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The use of AI in the translation of legal documents

A critical analysis

Abstract

The use of Artificial Intelligence (AI) in the legal field has grown substantially, and law firms have been resorting to intelligent machines for various purposes. Machine translation (MT) is also on the rise and legal translators are increasingly relying upon it. This paper aims to assess the quality and reliability of AI-driven legal translations. To do so, two chatbots, namely ChatGPT and Gemini, are applied to translate (from Italian into English) an extract of a notice of default issued by an Italian lawyer. To do so, the two automated target texts are analysed in light of legal definitions and principles sourced from statutory documents, the case-law and legal monolingual dictionaries. The paper finds shortcomings that range from mistranslated words and formulae to minor inaccuracies. In addition, some expressions sound infrequent or awkward to a competent target readership. The paper underlines the importance of human post-editing, of the deep knowledge of the subject-matter, and of consulting targeted language and legal resources.

1 Introduction

This article focuses on AI in the legal field. It firstly discusses and analyses the advantages and drawbacks of AI. Then, it delves into the traits of MT- and AI-driven legal translation, and brings to the fore the more salient features and challenges.

1.1 Definition of AI

The first definition of Artificial Intelligence (AI) dates back to the 1950s, where scholars such as Turing (1950) and McCarthy et al. (1955) envisaged the possibility to create machines that could behave intelligently. In particular, Turing's (1950) studies explored whether a computer was able to convince a human that it was also a human by manifesting intelligent thinking and analytical abilities.

Nowadays, AI is defined as a branch of computer science that is dedicated to building machines capable of developing intelligent behaviour (Alarie/Niblett/Yoon 2018). AI-based solutions can be entirely software-based and act virtually (such as search engines or speech recognition systems), or they can be inserted into hardware machines (such as self-driven cars or drones) (European Commission 2018: 1). What is currently relevant

in the definition and application of AI; however, is the fact that it must be human-centred (European Commission 2019: 4). This means that a human's freedom and the respect for its dignity must be practically feasible and relevant (European Commission 2019: 10).

1.2 Uses of AI in the legal field

The applications of AI in the legal domain are various. Brooks, Geherhes and Vorley (2020: 150) distinguish between using AI-driven solutions in the practice of the legal profession, and as a part of the services offered. In the first case, AI allows law firms to automate repetitive and labour-intensive tasks, given that decision-making and legal expertise are not needed. This helps lawyers improve and increase their skills, as they can dedicate time and effort to other activities where their professional judgement is more relevant. In the second case, AI is used to improve the internal workflow by streamlining everyday work processes.

1.2.1 Advantages

AI is welcomed in the legal field as it brings several advantages. Amongst the most acclaimed ones, AI-driven solutions can perform the following activities: analysing and reviewing contracts and lawyers' briefs by highlighting weaknesses and suggesting corrections, new elements and citations; automating due diligence and compliance review processes; fostering e-discovery by scanning pre-trial documents and bringing to the fore possible cases for litigation; processing disputes analytics by retrieving statistics per judge, case type and law firm (Thomson Reuters 2023: 11–13). In the United States of America, courts of law use AI-driven solutions to deal with repetitive processes, such as filing court cases ("auto-docketing") (Joint Technological Committee 2010: 7).

In addition, chatbots have been implemented to efficiently address the increasing number of inquiries (Joint Technological Committee 2010: 7). In this way, justice is delivered more efficiently and rapidly. AI is also supposed to spur a more equitable access to justice (Council 2020; eu-LISA and Eurojust 2022).

The Council of the EU's Conclusions (2020), in fact, state that digital technology helps improve proceedings and deal with standardised processes more smoothly (Council 2020: 6). In this way, procedures are followed more efficiently and effectively; hence, everyone can benefit from faster justice services (Council 2020: 6).

1.2.2 Risks

If several scholars praise AI for its many advantages, the use of intelligent machines may also pose challenges and risks (Leslie et al. 2021; Sheeba 2023). Sheeba (2023: 8–9), for example, raises ethical issues with regard to privacy, confidentiality and intellectual property rights. In addition, AI solutions may not be able to cope with nuanced legal cases that need long-term expertise and field experience.

