Google Translate: Lexical and Syntactic Problems of FIDIC Translation into Arabic

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ABSTRACT

The study investigates the translation of FIDIC (the Red Book 1999) by Google Translate compared to human translation. Four distinctive linguistic features are examined: passivization and modality at the syntactic level and collocations and doublets (two paralleled synonyms) at the lexical level. The results revealed that legal translators are bound by the fidelity and coherence rules to add formality and legal power to the target text; a missed feature in the Google Translate program. It is concluded that the syntactic structure of the legal text of the source language is maintained. However, human translators kept (16%) of the passive structures using active voice instead for clarity while Google Translate maintained (8%) of the passive structures. Modality is rendered to the present simple in Arabic for expressing obligation. It has been reached that human translation is more creative compared to Google Translate. The tool is unable to distinguish the nuances making the legal effect inappropriate to the reader.

KEYWORDS: *Equivalence theory, FIDIC, Google Translate, Legal Translation, Skopos Theory*

ترجمة (جوجل): المشكلاتُ المعجمية والنحوية في ترجمة عقودِ (الفيديك) للعربية

المستخلص

تلقي الدراسةُ الضوء على ترجمةِ (جوجل) لأحد الكتب الأربعة من كتب عقود الفيديك (الكتاب الأحمر 1999) مقارنةً بالترجمة البشرية، وتختص بدراسة أربع سمات لغويةٍ مميزة لهذه العقود، وهي: (تراكيب المبني للمجهول، والأفعال الناقصة على المستوى النحوي، والتلازم اللفظي، والمترادفات على المستوى المعجمي). وتتبنى الدراسة كلًّا من نظرية التكافؤ (1992) والنظرية الغائية (1978) لتحليل البيانات. وقد أظهرت النتائج أنَّ المترجمين القانونيين ملزمون بكلٍّ من: قاعدة الالتزام وقاعدة الترابط للنصِّ المصدر، لإضافة الرسمية والصبغة القانونية إلى النصِّ الهدف، والتي تعجز ترجمة جوجل عن إضافتها للنص، وتقترب ترجمة جوجل من الترجمة البشرية ولكن لديها بعض القصور؛ وعلي الرغم من حرص المترجمين القانونيين علي الحفاظ علي تراكيب النص؛ إلا أنهم يقومون بتحويل تراكيب المبني للمجهول والتي تمثل (30%) إلى صيغة المبني للمعلوم للتوضيح، حيث احتفظ المترجمون فقط ب (16%) من تراكيب المبني للمجهول، بينما احتفظت ترجمة جوجل ب (8%) من تراكيب المبني للمجهول. أما فيما يختص بالأفعال الناقصة، والتي تمثل (70%) في الفيديك، فقد تُرجمت في صيغة الفعل المضارع للإلزام. وفي بعض الأحيان ، لا تحقق ترجمة جوجل التكافؤ المعجمي وذلك لعجزها عن التمييز بين الفروق اللغوية الدقيقة بين المترادفات، وعلي الرغم من كونها مفهومةً إلا أنَّ ترجمة جوجل تتسم بالحرفية وتفتقر إلى إبداع العقل البشري؛ لأنها لا تقدم ترتيبًا منطقيًا للمعلومات. وبذلك فهي -في ضوء النظرية الغائية- تفتقر إلى الغرض التواصلي، وتعجز عن إضافة الصبغة القانونية للنص المُترجم، كما يفعل المترجمون القانونيون. ويظهر التحليل كذلك أن ترجمة جوجل لا تزال غير مجديةٍ للترجمة القانونية التي تحتاج إلى مزيدٍ من الدقة والوضوح.

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1. Introduction

Translating legal language isn't as simple as translating any other type of language. Legal language has its own unique syntax, meaning, terminology, genre, abbreviations, pragmatics, and stylistic features that make it quite challenging for translators. Understanding a legal term and translating it to another language requires a deep understanding of its place in the legal system to which it belongs. The complexity of rendering a legal text is a result of differences between the source language and the target language linguistic systems. Legal documents have specific requirements; the words should be precise so as not to be interpreted away from what is mentioned. Due to the development of technology, machine translation makes it easy to translate automatically. Because human language systems are unique and complicated, machine translation has recently improved to reach a qualified output.

2. Objective of the study

The study aims to demonstrate the lexical and syntactic problems of Google Translate in translating legal documents from English into Arabic like FIDIC (The International Federation of Consulting Engineers) contracts. The study seeks to explore the performance of Google Translate in rendering passivization and modality at the syntactic level. It analyzes collocations and doublets/binomials (e.g., valid and enforceable, unless and until, terms and conditions …etc.) at the lexical level. It also presents implications for Google Translate users to translate legal texts.

3. Research questions

1. Does Google Translate successfully process the distinctive syntactic features of FIDIC like passivization and modality?
2. How did Google Translate deal with the legal collocations and doublet found in FIDIC?

4. Methodology and data

The target text chosen for this paper is FIDIC the Red Book (1999) because it is much more applicable to a wider range of engineering works. It has bilingual versions in English. The reason for selecting such a legal text is that it is widely used by most construction companies as a standard contract in Arab countries such as Saudi Arabia, Jordan, and

Egypt. It contains general terms and conditions for working on civil engineering construction. Google Translate translation version is compared to the Arabic human translation of the professional legal translators of Nassar et al. (2008) to check the suitability of using the Google Translate program in dealing with legal texts.

5. Significance of the study

The study may give insight into the imperfections of Google Translate when dealing with legal texts. Legal translators can help programmers develop this translation tool to produce a grammatically and lexically flawless product. The database of this online tool needs to be enhanced with more lexical and syntactic information.

6. Review of literature

6.1. Definition of legal translation

It is a challenging field in translation because its terminology and structure are specific in nature, which makes it difficult to be rendered faithfully and unambiguously. Legal language is technical. It is a "technolect" used by specialized professionals. Legal English "uses certain words and expressions that are totally outside the experience of a layperson" (Gubby 2016:9). A contract is a type of legally enforceable agreement between two or more parties that is binding in law. the agreement has rights and obligations (Gubby 2016:160).

