translation and artificial intelligence translation in few cases. Alternatively, translation by bilingual translators proficient in the rules of both languages may be necessary for more precise translation.

4.2.2 Clarification

Rationalization leads to clarification by making explicit what the author initially intended to remain unclear in the original text (Berman, 2000). Essentially, it involves extracting meaning from ambiguity to achieve clarity.

Table 3: Clarification examples

ST	TT1	TT2
مع أشعة الشمس التي كانت تأكل **رأسه** وهو وحيدا في صحراء النقب، كان يسمع صخب أفكار في رأسه وكأنها مجموعة مسامير تقدق.. والو تنغرس.	With the rays of the sun **eating away at his head** while he was alone in the Negev desert, he could hear the noise of his thoughts in his head as if they were a set of nails being hammered**...** but not being planted.	With the sun's rays **scorching his head** as he stood alone in the Negev Desert, he could hear the tumult of his thoughts in his mind, like a collection of nails being hammered but not driven in.

The TT2 explicated many notions which are implicit in the source text. It clarified the terms and ideas for the target readers to facilitate them. For instance, in the example above, Kanafani has metaphorically likened the rays of the sun to the monster that devours the head of the man, symbolizing the rising temperatures in the Negev Desert. Despite this, the man stands firmly and is determined to proceed with a specific action. However, the translation of TT2 may have diluted this metaphor, clarifying that the sun merely burned his head, weakening the intensity of the comparison the author aimed to magnify in the perception of the reader. Conversely, the TT1 rendered the text literally, hence preserving the intended metaphor conveyed by the author. Thus, TT2 has clarified what the author of the original does not wish to be clear by changing the word choice.

4.2.3 Expansion

Expansion arises from both Rationalization and Clarification tendencies. It denotes the translation tendency of being more extensive in length compared to the source text. Berman (2000) defines this as over-translation.

Table 4: Expansion examples

ST	TT1	TT2
وحبس أنفاسه وهو يرقب من خلال العوسج التي مضت أرضا **سكب عليها قرقه** ليخلقها من العدم، وها هو ذا البيت الصغير الذي كان يأوي إليه مع زوج مه أيام العمل المتواصل في موسم الحصاد، فلقد كان بيته جميلا على ما **فيه من تواضع**، أما الآن، فلقد تهدمت ناحية منه،	He held his breath as he looked through the thorns at his land, on **which he would sweat** and create it from nothing. Here, then, was the small house that he used to stay in with his wife during the days of continuous work during the harvest season. It was a beautiful house despite its **modesty**, but now, one part of it has been destroyed.	He held his breath as he observed through the reeds his land **that earned him a living, cultivating it with sweat** to bring it to life from nothingness. There stood the small house that sheltered him with his wife during the days of continuous work in the harvest season. It had been a beautiful house, **humble in its simplicity**. But now, one side of it had crumbled,

Evidently, in the example above, Kanafani describes the moment of the man observing his land. He likened the man to one who irrigates the land with his sweat, symbolizing the fatigue and effort he exerted to revive it from nothingness. The TT2 added extra information to clarify the phrase "سكب عليها قرقه," implying that it is the source of his livelihood by adding "that earned him a living." Additionally, the man described his house as modest, yet the TT2 included additional information not present in the original text, stating that the house is humble "in its simplicity." Whereas TT1 rendered the text literally without any additions as "which he would sweat" and "modesty." As TT2 clarifies many words of the source text for the target reader, it becomes quite obvious to notice that it is longer and more verbose than TT1.

4.2.4 Ennoblement

This process involves rephrasing the original sentences to imbue them with elegance, readability, and brilliance. It constitutes a form of rewriting aimed at enriching meanings, yet it entails dismantling the structure and rhetoric of the original text. According to (Berman, 2000), in prose, the concept of "ennoblement" equates to rhetorical enhancement.

