

CAN GenAI IDENTIFY AND DISAMBIGUATE LEGAL POLYSEMOUS TERMINOLOGY? A CRITICAL ANALYSIS IN LIGHT OF ISO 24495-2:2025 ON LEGAL COMMUNICATION

Patrizia Giampieri*

SOMMARIO: 1.- Introduction; 1.1.- Polysemy in legal language; 1.2.- The use of GenAI in the legal field; 2.- Aim of the paper and research questions; 3.- Methodology; 4.- Analysis; 4.1- Analysis of the first text; 4.2- Analysis of the second text; 5.- Discussion; 6.- Conclusions.

Abstract:

The huge strides forward made by GenAI has prompted the scientific community to pose compelling questions about its reliability and accuracy, especially in high-stakes environments such as the legal one. Polysemy is one of the features characterising legal language that, inevitably, gives rise to ambiguity. In light of the ISO 24495-2:2025 standard on plain language and legal communication, there has been an increasing demand for the easification of the language of the law. In view of the efforts that legal drafters make to comply with such regulations, this paper wishes to explore the extent to which GenAI can support humans in the identification and disambiguation of polysemy in legal discourse. To this aim, two legal texts of approximately 60-70 words each are focused on. The first one is extracted from the UK House of Lords decisions, whereas the latter is sourced from English online terms of service. Six chatbots are considered for the cases under scrutiny, amongst which two are field-related. The texts are inputted into the chatbot prompt boxes, and the GenAI tools are prompted to pinpoint polysemous words and disambiguate (i.e., explain) them. The findings reveal scattered responses, sometimes inconsistent with one another, and a lack of coherent approaches. Some chatbots label terms with different grammatical functions (e.g., verbs/nouns) as polysemic, whereas others hallucinate. Therefore, the paper indicates that, at the time being, intelligent machines cannot replace humans' discernment and capacity to identify and disambiguate legal language subtleties.

Keywords: legal polysemy; legal chatbots; GenAI; legal language; ambiguity; legal communication

Riassunto:

I progressi compiuti dall'IA generativa (GenAI) hanno incentivato lo studio della sua affidabilità e accuratezza, soprattutto in contesti ad alto rischio come quello legale. Alla luce delle norme ISO 24495-2:2025 concernenti l'uso di un linguaggio chiaro nella

comunicazione giuridica, si è progressivamente rafforzata l'esigenza di semplificare il linguaggio del diritto. Allo stesso tempo, tuttavia, il linguaggio giuridico è fortemente caratterizzato da ambiguità e termini polisemantici. Il presente contributo analizza la capacità della GenAI di identificare e disambiguare termini polisemici del discorso giuridico. A tal fine, la presente analisi si focalizza su due testi giuridici di circa 60-70 parole ciascuno. Il primo è tratto dalle decisioni della House of Lords del Regno Unito, mentre il secondo proviene da termini e condizioni di servizio in lingua inglese disponibili online. A tal fine, sei chatbot sono impiegate, due delle quali giuridiche. I testi presi in considerazione sono inseriti nelle chatbot, a cui è richiesto di individuare le parole polisemiche e disambiguarle (ovverossia, spiegarle). I risultati evidenziano risposte frammentarie, talvolta incoerenti tra loro, e l'assenza di approcci congrui. Alcune chatbot classificano come polisemici termini aventi funzioni grammaticali diverse (ad es., verbi/sostantivi), mentre altre danno luogo ad allucinazioni. Il contributo indica pertanto che, allo stato attuale, la IA non può sostituire la capacità umana di discernere, identificare e disambiguare le peculiarità linguistiche del linguaggio giuridico.

Parole chiave: polisemia giuridica; chatbot giuridiche; GenAI; linguaggio giuridico; ambiguità; comunicazione giuridica

1.- Introduction

1.1.- Polysemy in legal language

Polysemy is a linguistic phenomenon arising from the co-existence of various senses associated with the same word¹. Amongst others, legal language is deemed opaque due to its polysemic character. As a matter of fact, Mellinkoff posits that legal discourse is characterised by «a frequent use of common words with uncommon meanings»². According to Hemel, legal polysemy is a natural linguistic and conceptual feature of legal language ensuing from the common law system³. Indeed, in Hemel's view, imbuing words with different significances can be the result of history-driven theoretical developments and, hence, deliberate choices.