6.2. Google Translate for legal documents

Google Translate program is a translation engine. It works by using the Statistical Machine Translation system. To translate a text, Google Translate searches for patterns in the documents translated by human translators stored in the database. Inaccuracy is one of the biggest obstacles that Google Translate users face.

Legal language is special in its grammatical structure and the way in which sentences are connected. Bostanji (2010) investigates the similarities and differences between Arabic and English legal texts, examining their structure and stylistic features. It also explores the challenges of legal translation in Saudi Arabia, including the impact of legal translators consulting with legal drafters. The findings indicate that legal translation is more challenging than other forms of translation. Most legal translators find translating legal texts from Arabic to English more difficult than from English to Arabic, particularly when translating

commercial contracts and agreements. This could be due to the translators' native language being Arabic, inadequate second language acquisition (especially in legal language), and limited engagement with legal English experts. Additionally, the study revealed that culture-specific legal terms are particularly problematic for legal translators when translating commercial contracts and agreements from Arabic to English (and vice versa). Other difficulties include general legal terminology, text layout, tense, modals, punctuation, capitalization, and sentence structure.

The accuracy of using Google Translate is examined by Vidhayasai et al. (2015). They investigate an airline's official website using Google Translate for translating its legal documents focusing on "Terms and Conditions" because of its great impact on the passengers. Results revealed that Google Translate errors occur at lexical and syntactical levels which makes the translation unintelligible. Another study is by Al-jarf (2016) who examined the accuracy of the Google Translate program in translating English technical terms. The findings suggest that the Google Translate program does provide Arabic equivalents for certain terms such as 'mobilization' and 'technical'. It is inconsistent in handling terms with various prefixes, roots, and suffix combinations, as well as compounds and blends. For example, the words 'intercellular' and 'intracellular' are translated as واقع خاليا بين. In some cases, the suffixes '-gram' and '-graph' have the same equivalent when combined with the root arterio- such as in arteriogram & arteriograph صورة شريانية. It is advised that the translation of Google Translate program be revised.

Another study is of Alshaikh (2022) which examined the common problems encountered by Saudi students when translating legal contracts. a questionnaire applied to students in two Saudi universities; King Saud University and Imam Mohammad Ibn Saud Islamic University. The results of the questionnaire have shown that students find difficulty in translating words and expressions like (hereinafter, hereto, and hereby). Multiple negatives, binominal expressions, and syntactic structure are the major difficulties of translation. A recent study by Naeem (2023) tackled the problems of translating collocations from English into Arabic using the Google Translate program in a scientific (semantic) context. The findings reveal that Google Translate fails to employ the necessary techniques when dealing with collocations (metaphorical, idiomatic, and grammatical). This is due to its lack of deep understanding of the linguistic and cultural nuances of both languages. Consequently, machine translation is still in need of human post-editing and revision.

6.3.   Skopos theory

Skopos Theory is developed in Germany by Vermeer (1978). It is a communicative functional approach to translation. The word 'skopos' is a Greek word that means 'purpose'. Moreover, any action has an outcome, and in translational action, the outcome is a translatum (a translation product). Skopos theory seeks to create the balance of equivalence; a kind of adjustment is required in the target text to reach a solution for the problem (Baker 1992).

Translation is a communicative process. Vermeer states that the Skopos rule is to translate functionally that suits the situation. The translator carries a particular purpose in mind. The task (commission) of the translator is to fulfill the expectations and needs of the audience of the target text. Vermeer (1986) stated that "the translator is "the" expert in translational action. He is responsible for the performance of the commissioned task, for the final translatum" edited in Venuti (2012:192). Skopos theory is based on three rules: the Skopos rule, the coherence rule, and the fidelity rule. The Skopos rule means that translation has a Skopos or purpose. For the coherence rule, the target text should be coherent in light of situational circumstances to be comprehended by its users. The fidelity rule is concerned with intertextual coherence between the source text and translated text.

6.4. Baker's equivalence theory

Baker (1992) states that some pitfalls in translation are due to the misinterpretation of the lexical patterning of the source text. There is a tension between the accuracy and the naturalness of words. Baker notes that the translator may not figure out a suitable collocation even if a native speaker. Baker (1992) refers to what is called 'textual equivalence', which means achieving coherence and cohesion between a source text and a target text. For example, the English verb shrug, for instance, has a limited collocational range. It occurs with the word 'shoulders' and does not have a particularly strong association with any other word in the language. By contrast, the word 'run' has a wide collocational range, such as company, business, show, car, stockings, tights, nose, wild, debt, bill, river, course, water, color…etc. The collocational range is influenced by specificity; if the word is more general, it has a broader collocational range. If it is more specific, it has a restricted collocational range.

The collocational patterning of a word determines the different senses of this word. The collocational pattern may be typical or untypical; some collocations may seem untypical in everyday life but typical in a specific register. In statistics, it is acceptable to use collocations like 'biased error' and 'tolerable error'. When translating computer data, a translator should be aware that data can be handled, extracted, processed, manipulated, and retrieved, but not shifted, treated, arranged, or tackled. A translator should be familiar with how the equivalent of data is used in their target texts.

An example is the word "dry," which we usually associate with "dry clothes," "dry river," and "dry weather," to give the meaning of being "free from water." However, a native speaker of a language cannot always accurately assess the typicality of register-specific collocations. Each of the collocations, such as "dry cow," "dry sound," "dry book," "dry bread," "dry voice," "dry humor," "dry wine," "dry country," and "dry run," have unique meanings, indicating that a word's meaning often depends on its association with certain collocates. When a translation of a word or phrase is criticized as inaccurate or inappropriate in a particular context, it may be because the translator failed to recognize the right collocational pattern. For example, if a translator renders "dry voice" as "a voice which is not moist," he is mistranslating "dry" in this context. This is because "dry voice" means "cold" in the sense of not expressing emotion. (Baker 1992)

7. Data analysis

7.1. Distinctive linguistic features of FIDIC

If the syntactic structures of the source language are different from the target language, some translation processes are required to keep the meaning especially when the target language has a grammatical category that that does not exist in the target language. To translate contract agreements, the translator should achieve two functions: legal meaning and legal effect. The legal meaning is achieved by following lexical and syntactic precision.

