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TRANSLATION QUALITY ASSESSMENT OF LEGAL CONTRACTS TRANSLATED BY GOOGLE TRANSLATE AND CHATGPT

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Abstract

Legal contracts are among the most difficult documents to translate because contracts are known for their linguistic and stylistic intricacies. Nowadays, people rely mainly on automated translation systems such as Google Translate and ChatGPT as translators to render different types of texts. This study aims to evaluate the quality of the translation of legal contracts rendered by Google Translate (GT) and ChatGPT using House's (2015) Model for Translation Quality Assessment (TQA). The study uses a descriptive qualitative approach to investigate the accuracy of Google Translate and ChatGPT when rendering legal contracts. This study focuses on analyzing the performance of both systems in translating contracts with emphasis on accuracy, through the identification of errors, precisely covert and overt ones, as classified by House's Model. The Model is employed to assess translation quality on multiple levels, including linguistic, stylistic, and contextual accuracy. An authentic contract written in Arabic is translated into English by both Google and ChatGPT, and errors were identified and classified according to House's Model (TQA). The results of this study demonstrate that both systems exhibit shortcomings when they render a legal contract at different levels, including: the linguistic, contextual, and stylistic levels. These shortcomings affect the quality of both translations negatively because both systems exhibit lexical inaccuracies and structural inconsistencies, which result in ambiguity, lack of domain-specific knowledge, inconsistent jargon, addition of redundant information, failure to preserve the formal and binding tone of the original text, and a need for human oversight. In other words, Google Translate and ChatGPT can be used as translators for simple content because they struggle with complexities that require human intervention. Also, the results assert that automated translation requires revision by professional translators. Furthermore, Houses' (2015) Model is found to be reliable to provide a framework for the assessment of the translation of legal contracts translated by Google Translate and ChatGPT.

Keywords: Automated Translations, Google Translate and ChatGPT, House's Model for Quality Assessment (TQA), Error Identification, and Legal Contracts.

1.0. Introduction:

The globalization of businesses and commerce has led to an unprecedented increase in the demand for high-quality translations of contracts and other legal documents. As a result, automated translation systems such as Google Translate and ChatGPT have become increasingly popular tools for translators, lawyers, and businesses seeking to facilitate international transactions and collaborations. However, the accuracy and reliability of systems in handling complex contractual terminology and nuances remain a subject of research (Tate et al., 2023).

Contracts are legally binding documents that require precise language and terminology to convey the intended meaning. Errors or inaccuracies in the translation can have serious consequences, including disputes, litigation, and financial losses. Therefore, it is essential to evaluate the translation quality of legal contracts translated by Google Translate and ChatGPT to ensure that they meet the required standards of accuracy and reliability. This study aims to assess the quality of the translation of legal contracts rendered by Google Translate and ChatGPT from Arabic into English using House's (2015) model of Translation Quality Assessment (TQA) to identify the areas for improvement.

1.1. Statement of the Problem:

The increasing demand for high-quality translation of contracts has led to a growing reliance on automated translation systems such as Google Translate and ChatGPT. However, the accuracy and reliability of these automated systems in handling complex contractual terminology and nuances are still problematic. This study aims to investigate the translation quality of contracts translated by Google Translate and ChatGPT using the Houses' Model with the objective of identifying areas for improvement and contribution to the development of more effective automated translation systems for contractual documents.

1.2. Significance of the Study:

Due to the requirement for instant translation and rapid development of new technology, automated translation has greatly facilitated the translation of different documents. Although automated translation systems are best suited for translating instruction manuals and their translations are high quality, the automated translation of other texts, especially legal contract texts, is still challenging. So, this study aims to assess the quality of the translation of legal documents by Google Translate and ChatGPT to highlight their limitations and contribute to their improvement. So, the importance of this study lies in its potential to inform the development of more effective automated translation systems for legal contracts. Through the evaluation of the quality of translation of contracts rendered by Google Translate and ChatGPT, this study aims to contribute to the improvement of both translation systems and to enhance their reliability and accuracy of translations in the legal domain.

1.3. Objectives of the Study:

The current study aims to achieve the following:

1- To evaluate the quality of the translation of legal contracts translated by Google Translate and ChatGPT according to House's model for Translation Quality Assessment (TQA)?

2- To identify the strengths and weaknesses of each translation system in handling contractual terminology and nuances?

To determine the extent to which Houses' (2015) Model provides a reliable framework for the evaluation of the translation of contracts translated by Google Translate and ChatGPT.

1.4. Questions of the Study:

What is the quality of the translation of contracts translated by Google Translate and ChatGPT according to House's model for Translation Quality Assessment (TQA)?

What are the strengths and weaknesses of each translation system in handling contractual terminology and nuances?

To what extent does Houses' (2015) Model provide a reliable framework for the assessment of the translation of contracts translated by Google Translate and ChatGPT?

1.5. Data of the Study:

1- An authentic Arabic contract (Contract for the Sale of Land) is used in this study. It is divided into (18) segments, and each segment represents an example.

2- The English-English dictionary: (Cambridge Advanced Learner's Dictionary: Third Edition). The translator depended on this monolingual dictionary to have the exact meaning of the words in the target language.

1.6. Procedures of the study:

1- This study uses the descriptive qualitative approach to investigate the accuracy of the translation of a legal contract rendered by Google Translate and ChatGPT.

2- An authentic contract (Contract for the Sale of Land) written in Arabic is used in this study, and it is divided into 18 segments, with each segment representing an example.

3- The (18) examples are translated into English twice; once by Google Translate and again by ChatGPT.

4- Errors in each target translation are identified and underlined.

5- Errors are classified according to House's (2015) Model for Translation Quality Assessment into Overt and Covert Errors.

6- The Overt and Covert Errors in each example are analyzed at different levels: linguistic, contextual, and stylistic.

7- Making a comparison of the automated translations by both Google Translate and ChatGPT to identify the flaws of each translation system, and how these flaws affect the quality of the translation of each.