AI may also give rise to biases. Intelligent machines, in fact, can be used to forecast human behaviours and assess risks. This means that they could reproduce the fallibilities

of human judgement and make discriminatory predictions (Leslie et al. 2021: 14–15). This may occur, for example, when system developers' biases influence the choices and design of intelligent computers (Leslie et al. 2021: 15).

With regard to consumer protection, Lagioia et al. (2022: 482) posit that “there is a risk of consumers becoming not empowered but overpowered by AI.” The massive use of AI solutions by large companies have put consumers in a very weak position, where their behaviours are predicted, their tastes and preferences are known and they are constantly targeted with customised solicitations (Lagioia et al. 2022: 482).

Last but not least, AI may generate argumentations, cases and citations which are fake, albeit seeming plausible (Amaro et al. 2023; Thomson Reuters 2023: 5). This underlines the importance of human supervision and of domain expertise. As far as the academic world is concerned, for example, Emsley (2023) states that AI-assisted chatbots like ChatGPT must not be used by scholars, as it fabricates information by providing false references and false details, although seeming rather convincing. According to the author, the production or generation of false data, or the change of the existing information by misrepresenting it, will inevitably lead to research misconduct.

1.3 MT, AI and chatbot-driven translations

Machine Translation (MT) is the automatic translation of a source text into a target text without human intervention (Mulé and Johnson 2010: 32). Therefore, MT is a computer-based process where translations are performed automatically via a platform or an interface. Automatic translations can also be carried out by AI-driven solutions, such as chatbots. Although chatbots were originally conceived to only interact (i. e., chat) with Internet surfers, they are now increasingly used to perform legal and translation tasks (Thomson Reuters 2023).

Several scholars have analysed the reliability of chatbot-based translations and have mostly found that their outputs are affected by limitations and drawbacks (Artamonova/Mambetov/Tulina 2023; Moneus/Sahari 2024). Moneus and Sahari (2024), for example, investigate the quality of the translations produced by chatbots such as ChatGPT, ChatSonic and Microsoft Copilot (i. e., the former Bing Chat). They prompt the systems to translate extracts of contracts from English into Arabic and compare the AI-based outputs with human translations. Amongst others, they find that the chatbots cannot capture the many subtleties of legal discourse. Therefore, automated translations feature a number of issues that humans must detect and correct. This means that machine-generated target texts need accurate post-editing and human intervention (Wiesmann 2019; Dik 2020; Escribe/Mitkov 2023; Giampieri 2023).

This sentiment is echoed by Escribe and Mitkov (2023), who envisage the implementation of post-editing activities as part of an interactive system, where ad hoc corpora are applied to become an integral part of the translation process. Post-editing is necessary as chatbot-driven translations and MT tend to produce a series of oddities or errors that

must be catered for. As mentioned, examples in this respect are hallucinations, falsifications and nonsensical output (Emsley 2023).

1.4 Use of AI and MT in legal translation

Despite the many drawbacks, AI-driven and machine translation are increasingly used by legal translators and lawyers (Homoki 2022; see also the surveys by Giampieri 2023). A small-scale survey carried out in Italy by Giampieri (2023: 59ff) points to the fact that legal translators resort to MT quite often, mostly to produce draft outputs. These are then post-edited by consulting ad hoc webpages, general bilingual dictionaries and multi-language platforms.

Ive et al. (2020) compare the automated translations of European legal texts with the official EU translations. The authors acknowledge the huge strides forward made by MT solutions; nonetheless, they posit that the quality of MT output is still lower than human-made translation.