7.1.1. Passivization

Passive voice is a distinctive feature of legal language. Lawyers prefer using the passive voice because it has an indirect formal tone. Using the passive voice is problematic in translation "depending on the availability of similar structures, or structures with similar functions, in the target language." (Baker 1992). It is noted that using a passive form indicates

that the subject is an affected entity. Passive structures are heavily used "to give the impression of objectivity" Baker (1992). The idea is not to replace active with active or passive with passive rather than choosing the function of the category.

Source Text	Back-translation	Google Translate
1.When **a notice is issued to a Party**, by the other Party or the Engineer, **a copy shall be sent to the Engineer or the other Party**, as the case may be.	**وعند إصدار** أية شهادة إلى طرف من قبل الطرف الآخر أو من المهندس، فانه **يجب إرسال صورة عنها إلى المهندس** أو إلى الطرف الآخر حسبما تتطلبه الحالة.	عندما **يتم إصدار** إشعار إلى أحد الأطراف ، من قبل الطرف الآخر أو المهندس **نسخة أرسل إلى المهندس أو** الطرف الآخر ، باعتباره قد تكون الحالة.
2. Each assistant, to whom **duties have been assigned** or **authority has been delegated**, **shall only be authorized** to issue instructions to the Contractor.	كل مساعٍد للمهندس ممن **اسند** اليه واجبات،أو **فوض** بصلاحية **سوف تكون له** الصلاحية فقط في اصدار تعليمات الى المقاول.	كل مساعد ، **تم تكليفه** بالواجبات أو **تم تفويض** السلطة له ، **يجب أن يكون** مفوضًا فقط لإصدار التعليمات إلى المقاول.
3. the Contractor shall extend the validity of the performance security until **the works have been completed and any defects have been remedied.**	فعلى المقاول أن يقوم بتمديد سريان مفعول ضمان الأداء بما يتفق مع ذلك حتى تكون الأشغال قد **أنجزت وتم اصلاح أية عيوب فيها**.	يجب على المقاول تمديد صلاحية ضمان الأداء حتى **يتم الانتهاء من الأعمال وتصحيح أي عيوب** .
4. Schedules" means the document(s) entitled schedules, **completed by the Contractor and submitted** with the Letter of Tender.	الجداول تعني المستند (المستندات) المعنون والجداول التي استكملها المقاول **وقدمها** مع خطاب العطاء.	"الجداول" تعني الوثيقة (الوثائق) المعنونة بالجداول ، والتي **تم إكمالها من قبل المقاول وتقديمها** مع خطاب العطاء
5. "Appendix to Tender" means the completed pages entitled appendix to tender, which **are appended** to and form part of the letter of tender	ملحق العطاء (ملحق عرض المناقصة) يعني الصفحات المستكملة والمعنونة "ملحق العطاء" **المرفقة** بخطاب العطاء والتي تشكّل جزءاً منه	"ملحق العطاء" يعني الصفحات المكتملة بعنوان ملحق العطاء ، والتي **يتم إلحاقها** وتشكل جزءًا من خطاب العطاء
6. For the export of Contractor's Equipment when **it is removed** from the Site	لتصدير معدات المقاول **عند ازالتها** من الموقع.	لتصدير معدات المقاول **عند إزالتها** من الموقع.
7. Take actions similar to those, which the **Contractor is required to take** under sub-paragraphs (a), (b) and (c) of Sub-Clause 4.8	يتخذون اجراءات مماثلة لتلك **المطلوبة** من المقاول بموجب الفقرات 0(أ، ب، ج) من المادة 8/4 ـ إجراءات السلامة والمادة 18/4 ـ حماية البيئة.	اتخاذ إجراءات مماثلة لتلك التي **يتعين على المقاول اتخاذها** بموجب الفقرات الفرعية (أ) و (ب) و (ج) من الفقرة الفرعية 4.8
8. The proportions or amounts of the Local and Foreign Currencies, and the fixed rates	تكون النسب أو المبالغ للعملة المحلية والعملات الاجنبية واسعار الصرف الثابتة التي	يجب أن تكون نسب أو مبالغ العملات المحلية والأجنبية وأسعار الصرف الثابتة

of exchange **to be used** for calculating the payments **shall be as stated** in the Appendix to Tender	سوف **تستخدم** في حساب الدفعات، كما **تم تحديدها** في ملحق العطاء	**المستخدمة** في احتساب المدفوعات **كما هو مذكور** في ملحق العطاء.
9. Other payments to the employer by the Contractor **shall be made** in the currency in which the sum **was expended by the employer**, or in such currency as **may be agreed by both parties**;	اما الدفعات الاخرى التي يسددها المقاول الى صاحب العمل فيجب أن **تسدد** بالعملة التي **قام صاحب العمل بانفاق ذلك المبلغ بها**، أو بأي عملة اخرى قد يتم الاتفاق عليها فيما بين الفريقين	يجب أن **يتم سداد** المدفوعات الأخرى لصاحب العمل من قبل المقاول بالعملة التي **تم بها إنفاق المبلغ من قبل صاحب العمل** ، أو بالعملة التي قد **يتفق عليها الطرفان** .
10. When calculating these proportions, no account **shall be taken** of any adjustments under sub-clause 13.7	عند احتساب هذه النسب، لا **يؤخذ** في الحسبان أي تعديلات بسبب تغيّر التشريعات بموجب المادة 7/13	عند حساب هذه النسب ، لن **توخذ** في الاعتبار أي تعديلات بموجب الفقرة الفرعية 13.7.

Table (1) illustrates passive structures in FIDIC translated into Arabic by the Google Translate program (compared to Nassar et al. (2008) translation)

In English, the passive structure is formed by copula+ V. past participle but in Arabic there is no such structure. The active is changed into passive by changing the internal diacritical markers; the verb is vowelized by *Damma* and *Fatha* on the penultimate in the present tense such as يُؤخَذ, يُسَدَدand *Damma* and *kasra* سُدِدَ ,أُخِذ in the past tense. Passive voice is excessively used in FIDIC to make it authoritative and objective and to give the text more legal power.