8- Discovering the meanings of the lexical items in the authentic monolingual dictionary: English-English dictionary (Cambridge Advanced Learner's Dictionary).
9- Demonstrating the role of House's (2015) Model for Translation Quality Assessment in providing a reliable framework for the assessment of the quality of translation of legal contracts rendered from Arabic into English.
10- Investigating the degree of accuracy of the target translation of each translation system, Google Translate and ChatGPT, highlighting the strengths and weaknesses of each.
11- The researcher provides a translation for the inaccurate renditions.

1.7. Juliane House's (2015) Model for Translation Quality Assessment (TQA):

House's model is a widely used framework for evaluating translation quality. The model focuses on assessing the equivalence between the source text (ST) and the target text (TT) at various levels. Here is a detailed analysis of House's model:

1. Understand the Source Text: Before analyzing the target text, thoroughly understand the source text's: Function (informative, expressive, operative), Register (field, tenor, mode), Genre (e.g., contract, agreement, statute), Style (formal, informal, technical).
2. Analyze the Target Text: Evaluate the target text's ability to: convey the same meaning as the source text, match the source text's register and genre, and use equivalent linguistic and stylistic features
3. Compare Source and Target Texts: Identify any mismatches or errors in the target text, including: - Omission or addition of information, Inaccurate or inconsistent terminology, Differences in tone, style, or register
4. Evaluate Covert and Overt Errors: consider both:
   - Covert errors (e.g., mismatches in register, genre, or style)
   - Overt errors (e.g., grammatical, lexical, or punctuation errors)
5. Use a Systematic Approach: Use a systematic approach to analyze and evaluate the target text, such as creating a checklist or template to assess different aspects of the text, using specific examples or quotes from the source and target texts to support your analysis.
6. Consider the Context: take into account the context in which the text will be used, including: the target audience and their needs, the purpose of the translation, and any cultural or linguistic differences that may impact the translation.

The present study is concerned with identifying and analyzing the overt and covert errors in the target translation by Google Translate and ChatGPT.

1.8. Review of literature on automated translation by Google Translate and ChatGPT

Automated translation, which is also known as machine translation, has been an active area of research for many decades. Automated translation has been discussed by many scholars, and it refers to a type of translation that depends on the memory of the machine and its algorithms in the process of recalling the stored segments (Zughoul and Abu-Alshaar,2005). Automated translation systems, such as Google Translate and ChatGPT, have been widely used for translating texts. Google Translate and ChatGPT are two translation systems that have drawn attention for their ability to generate coherent and contextually relevant translations. However, these systems often struggle with handling domain-specific terminology, complex sentence structures, and contextual meanings, particularly in technical fields (Olohan, 2011).

The advent of Google Translate was in 2006, and it is regarded as one of the most popular machine translation systems. It is utilized by most people all over the world (Mahmood & Al-Bagoa, 2021). Sherman (2005) states that Google Translate is a statistical, phrase-based machine translation (PBMT) model, and later in 2016, it was updated with a Neural Machine Translation (NMT) model. NMT operates a neural network that processes input through numerous layers before it goes out. It employs deep learning methods that result

in quick translation outcomes. This improvement of Google Translate is characterized by both high-quality translation and speed. It is stated that NMT uses algorithms that are able to comprehend the linguistic rules in a way that overtakes the traditional statistical method. Mahmood and Al-Bagoa (2021) show that Google Translate renders more than 100 billion words a day to support 107 languages. They further elucidate that Google Translate has the ability to translate full web pages, spoken languages, and text images. Google Translate is a machine translation tool that operates on a statistical model (Aitken & Balan, 2009). As a statistical machine translator, it utilizes linguistic modeling, statistical decision theory, and matching probabilities as the core of its translation process (Ney, 1995; Koehn et al., 2003).

ChatGPT is built upon the Generative Pre-trained Transformer (GPT) language model, originally introduced by OpenAI in 2018. The GPT model employs unsupervised learning techniques to produce coherent, human-like text. ChatGPT was specifically designed to adapt this model for use in chatbot applications, offering a sophisticated and responsive solution for natural language processing (NLP) and communication. One of ChatGPT's primary strengths is its ability to generate natural, coherent language. This capability makes it particularly useful in applications where human-like communication is important, such as language translation services (Mok and J. Zinkula, 2023).

1.8.1. ChatGPT Translation and Google Translation:

ChatGPT is extensively used in the field of translation, facilitating cross-cultural communication and making businesses and transactions much easier. It has many advantages, and one of its main advantages is its speed and efficiency. It can process large volumes of text in a fraction of the time, making it a perfect solution for businesses that need to translate significant amounts of content quickly, such as technical manuals or product descriptions. It can analyze vast amounts of data, allowing it to generate translations that are both fluent and culturally relevant. This level of precision is especially critical in industries like legal or financial services, where even minor translation errors can lead to serious consequences (Yan, 2023).

However, ChatGPT has limitations when it comes to capturing the cultural subtleties and contextual understanding that human translators bring. As a result, certain translations may lack the cultural sensitivity and emotional intelligence required for effective communication, particularly in more nuanced contexts. Moreover, ChatGPT can struggle with complex sentence structures, specialized jargon, and figurative language, which can result in inaccurate or subpar translations. The AI may also overlook the context or cultural significance of specific phrases, which are keys to an authentic translation and can only be fully understood by a human translator.

1.8.2. Automated Translation and the Challenges of Legal Translation

Automated translation has become widely used across many industries, but its application in the legal field presents distinct challenges. This study examines the complexities of using automated translation tools for legal documents, highlighting the critical need for accuracy, cultural sensitivity, and advanced technology. Key challenges include linguistic intricacies, stylistic aspects, syntactic features, and the inherent limitations of current translation technologies.