Table 4: Ennoblement examples

ST	TT1	TT2
ال ترید أن تحميه، انها هنا يعني شيئا آخر، غير الري والماء، شيئا كبيرا داميا كالمأساة.	Does not want to protect it. It means something other than irrigation and water, something big and **bloody** like a tragedy.	It doesn't want to protect it. It means something else, beyond irrigation and water, something significant and **poignant** like a tragedy.

In this example, Kanafani sought to describe the situation using words with sensitive meanings to magnify the tragedy the man is experiencing. The TT2 attempted to render the text more elegantly by replacing words with more noble and formal meanings. It is the tendency of enhancing the original text. In this case, translators are not allowed to change any element in the original text in order to enhance or refine it. For example, in the example above, TT2 rendered the word «دامي», which is a sensitive word that bears a negative meaning, into "poignant", aiming at promoting the original text language. On the other hand, TT1 provided the literal meaning of the words without any modification or finesse, such as "bloody." Consequently, it succeeded in conveying the meaning behind the author's use of such sensitive words. Therefore, it becomes quite obvious to notice that the word choice affected the style of the original.

4.2.5 Qualitative Impoverishment

This tendency entails substituting words and expressions from the original text with target text equivalents that are less sonorous and lack the richness of the original. Berman (2000) argues that employing this tendency significantly distorts the "signifying process and mode of expression" (p. 291) of the content being translated.

Table 5: Qualitative Impoverishment examples

ST	TT1	TT2
انه ال ينظر الآن إلى هذه الصور نظرة **المشاهد**، ال، أبدا، إنها **تتفاعل بأعماق أعماقه** ويحس بتسكب على أعصابه كالرصاص المذاب، إن ذاته تتفاعل الآن مع الماضي بشكل عجيب، لم يستطع أن **يخلع** نفسه من الصور الدموية، ولا أن **يخلعها** من نفسه،	He does not now look at this image with the eyes of a **viewer**, no, never. It interacts with **the depths of his soul**, and he feels it and sees it spilling onto his nerves like melted lead. His self now interacts with the past in a strange way. He could not **remove** himself from the bloody image, nor **remove** it from himself.	He doesn't look at this image now with the eyes of a **spectator**, no, not at all. It interacts with **the depths of his being.** He feels it, and he sees it pouring onto his nerves like molten lead. His very self is now interacting with the past in a strange way. He couldn't **strip** himself from the bloody image, nor could he **rid** himself **of it.**

In the example provided, both translations resulted in the deformation of several words within the sentence, leading to poor translations overall. Notably, TT2 substituted the word "المشاهد" with "spectator," which, in the context of sports, refers to someone who watches a game rather than someone

who observes a scene as intended in the source text. This choice not only fails to capture the intended meaning but also weakens it. Conversely, TT1 accurately translates it as "viewer," aligning more closely with the intended meaning. Similarly, both translations rendered the words "يخلع" and "يخلعها," which denote forcefully tearing something out from its roots, as "remove," "strip," and "rid of," lacking the depth and intensity of the original words. Kanafani vividly describes the man's recollection of the brutal killing of his wife, emphasizing his inability to erase those gruesome images from his mind. Additionally, both translations struggled to convey the phrase "بأعماق أعماقه" adequately, opting for phrases like "with the depths of his soul" and "with the depths of his being." However, these translations fall short of capturing the richness of the original phrase, which could be more accurately rendered as "in his deepest innermost." As a result, both translations suffer from qualitative impoverishment compared to the original sentences, which possess a richness of meaning that the translations fail to fully convey.

4.2.6 Quantitative Impoverishment

This tendency pertains to the loss of lexical fidelity in the translated text, wherein diverse synonyms are substituted by a single word. Lexical loss may be masked by the expansion of content by adding of supplementary information absent in the source text. Consequently, the resultant text often appears to be both protracted and diminished in richness (Berman, 2000).