It is noticed that the passive structures are kept in the Arabic translation. The past passive أنجزت *unğizat*, فوض *fuwiḍa* , أسند *usnida* and the use of اصدار *iṣdār*, ارسال *irsāl*, ازالة *izālah* اصلاح *iṣlāḥ* or the adjective المطلوبة *almaṭlūbah* in human translation which is more creative. The passive voice is used to create greater cohesion (Bulatović 2013). However, Google Translate has dealt with passive structures by using the auxiliary verb Tamma + infinitive (verb) instead of the passive تم اصدار *tamma iṣdār*, تم تكليف, تم الانتهاء *tamma alʾintihā*ʾ , تم تفويض *tamma tafwīḍ*, تم الحاق *tamma ʾilḥāq* , يتم سداد *yattim sadād* in example اكمال*tamma ʾikmāl* (2), (3), (4), (5) and (9) or active structure as in example (1) which is not accurate grammatically. Any distortion in legal translation is a violation of the fidelity rule and coherence rules. Google Translate rendered the same human translation in example (6) because the structure is simple. In examples (5) and (7), we notice that the translators rendered the passive sentence by one adjective المطلوبة' 'المرفقة *almaṭlūbah* , *almurfaqah*

whereas Google Translate changed the passive structure using an active relative clause. Passive voice is "more difficult to follow than the active voice because it reverses the true sentence structure." (Mahdi & Husain 2012:72). In example (10), the passive structure of the English text is preserved in the Arabic translation يؤخذ *yuʾḫaḏ* and Google Translate تؤخذ *tuʾḫaḏ*

Passive Structures in FIDIC	Passive Structures in Arabic Translation of FIDIC	Passive Structures in Google Translation Of FIDIC
451	72	38
	16%	8%

Table (2) shows the percentage of keeping passive structures in Arabic Translation (Nassar et al. (2008)) and Google Translate
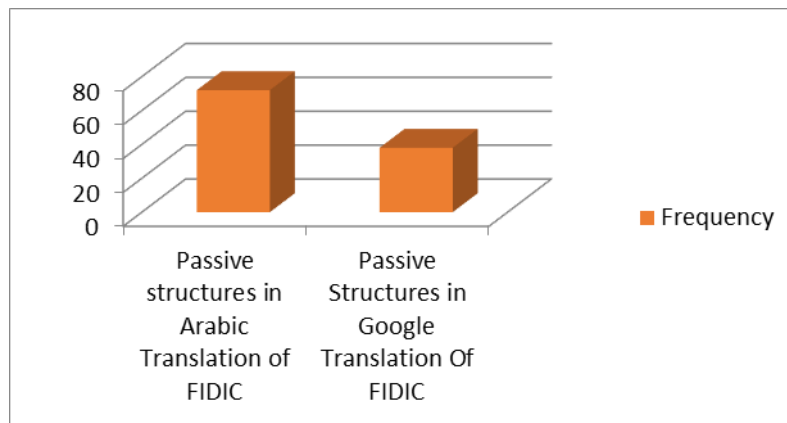

Figure (1) shows the percentage of keeping passive structures in Arabic Translation and Google Translate

7.1.1.2. Modality

`   Another distinctive feature of writing legal contracts is the use of modality. The modal verbs are used for many functions; for example, 'must' and 'shall' are used for obligation and necessity, 'may' and 'can' are used for permission, and 'will' is used for prediction. Modal verbs are frequently found in legal contracts as they lay down the rights and obligations required from the parties of the contract; authorizations, prohibitions, and permissions.

Source Text	Back Translation	Google Translate
1. The Employer **shall appoint** the Engineer who **shall carry** out the duties.	يقوم صاحب العمل **بتعيين** المهندس **للقيام** بالواجبات.	**على** صاحب العمل **تعيين** المهندس الذي **يتولى** المهام.
2. The Contractor **shall** be entitled	**يحق** للمقاول أن يستخدم لأغراض	**يحق** للمقاول أن يستخدم

to use for the purposes of the works	تنفيذ الأشغال	لأغراض الأعمال
3. Approvals, certificates, consents and determinations **shall not** be unreasonably withheld or delayed.	**لا يجوز** الامتناع عن اعطاء الموافقات والشهادات والقبول والتحديدات أو تأخير اصدارها دون سبب معقول	**لا يجوز** حجب أو تأخير الموافقات والشهادات والموافقات والقرارات بشكل غير معقول**.**
4. The Engineer **may** exercise the authority attributable to the Engineer.	**للمهندس ممارسة** الصلاحية المنوطة به.	يجوز للمهندس **أن يمارس** الصلاحيات المنسوبة إلى المهندس
5. This notice **shall describe** the physical conditions, so that they **can be inspected** by the Engineer	**يجب أن** يتضمن الاخطار وصفا للظروف المادية، حتى **يتمكن** المهندس من معاينتها	**يجب أن** يصف هذا الإشعار الظروف المادية ، بحيث **يمكن** للمهندس فحصها
6. the Contractor **cannot** readily obtain the Goods required for the Variation.	**لا يستطيع** أن يحصل على المعدات والتجهيزات والمواد المطلوبة لتنفيذ التغيير.	**لا يمكن** للمقاول الحصول بسهولة على السلع المطلوبة للتباين.
7. The Member **shall promptly disclose**, to each of them and to the Other Members (if any), any fact or circumstance which **might appear** inconsistent with his/her warranty	**وعلى** العضو **ان يصرح** فورا لكل منهم للأعضاء الآخرين (ان وجدوا) عن اي واقعة او ظرف **يمكن ان** تتعارض مع اقراره	**يجب على** العضو الإفصاح على الفور ، لكل منهم وللأعضاء الآخرين (إن وجد) ، عن أي حقيقة أو ظرف **قد يبدو** غير متوافق مع ضمانه / ضمانها
8. An estimate of any other amounts, which the contractor considers **will become** due to him under the contract. Estimated amounts **shall be shown** separately in these statements at completion.	تقدير أية مبالغ أخرى يعتبر المقاول ان **له حقاً** بصورة منفصلة في كشف دفعة الاتمام.	تقدير لأي مبالغ أخرى يعتبرها المقاول **مستحقة له** بموجب العقد. يجب إظهار المبالغ المقدرة بشكل منفصل في هذه البيانات عند الانتهاء.
9. any moneys which **should** have been recoverable under this insurance **shall** be paid by the insuring Party	فإن أية مبالغ **كان من الممكن أن** تسترد لقاء هذا التأمين **يتحملها** الطرف المؤمِّن.	**يجب أن** يدفع الطرف المؤمن أي أموال **كان من المفترض** استردادها بموجب هذا التأمين
10.If the Contractor suffers (or **will suffer**) delay and/or incurs (or **will incur**) additional Cost as a result of these changes in the Laws or in such interpretations, made after the Base Date, the Contractor **shall give** notice to the Employer and **shall be** entitled subject to Sub-Clause 201	اذا تكبد المقاول) أو **سوف** يتكبد تأخيرا و/أو تكلفة اضافية نتيجة لهذه التغييرات في القوانين أو لتلك التفسيرات لتي تم اصدارها بعد التاريخ الساسي، فإنه **يتعين على** المقاول أن **يرسل اخطارا** الى المهندس بذلك، لتقدير استحقاقاته بشأنها، مع مراعاة احكام المادة 1/20(– مطالبات المقاول)	إذا عانى المقاول (أو **سيعاني**) من التأخير و / أو تكبد (أو **سيتكبد**) تكلفة إضافية نتيجة لهذه التغييرات في القوانين أو في مثل هذه التفسيرات ، التي تمت بعد تاريخ الأساس ، **يجب على** المقاول إخطار صاحب العمل و بموجب البند الفرعي 201