Legal translation requires an exceptional level of precision. Translating legal texts is considered the most challenging translation task as it requires the highest degree of accuracy, and even minor errors can cause different lawsuits and legal accountability. Automated translation systems often struggle to fully grasp the complexity of legal concepts, which can lead to significant deviations from the intended legal meaning. Legal systems are deeply rooted in their respective cultural contexts, each with its own specialized terminology. Automated translation often fails to capture these linguistic and cultural nuances, which can

hinder the accurate transmission of legal concepts across languages. The meaning of legal terms is often highly contextual, linked closely to the specific legal document in which they appear. Automated translation systems may struggle to understand these nuanced contexts, leading to inaccuracies in the legal content they convey. Translating legal terms directly between languages is not always a straightforward task. Automated translation faces challenges in linguistic arbitration, requiring innovative methods to bridge language gaps while maintaining legal precision (Murici, 2016). Legal texts are known for their complex, specialized terminology and unique structure. Thus, automated translation must incorporate advanced technologies capable of understanding and accurately translating this intricate language to meet the exacting demands of legal accuracy. While automated translation offers efficiency and accessibility, its use in legal contexts demands careful consideration of the challenges at hand. Overcoming these challenges will require a multifaceted approach that combines technological advancements, linguistic expertise, and cultural sensitivity. As automated translation continues to improve, ongoing evaluation and refinement will be crucial to meet the specific needs of legal translation. This study sets the foundation for future advancements at the intersection of automated translation and legal practice, aiming for more accurate and culturally aware automated translation solutions (Murici b, 2016).

1.9. Previous Studies on translation by Google Translate and ChatGPT :

Al Rousan, etal. (2025) conducted a study to evaluate the competence of ChatGPT-based translation compared to Human Translation (HT) when translating an Arabic literary work. The results indicate that ChatGPT struggles with design-related factors and often produces unnecessary content. Moreover, the study concludes that ChatGPT is not a fully reliable tool for translating Arabic literature, which requires professional human translators.

Deilen et al. (2023) conducted a study to examine the effectiveness of using ChatGPT as a tool for translating texts into German Easy Language. The results showed that the texts produced by ChatGPT are easier than the standard texts, but most of them are still quite difficult for the intended target readers of German Easy Language. Furthermore, the content was not always translated correctly.

Adiel and El Sodig (2023) stated that machine translation may fail to render phrases or terms, confirming the hazard of relying solely on machines for translations. For them, translating literary genres, such as ancient Arabic poetry, machine translation is a debatable choice due to several dimensions, including the linguistic, cultural, and social, as well as the particular features of poetry. Machines can translate health texts written in Arabic into English adequately with post-editing.

Sutrisno (2020) conducted a study after the complaints of some Google Translate users in Indonesia who emphasized the inaccuracy of machine translation, saying that it could only render languages at the micro-level of words and phrases, rather than complete sentences or larger segments. The results of his study support those initial speculations that suggested Google Translate is only effective with words and phrases. In contrast, Memsource is proven to be a useful tool in presenting an accurate translation of 60.37% of Indonesian-English sentences and vice versa.

Brynjolfsson et al (2014) argued that machine learning is considered a part of a new technological era called the second machine age, indicating that estimations about the possible consequences on human labor are different where some believe that it facilitates a positive interaction between people and the machine, while others believe that the anticipations related to the machine are hyperbolic.

Dillon et al (2006) supported the use of automated translation, but only after becoming aware of the weaknesses of software and not totally declining it. They recommended training on software, although this was found to be protracted for the translators involved.

Bowker (2007) examined the effectiveness of automated translation on textuality, and it was found that it affects text cohesion. Similarly, Kenny (1999) argued that machine translation could save time and accomplish translator tasks, but he did not recommend it for texts with difficult syntactic structures. This view asserts that machine translation still has deficiencies.

Patil and Davies (2014) conducted a study to examine the efficacy of Google Translate as a translation tool when rendering medical terms, showing that the accuracy of translation varied from language to language. They concluded the accuracy of the translation reached 62% when sentences were translated into Eastern European languages and reached 74% when the sentences were rendered into Western European languages, the accuracy was higher, around 74%. However, when the sentences were translated into African languages, the accuracy of the translations only reached 45%. Likewise, when translating into Asian languages, the accuracy of the translation was 46%.

Several studies have explored the use of GPT-based models for machine translation tasks, with many reporting promising results. For example, Liu et al. (2020) evaluated the performance of GPT-2 on Chinese-English translation and found that it outperformed traditional SMT systems on multiple evaluation metrics. Similarly, Vaswani et al. (2017) demonstrated the effectiveness of transformer-based models for machine translation by introducing the Transformer architecture, which has since become a standard approach in NMT.While ChatGPT is a powerful translation tool, users should be aware of its limitations. Firstly, it may not be suitable for translating highly specialized content, such as legal documents, medical reports, scientific papers, or texts involving religious, historical, or literary terminology. These domains require domain-specific knowledge, which ChatGPT may not possess. ChatGPT may produce culturally insensitive translations, especially when dealing with idioms, jokes, or colloquial language. Since it lacks the cultural background and context to fully understand the significance of certain phrases or terms, its translations may miss important cultural nuances, potentially leading to misinterpretation. While ChatGPT can provide accurate and fluent translations, it is not always as precise as human translation. It is particularly useful for translating short documents and general text, but when it comes to long-form writing, technical jargon, or texts with cultural complexity, human translators are still the best option. Human translators not only translate but also proofread and ensure that the translation maintains the original meaning, style, and cultural relevance (Yan, 2023).

However, there is limited research specifically focusing on using ChatGPT for translating technical texts from Arabic to English. Given the unique challenges posed by technical documents, it is important to assess whether ChatGPT can effectively handle these complexities and produce accurate translations. Another challenge for ChatGPT is handling idiomatic expressions and colloquial language. Arabic contains many expressions that do not have direct equivalents in English, and ChatGPT may struggle to translate them accurately. Furthermore, Arabic diacritical marks—used to indicate vowel sounds and pronunciation—can pose difficulties, as they are not always reflected in English texts.

As demonstrated by Aitken and Balan (2009) and Patil and Davies (2014), Google Translate performs better with certain languages but is less effective with others. In their study on the translation of medical terms using Google Translate, Patil and Davies (2014) found that the accuracy of translations varied significantly depending on the target language. They tested ten commonly used medical statements, translating them from English into 26 different languages. The translated statements were then sent to native speakers of each language, who translated them back into English. The researchers compared the returned English phrases to the original versions to assess their meaning. Translations that were nonsensical or factually incorrect were marked as incorrect, while minor grammatical errors

were allowed.Based on these findings, Patil and Davies (2014) advised against using Google Translate for translating medical terms due to the high risk of error.