Table 6: Quantitative Impoverishment examples

ST	TT	
كان حاضره يمتزج مع ماضيه مزجا معقدا، إن صوت استغاثات زوجه وأنين ها المقطع المحروق، وصوت أسنانها تمضغ التراب، وصوت حنجرته وهي تطبق على صياح هستيريه، كل هذا، كان يمتزج اماتزاجا متشابكا بصوت الانفجار المريع، وصوت المتزج يمتزج متشابكا بصوت الانفجار المريع، وصوت العملاق يقتلع من الوجود..	His present was mixed with his past in a complex mixture. The sound of his wife's cries for help and her **clipped, burnt moans**, the sound of her teeth chewing the dirt, and the sound of his throat clenching to his hysterical screams, all of this, was **intertwined** with the sound of the horrific explosion, and the sound of the giant tank being uprooted from existence..	His present was blending with his past in a complex mixture. The sound of his wife's cries for help, her **fragmented sobs**, the sound of her teeth chewing on the soil, and the sound of his throat as he stifled his screams in hysterical outbursts—all of this **blended intricately** with the sound of the explosive blast and the giant tank tearing existence apart.

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In this example, Kanafani vividly depicts the moments in which the Jews tortured the protagonist's wife before hanging her. In the sentence "إن صوت استغاثات زوجه وأنين ها المقطع المحروق," the man recalls the sound of his wife's pleas and her scorched and shredded sobbing, as these moments intertwine intricately with the sound of the explosion that followed. However, in TT2, the word "محروق" is omitted entirely, resulting in a loss of lexical richness in the translation. Furthermore, TT1 replaces the phrase "يمتزج امتزاجا متشابكا" with a single word, "intertwined," leading to a loss of descriptive nuance intended by Kanafani. This omission and simplification in both translations contribute to a quantitative impoverishment, impacting the emotional resonance of the target text. As a result, readers of the translated text may not experience the same depth of emotion as those reading the original text.

4.2.7 The Destruction of Rhythms

It concerns the rhythmic disruption observed in translated texts. Analogous to poetry, prose exhibits rhythmic patterns, which may vary or present multiple rhythms (Berman, 2000). Inadequate translation of punctuation and word order can result in the distortion of the rhythmic coherence of the original text.

Table 7: The Destruction of Rhythms examples

ST	TT	
لقد شد اودو خصرها النحيل شاد ما، مجنون، ،انونجم لم يكن في وجهه كله، ما يشير إلى أنها كانت، قبل هلاكة، ،تقولا كلذ يشير إلى أنها كانت، قبل هلاكة، التمأ الساح رصاص ونارا ودما، إلى شجرة المقابلة يشهد كل ما فعلو شجرة المقابلة يشهد كل ما فعلو عاجزا، لقد شدو إلى الشجرة بحبال الكرابيج الجلدية طوال بعد بحبال الكرابيج الجلدية طوال بعد أن سلخو ظهره، وتركو يشهد كل شيء، وتركو يحدق ويصيح كالمجنون..	They tightened her thin waist like she was crazy, and it was not in her entire face, which indicates that Before long, it was full of bullets, fire, and blood. At that time, he was tied to the tree opposite, witnessing everything they did helplessly. They tied him to the tree with plowing ropes after they skinned his back with leather scraps all afternoon, and they left him to witness everything. They hated him. He stared and shouted like a madman..	They pulled her slender waist tightly, almost maniacally. There was nothing left on her face, indicating that she had, before her death, witnessed the courtyard filled with bullets, fire, and blood. At that time, he was tied to the opposite tree, witnessing everything helplessly. They had tied him to the tree with plow ropes after they had stripped his back with leather whips all afternoon. They left him to witness everything, tortured him, making him stare and scream like a madman.