Mattila contends that legal language embraces several sub-lexicons, ranging from terms coined by legislators to specific word meanings conveyed by judges and lawyers⁴. This implies that legal terminology characterises various legal genres and sub-domains. For these reasons, Bajčić frames and discusses interdisciplinarity as a phenomenon whereby

*Professore Associato di Lingua, Linguistica e Traduzione Inglese nell'Università degli Studi di Perugia.

¹ I.L. FALKUM - A. VICENTE, *Polysemy: Current Perspectives and Approaches*, in *Lingua* 157 (2015), pp. 1-16, 1.

² D. MELLINKOFF, *The Language of the Law*. Little, Brown and Co., 1963, p. 11.

³ D. J. HEMEL, *Polysemy and the Law*, in *Vanderbilt Law Review* 76.4 (2023), pp. 1067–1156.
[HTTP://dx.doi.org/10.2139/ssrn.4264800](http://dx.doi.org/10.2139/ssrn.4264800)

⁴ H. E. S. MATTILA, *Comparative Legal Linguistics*. Ashgate Publishing, 2006, p. 4.

the same legal term refers to and is applied in different legal settings⁵. In this way, legal terminology acquires nuanced senses⁶. In addition to single words, Chromá finds that legal phraseology can be imbued with varied meanings⁷. Therefore, interpretation efforts must be made to ascertain legal significance in context at both word and multi-word level.

Multi-word expressions, in fact, pose interpretation and disambiguation challenges⁸. Legal multi-words or «complex prepositions»⁹ are fixed formulae that are universally accepted and employed¹⁰, thereby ensuring the validity of the actions envisaged in a legal document¹¹. Some scholars posit that they are used «for the sake of precision»¹², thus rendering them semantically charged¹³. Nonetheless, the rigidity and crystallisation of several legal multi-words make their interpretation arduous, as their significance cannot be inferred by interpreting the single components. Hence, their application and disambiguation are often dependent on legal conventions and/or contextual elements (see the various examples provided by Giampieri¹⁴).

Jacometti and Pozzo clarify that polysemy is a form of ambiguity that should be distinguished from vagueness¹⁵. Namely, polysemy implies selecting among different senses, whereas vagueness (or indeterminacy) requires the identification of significance boundaries. In this respect, Cornu¹⁶ describes legal terminological ambiguity by distinguishing between internal and external polysemy. The former is also termed intralegal polysemy and is characterised by single terms conveying two or more distinct meanings. The latter includes words with both legal and extra-legal senses. According to Cornu, vocabulary assuming extra-legal significance belongs to general terminology that has been assigned a specific legal sense. Several scholars claim that both external and intralegal polysemy are inevitable in the language of the law^{17 18}. Cornu postulates

⁵ M. BAJČIĆ, *New Insights into the Semantics of Legal Concepts and the Legal Dictionary*, Amsterdam-Philadelphia 2017.

⁶ M. BAJČIĆ - D. GOLENKO, *Applying Large Language Models in Legal Translation: The State-of-the-Art*, in *International Journal of Language & Law* 13 (2024), pp. 171-196.

⁷ M. CHROMÁ, *Synonymy and Polysemy in Legal Terminology and Their Applications to Bilingual and Bijural Translation*, in *Research in Language* 9.1 (2011), pp. 31-50.

⁸ P. GIAMPIERI, *Legal Formulae: Exploring Legal Multi-Words in English, Italian and French*. London 2025.

⁹ A. JOHNSON - M. COULTHARD, *Introduction*, in M. Coulthard - A. Johnson (a cura di), *The Routledge Handbook of Forensic Linguistics*, London-New York 2010, pp. 1-16, 10.

¹⁰ M. GOTTI, *Text and Genre*, in P. Tiersma - L.M. Solan (a cura di), *The Oxford Handbook of Language and Law*, Oxford 2012, pp. 52-66.

¹¹ M. GOTTI, *Text and Genre*, cit.