With regard to the Italian and German language pair, Wiesmann (2019: 124) mentions some typical errors that are commonly produced by many MT systems, irrespective of the field or technical language addressed. Such mistranslations revolve around word repetitions, omissions and additions; words with no sense in the target context; terminological inconsistency, and wrong numbers. Moreover, the author refers to specific automatic translation infelicities that regard the legal field, such as the non-translation of phrases or words, nonsense legal expressions, wrong legal formulae, grammatical errors, unnecessary additions of words, and so on (Wiesmann 2019: 136–137). These findings are corroborated by Dik (2020), who analyses the automated translations of Dutch judgements into English. The author reports that most of the issues of automatically generated translations are not noticeable at a first glance.

Therefore, acquaintance with the legal subject-matter and with the field language is necessary in order to properly meet legal and linguistic challenges. In this respect, Prieto Ramos (2021: 177) suggests that legal translation should be performed by professionals who have a good grasp of comparative law.

Consequently, the reliance on targeted language tools and legal resources is of paramount importance in legal translation. De Groot and Van Laer (2006), for example, undertake detailed analyses of the quality of legal dictionaries. The authors provide comments on the most reliable ones and discuss the dubious quality of many other bilingual dictionaries.

In addition, trained translators must be able to disambiguate terms and meanings in context. In this regard, ad hoc language and legal resources other than dictionaries can be useful to translate or post-edit target texts. Such tools can be corpora, case-law databases, statutory documents, and professional translators' forums (Giampieri 2023, 2024). These resources offer the possibility for users to confirm or confute translation hypotheses, deepen their legal and language knowledge, and improve their translation skills and confidence.

2 Methodology

Given the advantages and disadvantages of using AI in the legal field, this paper is aimed at assessing the quality of AI-driven translations in the legal domain. In addition, it wishes to show how it is possible to support impressionistic evaluations of translations that are based on the assessor's existing translation experience by using targeted analytical methods and ad hoc legal and language resources.

For this purpose, an extract of a *lettera di messa in mora*¹ (lit. “default letter charging interests”) is translated from Italian into English by using two chatbots: ChatGPT (developed by OpenAI) and Gemini (developed by Google). In order to assess the quality of the two automated translations, statutory documents, the case-law and legal monolingual dictionaries are accounted for. In this regard, the Italian *Codice Civile* (Civil Code) is referred to; the Casemine case-law database (2024) is accessed and *Black's Law Dictionary* (Garner 2004) is consulted. Thanks to such an analytical approach, it is possible to adjust the target text to the peculiarities of the target language and target legal system. In this way, field-specific linguistic and legal investigations are carried out, which can be useful in the translation (or post-editing) of legal texts.

To obtain the automated translations from the two chatbots, the following prompt is written in the chat box of ChatGPT and Gemini (each chatbot at a time): “Translate the following text into English: ‘[*Italian text*]’”. The Italian source text is reported in Table 1 below (intricate words or expressions are underlined) (see also Giampieri 2023: 242).

<p>OGGETTO: <u>Messa in mora ed intimazione ad adempiere</u> Egr. <u>Dott.ssa XXXX</u>, sono l'<u>Avv. XXXX</u> e scrivo a nome e per conto della <u>XXXXX</u>, <u>società di persone</u> da Lei <u>assistita</u> nella Sua qualità di <u>dottore commercialista</u>. In data 10 agosto 2020, la sig. <u>XXXX</u> (<u>socia</u> della menzionata impresa) la contattava telefonicamente al fine di informarla tempestivamente del fatto che l'Agenzia delle Entrate aveva accreditato sul conto dell'impresa una somma pari ad € 9.562,00 in luogo della somma minima spettante <u>nel caso di specie</u> e pari ad € 2.000,00. Durante la telefonata intercorsa, Lei stessa ha garantito che si sarebbe attivata al fine di riparare l'errore da lei stessa commesso e individuare le modalità di restituzione del <u>contributo a fondo perduto</u> corrisposto in eccesso. <u>Tanto premesso</u>, con la presente sono ad <u>intimarla</u> formalmente di adempiere agli obblighi <u>a lei spettanti</u> entro e non oltre 7 giorni dal <u>ricevimento della presente</u> e, in particolare: (...) <u>Valga la presente</u> come <u>formale messa in mora</u>. Qualora non dovesse dare seguito alle richieste sopra esposte, entro i prossimi 7 giorni, le mie assistite si riservano di far valere i loro diritti nelle <u>sedì</u> opportune al fine di accertare la sua <u>responsabilità professionale</u>.</p>

Table 1: Italian source text

The text of Table 1 above presents a few linguistic challenges (underlined), which may not be properly addressed in automated translation. The next section sheds light on these aspects.