Table (3) demonstrates modality in FIDIC translated into Arabic by the Google Translate program (compared to Nassar et al. (2008) translation)

In the example (4), 'may' expresses permission or possibility. The modal verb 'shall' is heavily used to give the meaning of "has a duty to".

'Shall' is translated in Arabic in the present tense يجب أن or into the preposition علي...أن, يجب or يحق to express obligation as in examples (1), (4), and (6). When 'shall' is used with negation, it expresses prohibition and is translated لا يجوز as in example (3). The modal 'may' is used in legal text to express rights and translated قد or يجوز. The modal verb 'will' is translated سوف or س attached to the verb to indicate futurity. It is noted that although Google Translate translated modal verbs effectively.

Modal verbs	Frequency in Source Text (FIDIC)	Arabic Translation of Modals	Percentage
Shall	784	علي /يجب/ يحق/ يتعين أن...	76%
Should	8		1%
May	173	يجوز/قد	17%
Will	42	سوف	4%
Can	14	من الممكن	1%
Would	6	صيغة الفعل المضارع	1%
Could	5	يمكن/يكن	0%
Might	1	يمكن أن	0%
Total	1033		100%

Table (4) shows the Frequency of the Modal Verbs with their Translation in FIDIC

	Shall	Should	May	Will	Can	Would	Could	Might
Frequency in Source Text (FIDIC)	784	8	173	42	14	6	5	1

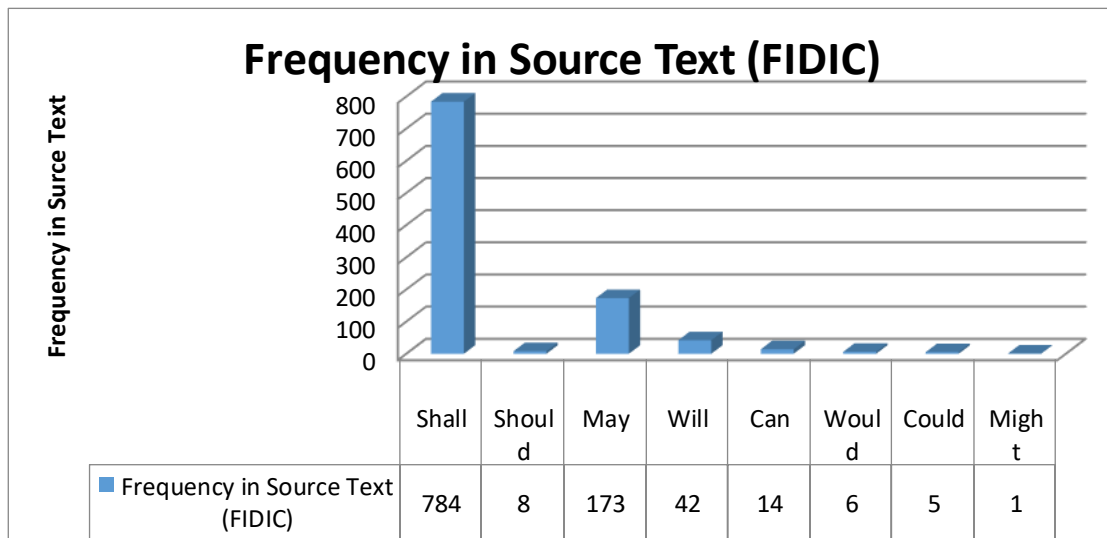Title: Frequency in Source Text (FIDIC)

Figure (2) shows the Frequency of the Modal Verbs with their Translation in FIDIC.

7.2. Lexical patterning

7.2.1. Collocations

Baker (1992) defines collocations are 'semantically arbitrary restrictions which do not follow logically from the propositional meaning of a word' (p14). Words that go together in combinations are collocated.

Synonyms or near-synonyms are combined in pairs called 'doublet'. Collocations are used for creating stronger sentences.