¹² I. KOSKENNIEMI, *Repetitive Word-Pairs in Old and Early Middle English Prose*, Turku 1968, p. 72.

¹³ A. JOHNSON - M. COULTHARD, *Introduction*, cit., p. 11.

¹⁴ P. GIAMPIERI, *Legal Formulae*, 2025, cit.

¹⁵ V. JACOMETTI - B. POZZO, *Traduttologia e linguaggio giuridico*, Milano 2018.

¹⁶ G. CORNU, *Linguistique juridique*, Paris 2005.

¹⁷ G. CORNU, *Linguistique juridique*, cit.

that external polysemy encompasses words such as “law”, “justice”, and “government”. Petru¹⁸, conversely, considers “law” as an element of intralegal polysemy, since it is imbued with several meanings that are attested in legal dictionaries.

Homonymy is another linguistic trait characterising legal discourse. According to this phenomenon, two or more senses are conveyed by the same form. Tiersma²⁰ postulates that polysemy and homonymy are relevant in the legal sphere because they relate to word meanings that are rather different from general or common significance. Amongst others, the author posits that homonymous terms may seem to express an ordinary meaning, although they are highly specific and legally oriented. In this respect, Tiersma accounts for various homonymous terms that can engender confusion, such as “party”, “notice”, and “(real/personal) property”.

The ISO 24495-2:2025 standard²¹ on plain language and legal communication establishes that legal texts need to «define or explain words and phrases that can be unfamiliar or confusing to readers». Indeed, the standard sets forth to «choose familiar, legally accurate words»²². More precisely, it requires legal communication to be relevant, findable, understandable, and usable for the intended audience. ISO 24495-2:2025 inevitably poses questions and challenges about the ways in which polysemous terms are to be employed (and explained) by legislators, lawyers, and judges. The consequences of such regulations are manifold and far-reaching. Not only are legal drafters required to render legal language more accessible, but they also have to ensure that the structure and layout of legal documents are easily understandable. This empowers laypeople with the knowledge they need to make informed decisions, and to analyse and grasp the content of legal texts. Only in this way can they participate more actively in civil society.

In an effort to change and adjust legal discourse to such rules, it is compelling to explore whether and to what extent intelligent machines can help humans shape legal language and make it more intelligible. For this reason, this paper explores whether GenAI is capable of disambiguating (and explaining) legal polysemous terms. If this is the case, humans can be assisted by machines in the drafting, restyling, and easification²³ of legal texts.

¹⁸ I. PETRU, *La polysémie: Élément majeur de la terminologie juridique selon G. Cornu. Un exemple récent du traitement législatif de ce phénomène en droit tchèque*, in *Écho des études romanes* 9.2 (2013), pp. 47-57.

¹⁹ I. PETRU, *La polysémie*, cit.

²⁰ P.M. TIERSMA, *Legal Language*, Chicago 1999, p. 111.

²¹ See <https://store.uni.com/iso-24495-2-2025>, p. 6.

²² ISO 24495-2:2025, cit.

²³ C. WILLIAMS, *The Impact of Plain Language on Legal English in the United Kingdom*, London-New York 2023, p. 18.

1.2.- The use of GenAI in the legal field

At the dawn of the 2020s, Brooks et al.²⁴ found that AI had the potential to perform repetitive tasks easily and accurately, thereby allowing lawyers to save time and dedicate efforts to quality and relationship-enhancing activities.

In 2025, Thomson Reuters²⁵ surveyed professional service businesses in the USA, the UK, Canada, Australia, Brazil, New Zealand, and Mexico. The investigation aimed at exploring and quantifying the use of AI by professionals. Amongst others, law firms were scrutinised and declared to use GenAI to perform a number of tasks, such as document review and specific legal searches. Indeed, intelligent machines are capable of revising contracts and pointing to weaknesses or shortcomings; in this way, they can swiftly draft and adjust legal documents²⁶. Therefore, compliance review and due diligence are tasks that are easily automated. Nonetheless, AI-driven tools are not suitable for interpreting contract nuanced language. Moreover, they may favour an unauthorised practice of law²⁷. Namely, users could resort to chatbots to receive legal advice without consulting experts. This implies that if machines produce biased responses, users may not be able to detect and adjust them. In the same manner, they would not be skilled enough to grasp the nuances and intricacies of legal cases.