¹ The letter was kindly provided by Flaminia Leuti, Esq., owner of the law firm Studio Legale Leuti.

3 Analysis

3.1 A general overview of the target text

This section is aimed at bringing to the fore possible challenges in automated translation due to system- or language-specificity issues. To this end, it provides a general overview of the target text. A more in-depth analysis is reported in the next section. With reference to the text in Table 1, the expressions (*formale*) *messa in mora* and *società di persone* typify the Italian legal system (Giampieri 2020, 2024). The former refers to the act of charging default interests for an undue payment, whereas the latter describes a typical form of association of people who carry on business with a view to a profit.

The titles given to the addressee (i. e., *Dott.ssa*) and to the sender (i. e., *Avv.*) characterise the Italian language and have to be adequately rendered in English. In particular, *Dott.ssa* qualifies a female person holding a degree. It should not be rendered literally as “Dr”, but as “Ms”, since the English language does not make such a distinction.² The abbreviation *Avv.* identifies a lawyer. In the English language, the equivalent “Esq.” should follow (not precede) the name of the lawyer (Garner 2004: 1652).

The noun *socia* relates to the “members” of a company, corporation, or partnership, but this term can be translated in different ways on the basis of the company, corporation, or partnership they belong to (Giampieri 2020).³ The prepositional phrase *nel caso di specie* (lit. “in the case of this species”, actually meaning “this matter”) should not be translated literally, as well as the field-related expression *contributo a fondo perduto* (lit. “non-repayable contribution”). The latter is generally applied to financial contexts; however, in this letter, it signifies an amount of money unduly paid.

Other words or expressions which may pose some challenge are the formulae *tanto premesso* (lit. “(having) so much prefaced”) and *valga la presente* (lit. “this is”, actually meaning “consider this letter as”); the expression (*ricevimento*) *della presente* (lit. “(receipt) of this present” or “(receipt) of this letter”), and the polysemous words *sedi* (lit. “venues” or “seats”) and *responsabilità* (lit. “responsibility”). The word *sedi* refers to the suing of the addressee and it means “courts of law”, whereas *responsabilità* should be rendered as “liability” in legal contexts.

As can be seen, the language of the notice of default of Table 1 above is particularly nuanced and full of intricate expressions. An automated translation system may not render them satisfactorily, especially if terms are not disambiguated in context and (legal) comparative investigations are not carried out. The sections which follow analyse the text of Table 1 in detail and show the automated translations proposed by ChatGPT and Gemini, together with a post-edited version of the target text. Post-editing is undertaken by consulting English and Italian statutory documents and the case-law, as well as legal monolingual dictionaries.

² Sansoni (2024: s. v. *dottoressa*).

³ Hoepli (2024: s. v. *socio*).

To allow for better comprehension and the comparability of the target texts, the letter of Table 1 is divided into paragraphs reported in tables. The tables are divided into four columns: the first one reports the source text; the second one the translation proposed by ChatGPT; the third one the translation suggested by Gemini, and the fourth one a post-edited text. Alternative post-edited renderings, if any, are written in squared brackets.

3.2 Detailed analysis and assessment of the automated translations

Table 2 below shows the source text as well as the automated and post-edited translations of the subject line of the notice.