As shown in the example above, Kanafani portrays the most horrifying scenes in the story. He depicted in this example what the Jews did to the protagonist and his wife during the terrifying moments of torture. Due to the importance of this description, Kanafani chose to write this description in just one sentence without dividing it into more than one for a purpose that is to immerse the reader and take their breath away from the horror of those moments. Therefore, Kanafani intentionally built a deliberate literary rhythm. He used seven commas without using any periods, to avoid interrupting the reader's flow of thoughts. However, both translations deformed that rhythm in the original text. For example, the TT1 used five commas along with four periods, and the TT2 exaggeratedly used nine commas along with five periods. Due to the incorrect usage of punctuation marks in some instances by both translations, the rhythm of the sentences was completely destroyed.

This statement contradicts the findings of Nurregina (2021) research, which was previously referenced. According to her study, she concluded that while the focus was on a short story, the disruption of rhythm typically occurs in poems or songs. However, it is noted that such disruption could also be observed within the context of short stories.

4.2.8 The Destruction of Underlying Networks of Significations
This deforming tendency destroys word references and significant hidden meanings. Moreover, there is a compromise in the loss of pragmatic meaning (Berman, 2000).

Table 8: The Destruction of Underlying Networks of Significations examples

ST	TT1	TT2
ويغرس قدميه في الرمال النعمة، ويقتلعها كما تقتلع قطعة الخشب العتيقة عن غراء لم يجف بعد كما يجب	He **plants** his feet in the soft sand, and **uproots** them like an old piece of wood is **uprooted** from glue that has not yet dried properly.	He **buries** his feet in the soft sands, **extracting** them as one would **pry** an aged piece of wood from glue not yet dried as it should be.

In the given example, the TT2 deviated from the original text by altering all words associated with "land." It is widely acknowledged that the concept of land holds profound significance in the works of Palestinian authors, particularly in Kanafani's writings. Kanafani deliberately incorporated numerous terms related to land, agriculture, fortifications, and water. However, both translations disrupted this underlying thematic connection within the story. For instance, the TT2 substituted words such as

"سرغي" (plants), "يقتلع" (uproots), and "يقتلعها" (uproots it) with "buries," "extracting," and "pry," respectively. These translated terms fail to convey Kanafani's intended emphasis on the significance of the land, potentially altering the interpretation of the reader of the target text and diminishing its authenticity and depth. Therefore, this led to qualitative impoverishment and destruction of underlying networks of signification that the writer purposely mentioned.

4.2.9 The Destruction of Linguistics Patterning

This tendency arises as a result of processes involving expansion, clarification, and rationalization (Berman, 2000) . It pertains to the inconsistency observed in translation due to the application of the translator's individual stylistic preferences in the target text. Moreover, it leads to a deficiency in coherence of meaning, attributed to the disruption of the systematic structure inherent in the original texts.

Table 9: The Destruction of Linguistics Patterning examples

ST	TT1	TT2
إن الخزان يقتحم حياته في بشكل مزعج، لقد أقيم في الساحة التي كان يجلس فيها هو وزوجته قبل أن يناما، يتحدثان فيها عن الذرة والقمح،	The tank interferes with his life in an annoying way. It was set up in the **square** where he and his wife used to sit before they went to sleep, talking about corn and wheat.	The tank intrudes into his life in an annoying way. It has been erected in **the space** where he and his wife used to sit before going to sleep, discussing corn and wheat.
كان في تلك الأيام يدعو جيرانه للجلوس، فتسهر زوجته وترش الساحة بالماء فتكسبها رطوبة محببة.	On those days, he would invite his neighbors to sit, and his wife would please him and sprinkle **the yard** with water, giving it a pleasant humidity.	In those days, he would invite neighbors to sit, and his wife would delight them, sprinkling **the courtyard** with water to give it a pleasant humidity.