7.2.1.1.   Collocation (Give+ Noun/adjective)

Source Text (verb give)	Back-translation	Google Translate
1. The Engineer shall **give notice** to both parties of each agreement.	على المهندس أن يقوم **بتبليغ** كلا الطرفين عن كل اتفاق.	يقوم المهندس **بإخطار** الطرفين بكل اتفاقية .
2. Each party shall **give effect** to each agreement.	وعلى كل طرف أن **يلتزم** بكل اتفاق .	يجب على كل طرف **تنفيذ** كل اتفاق .
3.The engineer **gives consent.**	**تمت موافقة** المهندس عليها	**يعطي** المهندس **الموافقة**
4. He may also request any necessary further particulars, but shall nevertheless **give his response** on the principles of the claim within such time.	وله أيضا ان يطلب أية تفاصيل اخرى ضرورية ورغم ذلك، فإن المهندس يعتبر ملزما **بتقديم ردّه** على أسس المطالبة خلال تلك الفترة.	يجوز له أيضًا أن يطلب أي تفاصيل إضافية ضرورية ، ولكن يجب عليه مع ذلك أن **يقدم إجابته** بشأن مبادئ الدعوى في غضون ذلك الوقت.
5. If any time the Parties so agrees, they may jointly agree refer a matter to the DAB for it to **give its opinion**.	يجوز للطرفين مجتمعين، اذا اتفقا على ذلك في أي وقت، احالة أي أمر الى "المجلس" **لأخذ رأيه** حوله	إذا وافق الطرفان على ذلك في أي وقت ، فيجوز لهما أن يتفقا بشكل مشترك على إحالة المسألة إلى DAB **لإبداء رأيه**.
6. be available to **give advice** and opinions, on any matter relevant to the Contract.	ان يكون متواجداً **لاعطاء النصيحة** والرأي في أي أمر يتصل بالعقد.	كن متاحًا **لتقديم المشورة** والآراء ، حول أي مسألة ذات صلة بالعقد
7. The Contractor shall appoint the Contractor's Representative and shall **give** him all **authority** necessary to act on the Contractor's behalf under the Contract.	يجب على المقاول أن يعين "ممثل المقاول" **ويعطيه كامل الصلاحية** ليتصرف نيابة عن المقاول بموجب العقد.	يجب على المقاول أن يعين ممثل المقاول **ويمنحه كل الصلاحيات** اللازمة للتصرف نيابة عن المقاول بموجب العقد.
8.**Gives an oral instruction**.	**بإصدار تعليمات شفوية**	**يعطي تعليمات شفهية.**
9. If the Engineer does not **give permission** within 28 days after being requested to do so, the Contractor may, by giving notice to the Engineer, treat the suspension as an omission under Clause 13	فاذا لم يقم المهندس **بالتصريح** للمقاول باستئناف العمل خلال الـ 28يوما التالية لتاريخ الطلب، جاز للمقاول، بعد اخطار المهندس، أن يتعامل مع التعليق وكأنه الغاء بموجب الباب الثالث عشر (التغييرات والتعديلات) للقسم المتأثر من الأشغال.	إذا لم **يمنح** المهندس **الإذن** في غضون 28 يومًا بعد أن طُلب منه القيام بذلك ، فيجوز للمقاول ، من خلال إرسال إشعار إلى المهندس ، أن يعامل التعليق على أنه حذف بموجب البند 13
10. be called as a witness to **give evidence** concerning any dispute before arbitrator(s) appointed for any arbitration under the Contract	لن يتم استدعاؤه **كشاهد** لتقديم دليل يتعلق بأي نزاع تنظر فيه هيئة التحكيم التي قد يتم تعيينها بموجب العقد	أن يتم استدعاؤهم **كشاهد** للإدلاء بأدلة تتعلق بأي نزاع قبل (يتم) تعيين المحكم في أي تحكيم بموجب العقد

Table (5) demonstrates collocation (Give+ Noun/adjective) in FIDIC translated into Arabic by the Google Translate program (compared to Nassar et al. (2008) translation)

Collocation is a way of connecting two words in order. Karjo & Metta (2019: 290) "Inappropriate translation of collocations will produce unnatural words and meanings" collocation used in FIDIC is verb +noun

(Give+ noun). The examples above demonstrate that the translation of Google Translate of collocations approximates the human translation as in examples (1), (2) and (7). However, it seems to be more literal in less idiomatic to the يعطي تعليمات, يقدم إجابته (4), يعطي الموافقة (3) examples native speakers.

7.2.1.2. Collocation (Make + Noun/Adjective)

Source Text (verb make)	Back-translation	Google Translate
1. This other party (and its personnel) shall not **make any admission** which might be prejudicial to the indemnifying Party	يتعين على الطرف الآخر ومستخدميه أن يمتنعوا عن **تقديم أي اقرار** يمكن ان يكون مجحفا بحق الطرف المعّوض	لا يجوز لهذا الطرف الآخر (وموظفيه) **تقديم أي اعتراف** قد يكون ضارًا بالطرف المُطالَب بالتعويض
2. If an insurer **makes** (or attempts to make) any **alteration**, the Party first notified by the insurer shall promptly give notice to the other Party.	لا يجوز لأي من الطرفين **اجراء أي تعديل** جوهري على شروط أي تأمين بدون الموافقة المسبقة من قبل الطرف الآخر	إذا **أجرت** شركة التأمين (أو حاولت إجراء) **أي تغيير**، فإن الطرف الذي تم إخطاره أولاً من قبل شركة التأمين يجب على الفور إخطار الطرف الآخر.
3. Force Majeure shall not apply to obligations of either Party to **make payments** to other Party under the Contract.	يجب أن لا تطبق القوة القاهرة على التزامات أي طرف في أن **يدفع** الى الطرف الاخر **استحقاقاته** بموجب العقد.	لا تنطبق "القوة القاهرة" على التزامات أي من الطرفين **لتسديد مدفوعات** إلى الطرف الآخر بموجب العقد.
4. Wherever the Employer or the Contractor refers a dispute to the DAB under Sub-Clause 20.4 of the Conditions of Contract, which will require the Member to **make a site visit** and attend a hearing.	عندما يحيل صاحب العمل أو المقاول نزاعا 4/20 من شروط العقد، وحيث يكون مطلوبًاأمن العضو أن **يقوم بزيارة الموقع** وحضور جلسة استماع	حيثما يحيل صاحب العمل أو المقاول نزاعًا إلى DAB بموجب الفقرة الفرعية 20.4 من شروط العقد ، والتي تتطلب من العضو **القيام بزيارة الموقع** وحضور جلسة استماع.
5. The employer shall similarly **make available** to the Contractor all data.	وعلى صاحب العمل بنفس الطريقة ان **يوفر** للمقاول كل تلك البيانات.	يجب على صاحب العمل بالمثل أن **يتيح** للمقاول جميع البيانات.
6. not while a Member enter into discussions or **make any agreement** with the Employer.	أن لا يدخل، وهو ما زال عضواً، في أي مناقشات او **يبرم أي اتفاق** مع أي من صاحب العمل.	ليس أثناء دخول العضو في مناقشات أو **عقد أي اتفاق** مع صاحب العمل.
7. The Employer shall only be entitled to set off against or **make any deduction** from an amount certified in a Payment Certificate	لا يعتبر صاحب العمل مخولا المقاصة **بالخصم** من أي مبلغ تم تصديقه في شهادة دفع	يحق لصاحب العمل فقط إجراء المقاصة أو **إجراء أي خصم** من مبلغ معتمد في شهادة الدفع
8. If agreement is not achieved, the Engineer shall **make a fair determination** in accordance with the Contract.	وفي حالة عدم التوصل الى اتفاق، فإنه وفقا للعقود، مع الاخذ في الاعتبار جميع الظروف ذات الصلة بهذا	في حالة عدم التوصل إلى الاتفاق ، يجب على المهندس **اتخاذ قرار عادل** وفقًا للعقد.