ST	ChatGPT	Gemini	Post-editing
<i>OGGETTO: Messa in mora ed intimazione ad adempiere</i>	Subject: <u>Formal Notice</u> and <u>Demand</u> to Fulfill	Subject: <u>Notice of default</u> and <u>demand</u> for performance	RE / Subject: (Formal) <u>Notice of default</u>

Table 2: Translations of the subject line

With regard to the translation of *oggetto*, the automated renderings “subject” are correct, although also “RE” could be opted for. The bilingual dictionary Hoepli, in fact, proposes both “subject” and “re”.⁴

As previously mentioned, the expression *messa in mora* may be difficult to find equivalents for as it is a typical institution (or legal principle) of the Italian legal system (rules 1221 and 1223 of the Italian Civil Code, Codice civile 2024). It describes the right to charge default interest in case of the non-payment of a debt. The Black's Law Dictionary defines “notice of default” as “a payment demand conditioned on the presentation of a document”. According to Giampieri (2024: 162), the verb *mettere in mora* can be rendered as “to charge interest”. By searching for “notice” together with “default” and “interest” in the Casemine database (2024), only results with “notice of default” are obtained (search query: "notice default interest"/3). Therefore, the rendering “notice of default” can be considered as satisfactory and complete, although it does not explicitly mention interests to charge. By searching for “demand to fulfil” in the Casemine (as proposed by ChatGPT), a few hits are retrieved. However, the verb “fulfil” is generally followed by an object (e. g., “a formal written demand to fulfil the agreement was served on the defendant”). Therefore, this expression might not be the most appropriate. The rendering “demand for performance” (suggested by Gemini) is also found in the Casemine; however, it is redundant in the context of the target text, given that “notice of default” already expresses a payment demand, as mentioned above. Therefore, the subject line could be translated as “Re: Notice of default” or “Subject: formal notice of default”. Table 3 below reports the first line of the notice.

⁴ Hoepli (2024: s. v. *oggetto*).

ST	ChatGPT	Gemini	Post-editing
<i>Egr. Dott.ssa XXXX, sono l'Avv. XXXX e scrivo a nome e per conto della XXXXX, società di persone da Lei assistita nella Sua qualità di dottore commercialista.</i>	Dear Dr. XXXX, I am <u>Attorney</u> XXXX, writing on behalf of XXXXX, a <u>partnership company</u> under your <u>assistance</u> in your capacity as a certified public accountant.	Dear Dr. XXXX, I am the <u>attorney</u> XXXX and I am writing on behalf of XXXXX, a <u>partnership company represented</u> by you in your capacity as a chartered accountant.	Dear Ms. XXXX, I am XXXX, <u>Esq.</u> , and I am writing in the name and on behalf of XXXXX, a <u>partnership</u> you <u>assist</u> as a chartered [registered] accountant.

Table 3: Translations of the first line of the notice

As previously mentioned, the title *Avv.* should be rendered as “Esq.” following the full name of the lawyer. Therefore, the two automated translations mentioning “attorney” before the name of the lawyer are incorrect.

With regard to *società di persone*, “partnership company” is a mistranslation, as the closest equivalent of a *società di persone* is a “partnership” (Proietti Consalvi 2018: 85; Giampieri 2020: 7). The Black's Law Dictionary defines a “partnership” as “a voluntary association of two or more persons who jointly own and carry on a business for profit.” It further distinguishes between various types of partnerships (e. g., “general partnerships” and “limited partnerships”), but there is no reference to a “partnership company”.

Finally, with regard to registered (or chartered; certified public) accountants, it should be pointed out that they “assist” their clients, as they do not necessarily (and always) “represent” them in their duties (as suggested by Gemini). Table 4 shows the next line of the notice.

ChatGPT proposes “Mrs” as a translation of *la sig.* The correct rendering is, by contrast, “Ms”, as Gemini suggests. The expression *socia della menzionata impresa* is partly rendered correctly by the two AI solutions. The word *socia*, in fact, is translated as “partner”.

The term *impresa*, in this case, could be translated literally as “business” (as proposed by ChatGPT) or (again) as “partnership” (actually meaning *società*). Therefore, the rendering “company” (as suggested by Gemini) is incorrect. The term *Agenzia delle Entrate* is rightly translated as “Revenue Agency”.⁵ However, as Gemini proposes, the modifier “Italian” should be added.