According to Osborne et al. (2006), the high accuracy between languages with similar grammatical systems is a result of Google Translate's use of parallel corpora. For example, translating between English and Portuguese, Indonesian and Malay, or Dutch and German is relatively straightforward for the system. In contrast, translating between languages with very different linguistic structures can result in less accurate translations.

As noted by Aitken and Balan (2009), Grajales (2015), and Patil and Davies (2014), Google Translate can achieve accuracy levels of over 70% for English-European language pairings, especially when translating between languages with similar grammatical systems.

1.10. The Analysis and Discussion:

This part tackles the analysis of the target translation (TT) by the two translation systems, Google Translate and ChatGPT, focusing on the identification of errors where they exist, and showing their types, either overt or covert, and their effect on the quality of translation.

Table (1) *Error Identification Analysis*

The source text	عقد بيع قطعة ارض
Google TT	Sale Contract for a Piece of Land
ChatGPT TT	Land Sale Agreement

Legal language employs specific terminology that has become widely recognized, and its meaning is well established in legal usage and judicial interpretation. In this example, the source text (ST) term "عقد /"Aqd" is rendered into English by Google Translate as "Contract," which is consistent with the legal terminology of contracts. It is defined by Cambridge as: "an agreement between two parties, which the law will enforce in some way. On the contrary, ChatGPT rendered the same term as "Agreement", which is rarely used in legal documents as an equivalent for the ST term "عقد".This indicates that ChatGPT lacks the knowledge of the jargon of legal contracts. This error is an overt error related to the lexical choices.

Table (2) *Error Identification Analysis*

The source text	أنه في يوم الأربعاء الموافق ١٣/٤ / ١٩٩٤ حرر هذا العقد
Google TT	On Wednesday 4/13/1994, this contract was drawn up.
ChatGPT TT	On Wednesday, April 13, 1994, this contract was drafted.

In this example, some overt errors are identified and underlined. The source text term "حرر"/"Harrar" is rendered differently by the two translation systems. Google Translate uses the phrasal verb "draw up," which is defined by Cambridge as "to compose a document following a standard form", while ChatGPT uses the word "draft," which is defined by Cambridge as: "to write a first version or a preliminary sketch". Both the lexical choices by Google Translate and ChatGPT are not accurate, and they are not suitable for their context. In legal contracts, certain jargons are used to convey a definite meaning. In this context, the ST term "حرر" should be best rendered as "was signed," which is the last stage of a contract after writing it.

Table (3) *Error Identification Analysis*

The source text	1- بين كل من: مسلم الديانة ، مصرى الجنسية . ..... /السيد...بائع" أول طرف " ٢- السيد/ ..... مصرى الجنسية . مسلم الديانة ، ثاني "مشتري"... طرف
Google TT	Between each of: 1- Mr. .... Egyptian nationality, Muslim religion, First party (seller). 2- Mr. .. Muslim by religion / …. Egyptian nationality, Second party, (buyer).
ChatGPT TT	Between: 1. Mr. [Name], of Egyptian nationality, Muslim by religion, "First Party (Seller)". 2. Mr. [Name], of Egyptian nationality, Muslim by religion, Second Party (Buyer).

In this example, Google Translate is more accurate than ChatGPT when it comes to translating the source text phrase "بين كل من"/"bin kol min" as "between each of" which makes the target translation very precise and definite, indicating that there are only two parties to this contract. So, the target translation is free of any ambiguities or misinterpretations because the relationship is direct and obvious. On the contrary, ChatGPT translation makes it possible to assume that there are other parties to the contract. Also, both the translations of Google and ChatGPT include redundant words because they translated the ST phrases "مصرى الجنسية" /Misri al-Jinsiyya and "مسلم الديانة"/Muslim al-deeyana as "Egyptian nationality" and "Muslim by religion", respectively. As noted in this translation, the use of the words "nationality" and "by religion" is uncommon and redundant. It is understood from the context that the adjectives "Egyptian" and "Muslim" refer to "nationality" and "Religion", respectively. So, these ST phrases should be rendered as "Egyptian" and "Muslim".

Table (4) *Error Identification Analysis*

The source text	بعد أن أقر جميع الأطراف بأهليتهما للتعاقد اتفقا على ما يلي :
Google TT	After all parties have acknowledged their eligibility to contract They agreed to the following:
ChatGPT TT	After both parties declared their full legal capacity to enter into this agreement, they agreed on the following

In this example, there are some overt errors that make the target translation inaccurate, affecting its quality negatively. Firstly, Google renders "جميع الاطراف"/Jami' alatraf as "All parties," which is not suitable for a contract that is usually signed between two parties. Secondly, Google Translate provides an acceptable verb for the ST " للتعاقد"/ lilt'aqud as "To contract" which is defined in the Cambridge dictionary as "to enter into contract with". Lexically, it is acceptable, but this is not the common form used in legal contracts, and it should be translated as "To enter into this contract". On the contrary, ChatGPT used the typical formulae used in legal contracts, with the phrase "to enter into this agreement", but the noun "agreement" makes it inconsistent with the translation of the title of the document "contract".

Table (5) *Error Identification Analysis*

The source text	...لما كان الطرف الأول يمتلك قطعة أرض زراعية ألت إليه عن طريق الميراث الشرعي "الأرض"
Google TT	Whereas the first party owned a plot of agricultural land that was inherited by law (land) …
ChatGPT TT	Whereas the First Party owns a parcel of agricultural land inherited by legal succession (the Land) …

In this example, there are some overt errors that affect the accuracy and quality of the target translation. According to the conventions of legal language, the "legal person" must be known and definite in a contract, so it should be written in English with the first letter capitalized. Regarding Google translation, the phrase "الطرف الاول"/ Al-taref al tawwal should be rendered in English with the initial letters capitalized as the "First Party". Concerning ChatGPT translation, it succeeds in rendering the same phrase in English consistently. Furthermore, Google Translate renders the ST verb "يمتلك"/yamtalik, which is a present tense verb, as "owned" using an inconsistent tense. On the contrary, ChatGPT rendered this verb accurately as "owns". Legal language uses the present simple tense to achieve a continuous and actual effect.