In the provided examples, Kanafani deliberately emphasizes the word "الساحة", which means "yard», for a specific purpose within the story. Through repeated mentions of this term, Kanafani aims to underscore the significance of this location within the protagonist's home. The yard serves as a witness to numerous pivotal moments in the protagonist's life, ranging from joyous gatherings with his wife and neighbors to the harrowing events of torture and the death of his wife. Therefore, the consistent translation of this term is crucial for maintaining the coherence of Kanafani's ideas and subtly conveying his intended message. However, both translations fail to uphold this essential thematic element current in the original text. TT1 inconsistently renders "الساحة" as "square" and "the yard," while TT2 translates it as "the space" and "the courtyard." This inconsistency in translation undermines the nuanced portrayal of the yard's significance within the story.

Since these translations were generated by artificial intelligence and machine translation, they lack the ability to grasp the ideological significance behind the word choice of the author and the essential of such terms within the context of resistance literature. Thus, this has led to qualitative impoverishment and the destruction of linguistics patterning resulting from the incorrect choice of words by machine translation.

5. Conclusion

The study delves into the deformations inherent in translating resistance literature from Arabic to English using artificial intelligence (AI), particularly through Google Translate and ChatGPT, as analyzed through Berman's deforming tendencies. Both translations exhibit significant distortions, with rationalization being the most prevalent tendency at 36% in both Google Translate (TT1) and ChatGPT (TT2). Following closely is qualitative impoverishment, with Google Translate registering 32% and ChatGPT 26%. Destruction of rhythms is observed at 10% for Google Translate and 11% for ChatGPT, while both platforms show an 8% tendency for quantitative impoverishment. Additionally, a 7% rate of destruction of linguistic patterns is evident in both translations, with expansion noted at 5% for Google Translate and 8% for ChatGPT. Clarification, however, registers the lowest percentage at 2% for both translations. Notably, the absence of the destruction of underlying networks of signification in Google Translate contrasts with ChatGPT, which exhibits it at 3%. Ennoblement remains minimal in both translations, with 0% for Google Translate and 1% for ChatGPT.

The study underscores the challenges inherent in translating resistance literature using AI, particularly due to the inability of automated methods to capture nuances, cultural contexts, and stylistic intricacies. While AI technologies offer potential benefits, they often fall short in conveying the ideological and emotional richness embedded within such texts. Human translators are crucial in understanding context and preserving the depth of the original work, requiring meticulous attention to linguistic nuances and underlying meanings. Thus, while AI can aid in the translation process, human involvement remains essential to ensure faithful and nuanced translations.

Moreover, the emergence of electronic armies poses a new challenge to machine translation, as deliberate manipulations compromise the accuracy and reliability of translations. Machine translation operates based on linguistic rules, but interference from electronic armies challenges its efficacy. This highlights the importance of refining machine learning models to detect and counteract such interference, preserving translation quality and trustworthiness in a complex digital landscape.

In conclusion, the study emphasizes the need for ongoing research and development efforts to improve machine translation capabilities, as well as exploring strategies for collaboration between human translators and AI systems. Fidelity to the original content remains paramount, especially in the case of resistance literature, with its ideological and emotional depth. This requires a balanced approach that leverages the strengths of AI while ensuring human oversight to maintain translation integrity.

References

Abu-Sitta, S. H. (2016). *Mapping My Return: A Palestinian Memoir.* Cairo: American University in Cairo Press.

Bassnett, S. (2014). *Translation studies.* London: Routledge, Taylor & Francis Group.

Berman, A. (2000). Translation and the Trials of the Foreign. In L. Venuti (Ed.), *The translation studies reader* (pp. 284-297). London: Routledge.

Deshazer, M. K. (1994). *A poetics of resistance: Women writing in El Salvador, South Africa, and the United States.* Ann Arbor: University of Michigan Press.

Devlin, J., Chang, M. W., Lee, K., & Toutanova, K. (2018). BERT: Pre-training of Deep Bidirectional Transformers for Language Understanding. *North American Chapter of the Association for Computational Linguistics .*

Harlow, B. (1987). *Resistance literature.* London: Methuen.