⁵ Agenzia delle Entrate (2024).

ST	ChatGPT	Gemini	Post-editing
<i>In data 10 agosto 2020, la sig. XXXX (<u>socia della menzionata impresa</u>) la contattava telefonicamente al fine di informarla tempestivamente del fatto che l'<u>Agenzia delle Entrate</u> aveva accreditato sul conto dell'impresa una somma pari ad € 9.562,00 in luogo della somma minima spettante <u>nel caso di specie</u> e pari ad € 2.000,00.</i>	On August 10, 2020, Mrs. XXXX (a partner in the mentioned business) contacted you by phone to promptly inform you that the Revenue Agency had credited an amount of € 9,562.00 to the company's account, instead of the minimum amount due <u>in this case</u> , which is € 2,000.00.	On August 10, 2020, Ms. XXXX (a partner in the aforementioned company) contacted you by phone to inform you promptly that the Italian Revenue Agency had credited the company's account with a sum of € 9,562.00 instead of the minimum amount due <u>in this case</u> , which is € 2,000.00.	On 10 th August 2020, Ms. XXXX (<u>partner of the aforementioned partnership [business]</u>) contacted you by telephone to promptly inform you that <u>the Italian Revenue Agency</u> had credited the partnership's account with an amount equal to € 9,562.00 instead of the minimum amount due <u>in the case in question</u> .

Table 4: Translations of the second line of the notice

As concerns the expression *nel caso di specie*, the Proz translators' forum (2024) suggests “in the case in question”,⁶ which generates several hits in the Casemine case-law database. This rendering could be considered as more specific than the general expression “in this case”, which appears in the two chatbot-driven outputs. Table 5 shows the third line of the notice.

ST	ChatGPT	Gemini	Post-editing
<i>Durante la telefonata intercorsa, <u>Lei stessa</u> ha garantito che si sarebbe attivata al fine di <u>riparare l'errore da lei stessa commesso</u> e individuare le modalità di restituzione del <u>contributo a fondo perduto corrisposto in eccesso</u>.</i>	During the phone call that took place, <u>you yourself</u> assured that you would take steps to <u>rectify the error</u> you committed and identify the procedures for the return of the <u>excess non-repayable grant funds</u> .	During the telephone call, <u>you yourself</u> guaranteed that you would take action to <u>correct the error</u> you made and identify the methods of returning the <u>excess grant contribution</u> .	During the phone call, <u>you</u> guaranteed that you would take action to <u>make amends</u> and return <u>the amount of money unduly paid [the amount of money paid in excess]</u> .

Table 5: Translations of the third line of the notice

⁶ Proz (2024: s. v. *nel caso di specie*).

In Table 5 above, it is noticeable that *lei stessa* is translated literally (and awkwardly) by the two chatbots (i. e., “you yourself”). The correct translation, in fact, should be “you”. The verb phrase *riparare l'errore* is also translated literally (i. e., “correct the error” and “rectify the error”). As the notice refers to an amount of money paid in excess, the more general expression “make amends” seems more adequate.

In the last part of the line, the noun phrase *contributo a fondo perduto* should not be considered as a “non-repayable” or “excess” “fund” or “contribution” (as suggested by the two AI solutions). This expression actually refers to the amount of money unduly paid (or paid in excess); hence, it should be plainly expressed as such. For example, it could be rendered as “the amount of money unduly paid” or “the amount of money paid in excess”. Table 6 addresses the fourth line of the notice.