Table (6) *Error Identification Analysis*

The source text	ولما كان الطرف الثاني يرغب في شراءهذه المساحة بأكملها.
Google TT	And since the second party wants to buy This entire space.
ChatGPT TT	And whereas the Second Party wishes to purchase this entire area,

The above table indicates some overt errors related to punctuation, consistency, and lexical choices. Google renders the phrase "الطرف الثانى"/ Al-taref al thani as the "second party" without capitalizing the initial letters, and this translation refers to any person in general; any party, not a specific one. In contrast, ChatGPT renders the same phrase as the "Second Party" with the initial letters capitalized in order to indicate the legal person in accordance with the conventions of the legal language. Moreover, the ST term "المساحة"/Al-masaha, which refers to the land subject to the contract and which is referred to above as "Land," is translated as " space" and "area" by Google Translate and ChatGPT, respectively. Both translations result in confusion and ambiguity when interpreting the contract due to the usage of several synonyms to refer to one object. Thus, this source text term should be translated as "Land" in order to achieve consistency along the contract.

Table (7) *Error Identification Analysis*

The source text	تم الاتفاق على الآتى:
Google TT	The following was agreed upon:
ChatGPT TT	Both parties have agreed on the following terms:

In this example, there are some covert errors that affect the quality of the target translation. According to the stylistic features of the language contracts, the legal subject should be known and definite. That's why the active voice form is preferred when formulating a contract. On the one hand, Google Translate renders "تم الاتفاق"/ using the passive voice form as: "the following was agreed upon", which is not suitable for the nature of legal contracts. It is crucial for a legal contract to be obvious and with no more than one interpretation. Also, using the past tense is not accurate. According to the standards of legal contracts, the present simple tense should be used to indicate that the terms and conditions outlined in the contract remain in force and binding on both parties and can be immediately applied upon signing the contract. In other words, using the present simple indicates continuity, immediate effect, and ongoing obligations. On the other hand, ChatGPT uses an active form, which makes the legal subject definite, but it uses a complex tense; the present perfect tense, which is inaccurate too. Thus, this part should be translated as "both parties agree on the following terms".

Table (8) *Error Identification Analysis*

The source text	١-يعتبر التمهيد السابق جزء لا يتجزأ من هذا العقد
Google TT	The previous introduction is considered an integral part of this contract
ChatGPT TT	The aforementioned preamble shall be considered an integral part of this contract.

In this example, some overt errors related to the formal aspects can be identified. Google renders the ST term "يعتبر"/yu'atabru as "is considered" while ChatGPT translated it as "shall be considered". The translation of ChatGPT preserves the formal tone of the ST, conveying obligation and commitment. Regarding the translation of the ST adjective "السابق", Google provides a neutral word "previous" while ChatGPT provided a typical word "aforementioned", keeping the linguistic and formal features of the language of contracts. Unlike Google which struggles with the legal register, ChatGPT provides an accurate rendition.

Table (9) *Error Identification Analysis*

The source text	باع وأسقط وتنازل الطرف الأول"البائع" بكافة الضمانات الفعلية والقانونية إلى الطرف الثاني القابل للشراء قطعة الأرض المذكورة أعلاه.
Google TT	Sold, dropped and waived by the first party "Seller" with all actual guarantees and legal to the second party to purchase the plot of land mentioned above
ChatGPT TT	The First Party (Seller) hereby sells, assigns, and transfers, with all legal and factual guarantees, to the Second Party (Buyer), who accepts, the agricultural land described above

In this example, there are some covert errors. When considering the grammatical structure of Google Translate, it is obvious that the passive form is used. In the language of legal contracts, it is essential to identify the legal person, whether an individual or entity, clearly and accurately, to identify commitments and obligations precisely, and to allocate responsibilities to avoid any future disputes arising from ambiguity or lack of clarity. That's why the legal language of contracts adheres to the active voice, which ensures that obligations and commitments are clearly defined. So, Google Translate is not consistent with the formal and stylistic features of the legal language of contracts. Additionally, Google provides a literal translation for the ST ""اسقط وتنازل"/asqat wa tanazel as "dropped and waived". "Drop" is defined by Cambridge as "to let fall or to move downward" and "waive as "as "to give up, or abandon ". These renditions are not consistent with the jargon of legal contracts. Furthermore, ChatGPT provided an accurate rendition of the ST, keeping the linguistic, syntactic, and stylistic features of the ST.

Table (10) *Error Identification Analysis*

The source text	والمحددة بالحدود الآتية : الحد البحري ، الحد القبلي ، الحد الشرقي ، الحد الغربي
Google TT	and defined by the following limits: Maritime limit, Tribal limit, Eastern border, Western border.
ChatGPT TT	And bounded by the following limits: Northern Boundary, Southern Boundary, Eastern Boundary, Western Boundary.

In this example, there are some overt errors related to the lexical choices, which make the target translation inaccurate, affecting its quality negatively. Firstly, Google Translate renders the phrases " الحد البحرى والحد القبلى"/Al-hadd al-bahri wa Al-hadd al-qibli literally as "

Maritime limit and Tribal limit," which is not accurate at all. On the contrary, ChatGPT provides precise renditions for the same phrases as "Northern Boundary and Southern Boundary". It is obvious that Google struggles with the contextual meaning of some words.

Table (11) *Error Identification Analysis*

The source text	يسدد ... وقت تحرير هذا العقد والباقي وقدره... دفع منها ...تم هذا البيع نظير ثمن إجمالي قدره في موعد أقصاه ٣٠ يناير ١٩٩٥.
Google TT	This sale was made for a total price of …, of which … were paid at the time of writing this contract and the remainder, …, is to be paid no later than January 30, 1995.
ChatGPT TT	This sale has been executed for a total amount of …, of which …has been paid at the time of drafting this contract, and the remaining … is to be paid no later than January 30, 1995.