Leslie et al.²⁸ provide other instances of AI-generated shortcomings by arguing that discrimination occurs when stereotyping biases become entrenched in the design and development of AI systems. Additionally, discriminatory outputs are likely to be generated when biased information becomes part of the input data in AI training models. As is known, intelligent machines operate via mathematical functions and algorithms developed from training data. Hence, their outputs are grounded in the dataset inputted. This accentuates the inability of smart technologies to formulate arguments and derive information by relying on linguistic or pragmalinguistic stimuli and functions. Namely, AI calculates the statistical probability of a word following another word. This implies that AI-generated language is not rooted in human-like discernment of linguistic, paralinguistic, context-related, and cultural elements. Therefore, it can be asserted that intelligent machines are devoid of anthropomorphic acumen and sagacity.

²⁴ C. BROOKS - C. GHERHES - T. VORLEY, *Artificial Intelligence in the Legal Sector: Pressures and Challenges of Transformation*, in *Cambridge Journal of Regions, Economy and Society* 13.1 (2020), pp. 135-152.

²⁵ THOMSON REUTERS, *2025 Generative AI in Professional Services Report*, Toronto 2025.

²⁶ D. SCHWARCZ - H.J. CHOI, *AI Tools for Lawyers: A Practical Guide*, in *Minnesota Law Review Headnotes* 1 (2023), pp. 1-39.

²⁷ THOMSON REUTERS, *2025 Generative AI in Professional Services Report*, cit.

²⁸ D. LESLIE - C. BURR - M. AITKEN - J. COWLS - M. KATELL - M. BRIGGS, *Artificial Intelligence, Human Rights, Democracy, and the Rule of Law: A Primer*, Strasbourg 2021.

2.- *Aim of the paper and research questions*

Despite the several literature-driven studies on legal polysemy and AI (in)felicitous applications in the legal sphere, there is currently a gap in the literature regarding the analysis and disambiguation of legal polysemous terms by smart technologies. This paper is aimed at bridging this gap by examining the ability of GenAI to pinpoint and disambiguate (or easify) polysemous terms in legal discourse. For this purpose, short texts are extracted from judicial decisions and online terms of service. Such texts are inputted in various chatbots, which are prompted to identify and explain polysemous words, if detected. By doing so, it is possible to ascertain the extent to which chatbots are able to partly meet the plain language requirements envisaged in the ISO 24495-2:2025 regulations.

The research questions that this paper wishes to address are the following: 1) Can GenAI identify and disambiguate polysemous terms in short legal passages? 2) Is AI-powered disambiguation satisfactory in light of the ISO 24495-2:2025 standard?

3.- *Methodology*

To analyse the capability of GenAI to pinpoint and disambiguate legal polysemy, two short legal texts are considered. The first one is sourced from the CoCELD²⁹, a Corpus of Contemporary English Legal Decisions. The second one is extracted from the ToS EN³⁰, a corpus of online terms of web hosting services. The former dataset features the case law of the United Kingdom and the Commonwealth from 1950 to 2021. It is composed of two sub-sections: one containing the Privy Council decisions, and the other one featuring the decisions by the House of Lords and Supreme Court. The text considered for the purposes of this paper was selected from the House of Lords and UK Supreme Court sub-corpus. In particular, it is concerned with the case *Wheeler v Mercer [1956] UKHL 5* (House of Lords), quoting the *Landlord and Tenant Act 1954*. The second text was sourced from a corpus of terms of web hosting services drawn up according to the laws of England and Wales and collected in 2021³¹.

Both texts are approximately 60-70 words long. Each text is entered in a chatbot prompt box asking to find and disambiguate polysemous words, if any. The chatbots under scrutiny are the following: ChatLaw (ChatLaw2-MoE version), ChatGPT (GPT-5 version), Copilot (version 1.0), FreeLaw Chat (available in its beta version), Gemini (Gemini 2.5 version), and Grok (Grok 4 version)³². ChatLaw and FreeLaw Chat are

²⁹ P. RODRÍGUEZ-PUENTE - D. HERNÁNDEZ-COALLA, *Corpus of Contemporary English Legal Decisions, 1950-2021 (CoCELD)*, Oviedo 2022.