ST	ChatGPT	Gemini	Post-editing
<i>Tanto premesso, con la presente sono ad intimarla formalmente di adempiere agli obblighi a lei spettanti entro e non oltre 7 giorni dal ricevimento della presente e, in particolare:</i>	<u>Having stated the above</u> , I hereby formally <u>demand</u> that you fulfill <u>your</u> obligations within 7 days from the receipt <u>of this letter</u> , and specifically:	<u>Having said that</u> , with this letter I am formally <u>notifying</u> you to fulfill <u>your</u> obligations within 7 days of receipt <u>of this letter</u> , and in particular:	<u>Having stated the above</u> , I hereby <u>serve you this notice</u> to fulfill <u>your</u> obligations within 7 days from the receipt <u>thereof [of this notice]</u> . In particular:

Table 6: Translations of the fourth line of the notice

Proposing “having said that” to render *tanto premesso* (see Gemini's translation) is partly wrong because nobody “said” anything. This means that expressions commonly used in the written form should be opted for. In this regard, ChatGPT suggests the formula “having stated the above”, which can be acceptable. The Casemine portal, in fact, produces a few occurrences of this phrase.

The verb *intimare* means to formally demand or urge. The translations proposed by both chatbots are correct, although “notify” (suggested by Gemini) is slightly imprecise. In legal language, in fact, a notice is “served” upon someone, not “notified”. By searching for “notify a notice” in the Casemine, for instance, no results are obtained, whereas by querying “serve a notice”, many occurrences are retrieved. As a matter of fact, the verb phrase “serve a notice of default” produces a few hits.

The noun phrase (*obblighi*) *a lei spettanti* is addressed satisfactorily by both chatbots, which simplify the expression by proposing “your (obligations)”. The Casemine database, in fact, produces more hits of “his obligations”, “your obligations” and “their obligations” than “obligations upon him”, “obligations upon you” and “obligations upon them”, respectively.

Finally, the noun phrase *ricevimento della presente* is rendered as “receipt of this letter” by both chatbots. However, as previously mentioned, the “letter” in question is

actually a “notice”, which assumes a specific value and meaning in legal terms. Therefore, the source phrase should be translated as “receipt of this notice” or “receipt thereof”. Table 7 addresses the fifth and last line of the notice.

ST	ChatGPT	Gemini	Post-editing
<p><u>Valga la presente come formale messa in mora.</u> Qualora non dovesse dare seguito alle richieste sopra esposte, entro i prossimi 7 giorni, le mie assistite si riservano di far valere i loro diritti nelle sedi opportune al fine di accertare la sua responsabilità professionale.</p>	<p><u>Let this serve as a formal notice of default.</u> In the event that you do not comply with the above requests within the next 7 days, my clients reserve the right to assert their rights through appropriate <u>channels</u> in order to ascertain your <u>professional responsibility</u>.</p>	<p><u>This letter serves as a formal notice of default.</u> If you do not comply with the requests set out above within the next 7 days, my clients reserve the right to assert their rights in the appropriate <u>venues</u> in order to establish your <u>professional liability</u>.</p>	<p><u>This is a formal notice of default.</u> If you do not comply within the next 7 days, my clients reserve the right to assert [vindicate, pursue, enforce] their rights in <u>court</u> [in court proceedings] to establish [ascertain] your <u>liability</u>.</p>

Table 7: Translations of the fifth line of the notice

The phrase *valga la presente come formale messa in mora* is rendered as “let this serve as a formal notice” by ChatGPT and as “this letter serves as a formal notice of default” by Gemini. The expression “let this letter serves as” is a mistranslation of the source text and is not a legal formula. The Casemine, for example, generates no occurrences of such a phrase and only two of “serve(s) as a formal notice”. By contrast, the translation produced by Gemini is formal and appropriate, although the document in question is a “notice”, as already clarified. Therefore, the post-edited target phrase could be “this is a formal notice of default”.

In the source text, the word *sedi* (lit. “seats”) should not be considered literally, as previously mentioned. This term, in fact, refers to the courts of law or forums where a party could be taken to, if s/he does not comply with the lawyer’s demand. Therefore, the words “channels” (proposed by ChatGPT) and “venues” (suggested by Gemini) do not seem appropriate. By searching for the word “rights” together with “assert” and “venues” (or “channels”) in the Casemine, no results are obtained (search queries: “assert rights venues”/3 and “assert rights channels”/3). By querying “rights”, “assert” and “court” in the Casemine, a few hits are obtained with phrases such as “assert his rights before this court” and “assert his rights in this court”. Additionally, by searching for “rights in court”, the following phrases are retrieved: “vindicate his rights in court proceedings”, “pursuing her civil rights in court”, “enforce their rights in court”, and “assert such rights in court”. As can be seen, there are several examples of “court” which render the source phrase *far valere i loro diritti nelle sedi opportune*.