In this example, there are some overt errors related to the linguistic choices. As for Google Translate, it translates the ST term "تحرير"/tahrir as "writing," which is not consistent with the ST term, and it is not commonly used in this context. Thus, it should be rendered as "signing", and it renders the ST term "يسدد /"yasdad as "is to be paid". In legal contracts, the modal "Shall" is used to express a binding commitment and obligation that a party must fulfill. Thus, this ST term should be translated as "Shall be paid". Regarding ChatGPT translation, the linguistic choices were not accurate. It renders the ST term "تحرير" inaccurately as "drafting," which is defined in Cambridge as "to write a first version or a preliminary sketch". Furthermore, it renders the ST term "يسدد "as "is to be paid". This rendition does not maintain the formal tone of the ST.

Table (12) *Error Identification Analysis*

The source text	يقر الطرف الأول بأن ملكيته للأرض المبيعة المحددة اعلام قد آلت إليه عن طريق الميراث الشرعي عن والده المرحوم
Google TT	The first party acknowledges that it owns the specified land for sale was announced to him through legal inheritance from his late father.
ChatGPT TT	The First Party affirms that ownership of the sold land, as specified, has legally devolved to them through inheritance from their late father.

This example reflects a number of overt errors related to the lexical and grammatical choices, which make the target translation inaccurate. An error can be identified in the translation of the third-person pronoun "It," which refers to an inanimate object, while in this context, it refers to a human being, "the first party" in the English version. Furthermore, the language of legal contracts avoids using "the anaphoric devices" in order to avoid any ambiguity or misinterpretation of the ST, particularly when it is related to the legal person. So, it should be translated as "the first party acknowledges that the first party..." Also, Google Translate renders the ST clause "ألت اليه"/Alata ilayhi as "was announced to him". Legal contracts employ certain technical terms which make the meaning obvious and free of any ambiguity, and the meaning og these terms is agreed upon. So, the verb "announced" is defined by Cambridge as" to declare by judicial sentence". Although it conveys the meaning of the ST term, it is redundant when it is followed by the phrase "through legal inheritance". So, the ST verb should be rendered as "was legally inherited by the First Party".

Concerning ChatGPT translation, it displays several overt errors that decrease the quality of the target translation. It renders the ST term "يقر"/Yuqr as "affirm", which is defined by Cambridge as "to make firm, to confirm, to support". It is not common to use the

word "affirm" in legal contracts to convey the meaning of the ST term. So, words such as "acknowledge", "declare", and "represent" are more accurate. Also, ChatGPT renders the ST clause "ألت اليه "/Alt Elyhu" as was devolved to them". The verb was accurately rendered because the verb "devolve" was defined by Cambridge as "to be inherited". ". Although it conveys the meaning of the ST term, it makes redundancy when it is followed by the phrase "through inheritance". So, the ST verb should be rendered as "was legally inherited to him". Furthermore, ChatGPt mistakes the translation of the third person singular pronoun and third person singular possessive pronoun when rendering the ST words "إليه" and "والده" as "to them" and "their father" respectively.

Table (13) *Error Identification Analysis*

The source text	يقر الطرف الثاني بأنه قد عاين قطعة الأرض المبيعة محل هذا العقد المعاينة التامة النافية للجهالة وانه استلمها بالحالة التي هي عليها وقبلها على علاتها.
Google TT	The second party acknowledges that he has inspected the plot of land sold, the subject of this contract, with a complete inspection that negates ignorance, and that he has received it in the condition it is in and accepted it as it is.
ChatGPT TT	The Second Party acknowledges having inspected the sold parcel of land thoroughly, in a manner that eliminates any doubt, and has accepted it in its current condition without any reservations.

This example exhibits certain overt errors on the linguistic and grammatical levels. Google rendered the phrase "الطرف الثانى"/ Al-taref al thani as the "second party" without capitalizing the initial letters, and this translation refers to any person in general, not a specific one. Furthermore, Google Translate renders the ST clause "بأنه قد عاين"/Biannahu qad ayana" as "that he has inspected," which violates the conventions and features of the language of legal contracts that confirm that the language of contracts should avoid using pronouns to guarantee the clarity of contracts. Thus, it is preferred, in legal contracts, to repeat the word instead of using the pronoun to avoid any ambiguity or misinterpretation. So, it should be rendered as" that the second party has inspected". Also, it renders the ST phrase " قطعة الارض المبيعة"/ as "the plot of land sold," and this phrase may be interpreted as a sentence implying the plot of land performed the action of selling, which might lead to ambiguity in context. It should be translated as "The sold plot of land," which is more precise and formal, clearly indicating that the plot of land is the object that has been sold, and it is consistent and common in legal contracts.

Concerning the translation of ChatGPT, it does not adhere to the formal structure of a legal contract, which necessitates clarifying and identifying the legal person. It translates the ST clause "بأنه قد عاين"/Biannahu qad ayana as "having inspected," which does not keep the formal structure of ST and leads to ambiguity. Furthermore, ChatGPT renders the ST term "قطعة" as "parcel", which is defined by Cambridge as: "a division of land brought and sold as a unit". Although it is lexically correct, it is not commonly used in legal contracts, which have their own technical terms. So, using the target translation "plot" is more accurate and consistent with the jargon of legal contracts.

Table (14) *Error Identification Analysis*

The source text	- يقر الطرف الأول بخلو المساحة المباعة من جميع الرهون وكافة الحقوق العينية الأصلية والتبعية
Google TT	The first party acknowledges that the sold area is free of all mortgages and all original and subsidiary real rights.
ChatGPT TT	The First Party guarantees that the sold land is free from all mortgages and any original or accessory property rights.

This example demonstrates some overt errors. Google Translate renders the ST term "المساحة"/Al Masaha, which refers to the land, the subject of this contract, as "area". This rendition causes confusion and ambiguity because a new term, "area", was used in the English version to refer to the ST term "الارض ", which was referred to previously as " land ". Thus, the ST term should be rendered as "land" in order to achieve consistency and to avoid any ambiguity or misinterpretation.