	يتعين على المهندس أن **يقوم بتحديد عادل** وفقا للعقد .	
9.The employer shall not **make a claim** under the performance security.	على صاحب العمل أن لا **يقدم مطالبة** بخصوص ضمان الاداء.	لا يجوز لصاحب العمل **تقديم مطالبة** بموجب ضمان الأداء.
10. the Contractor shall **make arrangements** for the engagement of all staff and Labour.	على المقاول، مالم ينص على غير ذلك في المواصفات، أن **يتخذ ترتيباته** لتعيين جميع المستخدمين والعمال	يجب على المقاول **اتخاذ الترتيبات** اللازمة لإشراك جميع الموظفين والعمالة

Table (6) demonstrates collocation (Make + Noun/Adjective) in FIDIC translated into Arabic by the Google Translate program (compared to Nassar et al. (2008) translation)

Some collocations are register-specific; Baker (1992) states that "the tendency of certain words to co-occur has to do with their propositional meanings" (p47). Differences in the collocational pattern of both the source language and the target language may cause pitfalls in translation. It is observed from the examples above that Google Translate chooses a translation that is literal.

7.2.2. Doublet

Doublets are a sequence of two words belonging to the same grammatical category and joined by a conjunction. They are used in FIDIC for precision and inclusiveness and for adding weight to the sentence. Doublets are distinctive style markers of legal text. Translating doublets (binomials) is problematic.

Source Text	Back Translation	Google Translate
1. If the recipient has not stated otherwise when requesting an **approval or consent**, it may be sent to the address from which the request was issued.	اذا لم يحدّد المتلقي غير ذلك عند طلبه **الموافقة أو القبول**، جاز ارسالها الى العنوان الذي صدر منه الطلب.	إذا لم يذكر المستلم خلاف ذلك عند طلب **الموافقة أو الموافقة** ، فقد يتم إرساله إلى العنوان الذي تم إصدار الطلب منه.
2. Delivered, **sent or transmitted** to the address for the recipient's communications as stated in the Appendix to Tender.	تسلم أو **ترسل أو تنقل** إلى عنوان المتلقي المختار المنصوص عليه في ملحق العطاء	تم تسليمها أو **إرسالها أو إرسالها** إلى عنوان اتصالات المستلم كما هو مذكور في ملحق العطاء
3. Each party shall give effect to each agreement or determination **unless and until** revised under Clause 20	على كل طرف أن يلتزم بكل اتفاق أو تحديد، **ما لم، والى أن**، تتم مراجعته بموجب الباب العشرين	يجب على كل طرف تنفيذ كل اتفاقية أو قرار **ما لم وحتى** يتم تعديله بموجب البند 20
4.The Contractor shall ensure that the performance security is **valid and enforceable**	على المقاول ان يتأكد من أن يظل ضمان الأداء **سارياً ونافذاً**	يجب على المقاول التأكد من أن أمن الأداء **ساري المفعول وقابل للتنفيذ**

English	(Nassar et al. 2008)	Google Translate
5.The Contractor shall **indemnify and hold harmless** the Employer, the Employer's Personnel, and their respective agents, against and from all claims, damages, losses and expenses	يتعين على المقاول ان **يعوض ويحمي من الضرر** كلا من صاحب العمل وأفراده ووكلائهم ضد جميع المطالبات الأضرار0والخسائر والنفقات	يجب على المقاول **تعويض** صاحب العمل وموظفي صاحب العمل ووكلائهم المعنيين **وإبراء ذمتهم** ، ضد ومن جميع المطالبات والأضرار والخسائر والنفقات
6. The Contractor's Representative may delegate any **powers, functions and authority** to any competent person.	يجوز لممثل المقاول أن يفوض أية **سلطات ومهام وصلاحية** الي شخص مؤهل	يجوز لممثل المقاول تفويض أي **صلاحيات ووظائف وسلطات** إلى أي شخص مختص .
7. Each "Dispute Adjudication Agreement" is a tripartite agreement **by and between**: a) the "Employer"; b) the "Contractor; c) the "Member" who is defined in the Dispute Adjudication Agreement	كل "اتفاقية فض نزاعات" هي اتفاقية ثلاثية الأطراف، تنعقد **فيما بين** أ - صاحب العمل، و ب- المقاول،و ج- عضو "مجلس فض النزاعات" او "عضو المجلس" المعرّف في اتفاقية فض النزاعات	كل "اتفاقية الفصل في النزاع" هي اتفاقية ثلاثية **بين وبين**: أ) "صاحب العمل" ؛ ب) "المقاول. ج) "العضو" المحدد في اتفاقية التحكيم في النزاع
8. If the Engineer requires this Plant, Materials or Workmanship to be retested, the tests shall be repeated under the same **terms and conditions**.	إذا طلب المهندس إعادة اختبار هذه التجهيزات أو المواد أو المصنعية، فيجب إعادة اجراء الاختبارات وفق ذات **الشروط والظروف**.	إذا طلب المهندس إعادة اختبار هذه المحطة أو المواد أو المصنعية ، فيجب إعادة الاختبارات وفقًا لنفس **الشروط والأحكام.**