Harlow, B. (2023). *Resistance Literature.* London: Routledge.

Hawa, K. (2023). Palestinian Literary Criticism in Ghassan Kanafani's On Zionist Literature. *Journal of Palestine Studies , 52* (3), pp. 83-96.

Khalili, L. (2020). *Time in the Shadows : Confinement in Counterinsurgencies.* Stanford: Stanford University Press.

Koehn, P. (2010). *Statistical Machine Translation.* Cambridge: Cambridge University Press.

Landers, C. E. (2001). *Literary Translation: A Practical Guide.* Clevedon: Multilingual Matters.

Landers, C. E. (2001). *Literary Translation: A Practical Guide.* Clevedon: Multilingual Matters.

Lefevere, A. (1992). *Translation, history, culture: A sourcebook.* London: Roultedge.

LeGassick, T. (1971). Some Recent War-Related Arabic Fiction. *Middle East Journal , 4*, pp. 491-505.

Levy, J., Corness, P., & Jettmarová, Z. (2011). *The Art of Translation.* Amsterdam: J. Benjamins.

Newmark, P. (2009). The linguistic and communicative stages in translation theory. In J. Munday, *The Routledge Companion to Translation Studies* (pp. 20-35). London: Routledge.

Nord, C. (2005). *Text analysis in translation: Theory, methodology, and didactic application of a model for translation-oriented text analysis* (2 ed.). Amsterdam: Rodopi.

Nord, C. (2008). *Translating as a Purposeful Activity: Functionalist Approaches Explained* (2nd Ed ed.). London: Routledge.

Nurregina, B. F. (2021). *Deforming tendencies found in the translation of Bunanta`s Putri Kemang (Unpublished doctoral dissertation).* YOGYAKARTA: UNIVERSITAS SANATA DHARMA YOGYAKARTA.

Pappe, I. (2011). *The Forgotten Palestinians: A History of the Palestinians in Israel.* New Haven and London: Yale University press.

Radford, A., Wu, J., Child, R., Luan, D., Amodei, D., & Sutskever, I. (2019). Language Models are Unsupervised Multitask Learners. *Language Models are Unsupervised Multitask Learners .*

Reiss, K. (2000). *Translation criticism: The potentials and limitations : categories and criteria for translation quality assessment.* Manchester: St. Jerome Publishing.

Robert-Foley, L. (2024). *Experimental Translation The Work of Translation in the Age of Algorithmic Production.* London: Goldsmiths press.

Shahzaib, Iqbal, M., & Rubab, U. e. (2023). Voices Unheard: Analyzing Marginalization and Resistance in Rabbani's 'Invisible People' through a Spivakian Lens. *Wah Academia Journal of Social Sciences , 2*, pp. 134-152.

Tymoczko, M. (2015). *Enlarging Translation, Empowering Translators.* London: Routledge.

Vaswani, A., Shazeer, N., Parmar, N., Uszkorei, J., Jones, L., Gomez, A. N., et al. (2017). Attention is All

You Need. *Advances in neural information processing systems.* Curran Associates, Inc.

Venuti, L. (2018). *The translator's invisibility : a history of translation* (3nd Ed ed.). New York: Routledge.

Wittman, E. O. (2013). Literary Narrative Prose and Translation Studies. In F. B. Carmen Millán, & F. B. Carmen Millán (Ed.), *The Routledge Handbook of Translation Studies* (pp. 456-468). London: Routledge.

غسان كنفاني. (1982). ⬜⬜⬜⬜⬜ ⬜⬜⬜⬜⬜⬜. بيروت: مؤسسة الأبحاث العربية.

كنفاني, غ. (1986). ⬜⬜⬜⬜⬜⬜⬜ ⬜⬜⬜⬜⬜⬜⬜⬜ ⬜⬜⬜⬜⬜. بيروت: مؤسسة الدراسات الفلسطينية.