Regarding the translation of ChatGPT, it renders the ST term "يقر"/Yuqr as "guarantee," which is defined by Cambridge as "to give assurance that something will be done right". This target translation is not accurate, and the ST term should be rendered using verbs like "acknowledge", "declare", and "represent", which are more accurate and commonly used in legal contracts. Also, ChatGPT uses an incorrect grammatical form, a wrong preposition, when it renders the ST phrasal verb " يخلو من"/ as "free from", not "free of".

Table (15) *Error Identification Analysis*

The source text	-لا يجوز للطرف الثاني المشترى التصرف بالبيع أو تغيير معالم المساحة موضوع هذا العقد إلا بعد سداد جميع المبالغ المستحقة عليه.
Google TT	The second party, the buyer, may not dispose of the sale or change the features of the area subject to this contract except after paying all amounts due from him
ChatGPT TT	The Second Party (Buyer) is prohibited from reselling or altering the features of the land subject to this contract until all due amounts have been paid in full.

In this example, there are some overt errors related to the lexical choices that make the target translation ambiguous. As for Google Translate, it translates the ST term "المساحة", which refers to the land, the subject of this contract, as "area". Here, two lexical terms, "land" and "area", refer to one object in the source text "ارض" /Ard. In order to achieve consistency and avoid ambiguity, one term must be used throughout the contract. Both Google and ChatGPT rendered the ST clause "الا بعد سداد جميع المبالغ المستحقة عليه"/Ila ba'd sadad gamee' al-mabaligh Al Mostahaqa Alyhy using the passive voice form as: "except after paying all amounts due from him" and "until all due amounts have been paid in full", respectively. In the language of legal contracts, the legal person must be identified to identify the binding commitments and obligations that the legal person must fulfill. Thus, this ST clause should be translated as "except after the Second Party pays all amounts due from the Second Party". This translation ensures the clarity of the target text and eliminates any vagueness or misinterpretation. This is the primary concern when formulating a legal contract.

Table (16) *Error Identification Analysis*

The source text	يعتبر هذا العقد مفسوخا من تلقاء نفسه إذا تقاعس الطرف الثاني "المشترى" عن سداد المبلغ المتبقى في موعد غايته يناير ١٩٩٥.
Google TT	This contract shall be deemed automatically terminated if the second party, the “buyer”, fails to pay the remaining amount by January 30, 1995.
ChatGPT TT	This contract shall be considered null and void automatically if the Second Party (Buyer) fails to pay the remaining amount by January 30, 1995.

In this example, both Google and ChatGPT provide accurate renditions that convey the intended meaning of the source text and keep its formal features. In Google Translate, the

underlined phrase should be written with the initial letters capitalized to match the features of the language of legal contracts.

***Table (17)** Error Identification Analysis*

The source text	إذا رغب أي طرف من أطراف هذا العقد العدول عن التعاقد يلتزم بأن يدفع للطرف الآخر مبلغ (٥٠٠٠٠) جنية خمسون ألف جنيها لاغير كشرط جزائي الزامي.
Google TT	If any party to this contract wishes to withdraw from the contract, it shall be obligated to pay the other party an amount of fifty thousand pounds only (50,000) pounds as a mandatory penalty clause.
ChatGPT TT	If either party to this contract wishes to withdraw from the agreement, they are obligated to pay the other party a penalty of Fifty Thousand Egyptian Pounds (50,000 EGP) as a binding penalty clause.

This example shows some covert errors. Google translate renders the ST verb with the implicit agent "يلتزم"/Yltazem as "it shall be obligated", which is not consistent with the language of legal contracts, which necessitates defining the legal person and bans the use of the anaphoric devices that result in ambiguity or confusion. So, this part should be rendered as "such party (the party that withdraws from the contract) shall be obligated to…".

As for ChatGPT translation, it has some errors that can be identified. Firstly, it translated the ST term "التعاقد "/Ta'aqd as "agreement" while it previously referred to the ST term "العقد"/Al Aqd as "contract". As a result of using multiple nouns to refer to the same object, the contract becomes confusing and lacks consistency and clarity. So, this ST term should be rendered as "the contract ". Furthermore, ChatGPT translates the ST verb with the implicit agent "يلتزم" as "they shall be obligated". Using the third-person plural pronoun "they" is incorrect because the source text refers to a singular subject. Since it is not preferred to use pronouns, this part should be translated as "such party (the party that withdraws from the contract) shall be obligated to…".

***Table (18)** Error Identification Analysis*

The source text	تحرر هذا العقد من نسختين بيد كل طرف نسخة للعمل بموجبها عند اللزوم.
Google TT	This contract is made in two copies; each party has a copy for work accordingly when necessary.
ChatGPT TT	This contract has been drafted in two copies, with each party retaining one copy to act upon as necessary.

In this example, Google provides an accurate rendition, unlike ChatGPT, which uses inaccurate words, tenses, and structures. ChatGPT rendered the ST verb "تحرر"/Tahar as "has been drafted". The verb "draft" is not accurate here, and the perfect tense is not accurate too. It should be translated as "is signed". Also, the use of the gerund "retaining" in the part "with each party retaining one copy" is not accurate and does not add to the meaning of the ST Term. This underlined part should be rendered as "each party has one copy" or "one copy for each party".