Table (7) illustrates the use of doublet in FIDIC translated into Arabic by the Google Translate program (compared to Nassar et al. (2008) translation)

It is noticed in examples (1), (2), and (7), Google Translate could not figure out the nuances repeating the same lexical item الموافقة أو **الموافقة, إرسالها أو إرسالها, بين وبين** Binomials in FIDIC are conjoined nouns (examples 1, 6, 8), verbs (examples 2, 5), adjectives (example 4) or preposition (example 7). It is observed that the translators maintain the structure of the binomials (conjoined nouns, verbs, adjectives… etc.) in the target text whereas Google Translate repeats the word or changes the binomial structure. In translating doublet and triplet or binomial, the same number of words should be kept; each word has a legal implication that should be kept in the target language because of legal constraints (El Farahaty 2016). Sometimes the absence of lexical equivalence results in the repetition of the word as the tool is unable to distinguish the nuances of some doublets which makes the legal effect inappropriate to the reader.

Syntactic	Frequency	Percentage	Lexical	Frequency	Percentage
Modality	1033	70%	**Collocation**	26	76%
Passive Structures	451	30%	**Doublet**	8	24%
Total	1484	100%	**Total**	34	100%

Table (8) illustrates the Frequency of Lexical and Syntactic Features in FIDIC
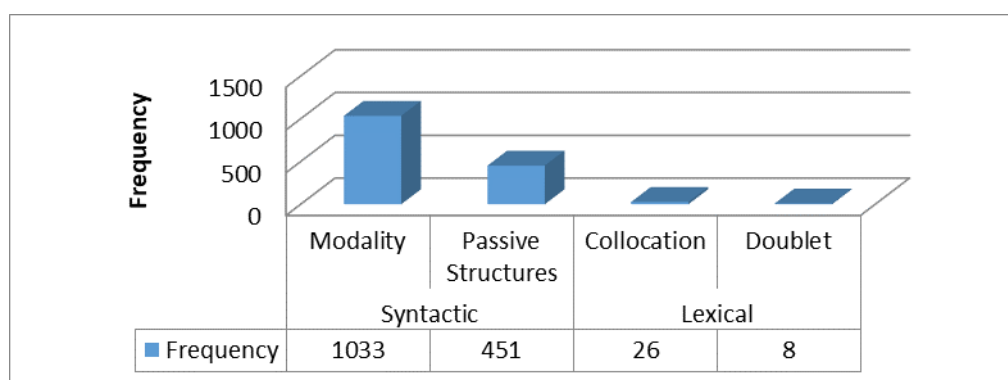

Figure (3) illustrates the Frequency of Lexical and Syntactic Features in FIDIC

8. Discussion

One of the most difficult problems in machine translation is the cross-linguistic variations that result from the mapping between the lexical words and structures in the source language and the target language (Mahmoud 2006). The translation may have a different form from the original. After examining the source text and the target text, it can be noted passive voice is heavily used in FIDIC to create a sense of impersonality which gives the text more legal power. It also imposes an obligation on every person in the chain. In Nassar et al. (2008) translation of FIDIC (the Red Book 1999), active voice is used in rendering passive structures to place emphasis on the performer; structural divergence is needed for clarity. The use of passive in the translated Arabic version (16%) such as فُوِضَ ، أُنْجِزَت ، تُسْتَخدم ،وُجِد is less than in the English version (451 passive structures). The Google Translate program rendered passive voice into active keeping only (8%) of the passive structures because passive is more complex than active. Grammatical cohesion is more in human translation than in Google Translate. The study is in line with (Ambawani 2014, Ismail and Hartono 2016, and Allue 2017) that Google Translate is a good translation tool but it does not always give accurate translations which leads to ambiguity.

At the lexical level, collocations constitute (76%) of verbs (give) and (make) in FIDIC. Fifteen collocations with the verb (make + noun); 'make admission', 'make alteration', 'make attempt', 'make agreement', 'make deduction', 'make a claim', 'make arrangement', 'make payment', 'make site-visit', 'make a determination', 'make allowances', 'make adjustments', 'make correction', 'make an advance', 'make reports', 'make allowances', and (make + adjective) 'make available' and 'make good'. Ten collocations with the verb give: 'give notice' has been mostly mentioned (35 times) as the document is legal, 'give effect' (twice), 'give instruction' (twice), 'give advice' (twice), 'give evidence' (twice), 'give authority', 'give response', 'give consent', 'give permission', 'give opinion', 'give advice' (once). The translator may encounter lexical difficulties in translating legal collocations as the translator should have the knowledge of legal terminology required to achieve the legal meaning and effect (Bostanji 2010, Mohammad et al. 2010, Abdulwahid et al. 2017, El Ghazi et al. 2019; Alshehab & Rababah 2020).

9. Conclusion

Legal language is characterized by complex syntax. Arabic and English are of different language families, so there would be grammatical differences between the two languages. Google Translate may find difficulties in translating different structures or figuring out some lexical patterning. The difference between a legal translator and Google Translate is that a legal translator follows the coherence principle and fidelity principle to keep the unique features of the legal text.

The difference between Google Translate and human translators is that legal translators pay more attention to the formality of the legal text making it more coherent to the readers. 'Fidelity Rule' focuses on the coherence between the source text and the target text. The fidelity of FIDIC is reflected in the precision, accuracy, and cultural equivalence of the translated text. Some constructions are translated literally and provide non-sensical interpretation which affects the validity of the document. Though it is understandable, Google Translate does not provide a rational arrangement of the information. The analysis shows that the tool is still not feasible for legal translation which needs more precision and accuracy.

10. Limitations of the study

Although many studies have been conducted on Google Translate, few studies have adopted supporting theories to analyze the errors of using Google Translate to translate English corpus from English to Arabic. To deal with such limitations, equivalence theory, and skopos theory were used.

11. Recommendation for further research

From the findings of this study, it cannot provide reliable translation as professional expertise. Legal translators can help the designers to develop this translation tool to produce a more functional accurate legal text and to make it sound natural to the readers. Further research could investigate other distinctive features of contracts such as conditionals, reduced restrictive relative clauses, nominalization, and participles.

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