The term *responsabilità professionale* can be expressed by the term “liability”. The Black’s Law Dictionary, in fact, defines “liability” as “the quality or state of being legally obligated or accountable”. Therefore, “liability” (generated by Gemini) should be preferred over “responsibility” (produced by ChatGPT). Lastly, as regards the verb preceding “liability”, the Casemine database shows more hits of “establish” (suggested by Gemini) than “ascertain” (proposed by ChatGPT).

4 Discussion

As can be seen from the analyses carried out above, the translations proposed by the two AI solutions are sometimes inaccurate. In some circumstances, in fact, they need improvements and adjustments. The rendering of *società di persone* with the noun phrases “partnership company”, for example, is misleading, as there is no “partnership company” at common law. The same can be said of the literal translation of *contributo a fondo perduto* which, in the context of the notice, refers to an amount of money unduly paid. Also, the formula *valga la presente* is mistranslated as “let this serve as”, which is both a translation infelicity and a non-existent legal formula. Finally, rendering *sedes* as “channels” or “venues” can be deceptive, as *sedes* relates to the courts of law where the case could be brought to.

Minor inaccuracies are noticed in some of the translation options produced by either ChatGPT or Gemini. Examples in this regard are using the title “attorney” instead of “Esq.”, or translating *riparare all'errore* literally (i. e., “rectify the error” and “correct the error”), whereas, in the context, this expression means “make amends”. Other inaccuracies are the following: rendering the formula *tanto premesso* with the expression “having said that”, which is unrelated to the written form of the notice; referring to the document as a “letter” rather than as a “(formal) notice”; using the verb “notify” instead of the more formal and field-specific “serve (this notice)”, and mentioning “responsibility” instead of the more field-specific term “liability”.

At a first glance, the automated translations do not seem fallacious. By reading them more carefully, however, it becomes apparent that human intervention is necessary. Therefore, informed and careful post-editing must be envisaged. In this regard, trustworthy resources such as legal dictionaries, statutory documents, and the case-law are to be accounted for.

Thanks to the analyses carried out above, this paper contributes to explaining how a translator's initial assessment of a given text can be supported and integrated by targeted legal and language investigations. These can be carried out in case-law databases, statutory documents, professional translator's forums, and legal dictionaries.

5 Conclusions

This paper was aimed at exploring the accuracy and reliability of the automated translations of legal documents performed by two different AI solutions. To this aim, two chatbots, namely ChatGPT and Gemini, were taken into consideration. The results confirm literature findings (Escribe/Mitkov 2023; Giampieri 2023), i. e., that AI-generated output must be supervised and, in particular, post-edited. In this regard, an array of reliable language resources was considered, such as statutory documents, the case-law, legal monolingual dictionaries and, occasionally, experts' forums.

The paper findings bring to the fore a series of shortcomings, ranging from mistranslated words and formulae to minor inaccuracies. All such issues, however, did not hinder the comprehension of the target text, but many sounded awkward, infrequent or field-unrelated to an informed target readership. The paper also reveals that AI-generated inaccuracies tend to be subtle; hence, deep knowledge of the subject-matter and of the source terminology is an unyielding prerequisite.

The limits of this paper lie in the fact that it only analysed one legal document. A larger number of legal texts may have produced results which could have been generalised to other field-related documents or, perhaps, applied to legal language as a whole.

Future research could investigate whether AI-driven solutions have made further steps forward and, hopefully, have become more tailored to the requirements of legal language and/or the legal field.

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trans-kom

ISSN 1867-4844

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