1.11 The Results of the Study:

The results of the analysis of the data (the selected verses of the two translations adopted in this study) are as follows:

Concerning Google's translation, while Google Translate can be relied upon as a translation tool, it has some shortcomings and limitations when it comes to translating legal documents, especially contracts, due to the following reasons:

1. Inconsistent Terminology: Google Translate uses inconsistent terminology, and this compromises the accuracy and reliability of legal contract translations.
2. Neutral Word Choice: Google Translate relies on neutral words and fails to capture the nuanced legal register required in contracts.
3. Redundancy: The insertion of redundant words by Google Translate disrupts the clarity and concision essential in legal language.
4. Structural Inadequacies: Google Translate struggles to replicate the specific structural conventions of legal contracts, leading to translations that may not conform to domain-specific standards.
5. Punctuation Errors: Google Translate fails to adhere to punctuation rules specific to legal contracts, resulting in misinterpretation and ambiguity.
6. Verb Tense Inconsistencies: The inconsistent use of verb tenses in translations can alter the meaning and enforceability of contractual clauses.
7. Lack of Terminological Consistency: Using multiple synonyms for a single concept within the same document undermines the precision required in legal contracts.
8. Overuse of Passive Voice: Google Translate's frequent use of the passive voice, which is generally avoided in contract drafting, can lead to ambiguity and reduced clarity.
9. Literal Translation Pitfalls: Relying on literal translation often results in incorrect outcomes that fail to convey the intended meaning of the original text.
10. Contextual Understanding Limitations: Google Translate's struggle to grasp contextual meanings of words can lead to translations that misrepresent the original intent.
11. Lexical Inaccuracies: Google Translate's lexical shortcomings compromise the accuracy of legal terminology and concepts.
12. Grammatical Inconsistencies: Grammatical errors in translations can affect the interpretation and enforceability of contractual provisions.
13. Failure to Adhere to Legal Conventions: The system's inability to consistently follow legal language conventions can result in translations that are not fit for purpose.
14. Inadequate Domain-Specific Knowledge: Google Translate's lack of specialized knowledge in legal contracts leads to translations that may not meet the specific needs of the legal domain, using binding words and the domain's jargon.
15. Using anaphoric devices: Google Translate employs the anaphoric devices such as "he and them", and this contradicts the standards of legal language and leads to ambiguity and misinterpretation.

The cumulative effect of the abovementioned shortcomings significantly compromises the overall quality and reliability of Google's translations of legal contracts. These points highlight the limitations of relying solely on Google Translate for legal contract translation and underscore the need for specialized translation expertise in this domain.

Concerning ChatGPT's Translation, while ChatGPT can be a useful tool, it is obvious that human expertise and oversight are essential for ensuring the quality and accuracy of legal translations due to the following reasons:

1. ChatGPT fails to use the exact register that captures the nuanced legal meanings required in contracts.
3. ChatGPT inserts unnecessary words in the legal document.
4. Lack of Terminological Consistency: Using multiple synonyms for a single concept within the same document undermines the precision required in legal contracts.

5. GhatGPT struggles, in certain places, with using the correct verb form in a way that matches the standards of legal contracts.
6. Contextual Understanding Limitations: ChatGPT struggles, in certain positions, to grasp contextual meanings of words, which can lead to translations that misrepresent the original intent.
7. Lexical Inaccuracies: ChatGPT has lexical shortcomings related to the misuse of the third-person pronoun; it uses the plural form instead of the singular form.
8. Grammatical Inconsistencies: ChatGPT exhibits grammatical errors in translation due to using compound tenses, in addition to subject-verb disagreement.
9. Inadequate Domain-Specific Knowledge: ChatGPT's lack of specialized knowledge in legal contracts leads to translations that may not meet the specific needs of the legal domain. Using binding words and the domain's jargon is essential in legal contracts.
10. Using anaphoric devices: ChatGPT employs the anaphoric devices such as "he and they", and this contradicts the standards of legal language and leads to ambiguity and misinterpretation.
11. It demonstrates an ability to apply the correct punctuation, tense and structure in some position but not in others. That's why any legal translation by ChatGPT requires human reviewing to achieve the optimal results.

Concerning the Effectiveness of House's Model (2015) for Translation Quality Assessment (TQA), it is proven to be reliable and effective in evaluating the quality of translation of legal contracts due to the following reasons:

1. House's model provides a comprehensive framework for assessing translation quality by considering both Overt and Covert errors, making it suitable for evaluating legal documents.
2. It distinguishes between overt errors, such as grammatical mistakes, and covert errors, such as mismatches in tone or style, which is crucial for legal documents where precision and accuracy are key factors.
3. It focuses on functionality as it emphasizes the functional aspects of translation, ensuring that the translated legal document serves its intended purpose in the target culture, such as being legally binding or enforceable.
4. It evaluates the accuracy of the register and style in the target language, which is critical for legal documents where formal language and specific terminology are required.
5. It considers the type of text and genre conventions of legal documents, ensuring that the translation adheres to the expected norms and standards.
6. It allows for a detailed analysis of errors, enabling translators and reviewers to identify the areas for improvement and ensure that the final translation meets the required standards.
7. It helps improve the overall quality of the translation of legal documents, reducing the risk of misinterpretation or disputes.

In addition to the disadvantages of the translation produced by Google Translate and ChatGPT, there are some advantages which can be summarized as follows:

1. Speed: Both Google and ChatGPT can translate large volumes of text quickly, making them useful for initial drafts or rough translations.
2. Cost-effectiveness: Machine translation can be more cost-effective than human translation, especially for large projects or routine documents.
3. Accessibility: Google and ChatGPT are widely available and accessible, making them useful for individuals and organizations with limited resources.

4. Ability to handle large volumes: Both systems can handle large volumes of text, making them useful for complex or lengthy contracts.

1.12. Conclusion:

Based on the analysis of the samples of the current study, it is concluded that both Google Translate and ChatGPT have shortcomings when translating legal contracts at the lexical, grammatical, and structural levels. While Google Translate and ChatGPT cannot provide as accurate translations, it is not always as precise as human translation. It is particularly useful for translating short documents and general text, but when it comes to specialized writing, technical jargon, or texts with cultural complexity, human translators are still the best option. Human translators not only translate but also proofread and ensure that the translation maintains the original meaning, style, and cultural appropriateness. The aforementioned results suggest that a hybrid approach, combining machine translation with human review and editing, may be the most effective way to achieve high-quality translations of legal contracts. To sum up, Google Translate and ChatGPT should not be relied on solely for translating technical texts, including legal contracts, and the translated texts produced by Google Translate and ChatGPT should be monitored by professional translators to mitigate any potential negative results.

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