³⁰ P. GIAMPIERI, *Corpus-Based Translation of Private Legal Documents*. Amsterdam, 2024.

³¹ P. GIAMPIERI, *Corpus-Based Translation*, cit.

³² CHATGPT: <https://chatgpt.com/>

legal chatbots (meaning that they cater for legal firms' needs). The former is developed by Colit AI, and the latter is a spin-off of Lawyer.com Inc. The other GenAI tools are general-purpose chatbots: ChatGPT is designed by OpenAI; Copilot is implemented by Microsoft; Gemini is offered by Google, and Grok is created by xAI.

For the purposes of this analysis, ChatLaw, ChatGPT, and Copilot are prompted to scrutinise the first text, whereas FreeLaw Chat, Gemini, and Grok perform the analysis of the second text. In this way, both groups of GenAI tools include at least a field-related chatbot (namely, ChatLaw for the first text, and FreeLaw Chat for the second one). The objective of this study is not to compare chatbot performance for the same tasks, but to investigate how specific systems behave in different contexts. For these reasons, two different groups of GenAI systems are assigned different tasks. Additionally, for reasons of space, it would not be possible to examine the performance of the six chatbots for the two different tasks.

The following prompt is inputted in each prompt box:

Prompt: Can you identify polysemous terms in the following text and disambiguate them (that means: explain their meaning in context)? “[*text*]”. Consider the standards of ISO 24495-2:2025. Refer to English law, if necessary.

The analysis presented in this paper was conducted in October 2025, and no specific settings were configured during the interaction with the chatbots.

4.- Analysis

This section reports and discusses the legal texts inputted in the chatbots and the GenAI-driven outputs.

4.1.- Analysis of the first text

Table 1 displays the first text, sourced from CoCELD. The text contains references to a tenancy agreement. Polysemous words are underlined and explained below the table.

Table 1. First text extracted from CoCELD

Section 29 must be noticed. It <u>provides</u> that, subject to the <u>provisions</u> of the <u>Act</u>, on an <u>application</u> under section 24 (1) of the Act for a new tenancy the <u>Court</u> shall make an <u>order</u> for the <u>grant</u> of a tenancy comprising such <u>property</u>, at such rent and on such other <u>terms</u> as are thereafter <u>provided</u>.
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As can be noticed, Table 1 showcases polysemous terminology. The word “section”

CHATLAW: <https://www.chatlaw.us/>

COPILOT: <https://copilot.microsoft.com/>

FREELAW CHAT: <https://freelawchat.ai/chat.php>

GROK: <https://grok.com/>

refers to a specific article of an act, or statutory document (i.e., a law)³³. Conversely, in general language, it identifies one of the parts that something is divided into³⁴. Likewise, “provides”, “provided” and “provision” are imbued with diverse meanings both within and outside the legal sphere³⁵. In the first instance, “provides” is a synonym of “establishes” or “rules” (as a statutory document does). The verb “provided”, conversely, means “indicated” in the context of the text of Table 1. Finally, the term “provisions” qualifies specific legal “dispositions”. Therefore, the lemma “provide” denotes an intralegal and interdisciplinary polysemic character. The word “Act” is notably polysemic³⁶, given that it refers to a “law” or “statute”, rather than an “action” (as a general word sense requires). The term “application” assumes a specific legal connotation in the context of Table 1, as it indicates an application or petition submitted to a court for the grant of a new tenancy. Scholars also consider “Court” as polysemic, because it may refer to a judge, a legislative assembly, or the building where judges convene³⁷. Evidently, “order” is polysemous because it identifies a court official proclamation³⁸, whereas, in standard language, it is something that must be abided by³⁹. The noun “grant” is a “concession” in the text of Table 1⁴⁰. In general language, by contrast, a “grant” is an amount of money provided for a special purpose⁴¹. The word “property” denotes interdisciplinarity because along with “thing”, it connotes a right, a right of ownership, and residential premises^{42 43}. Finally, “terms” is highly polysemic because it may relate to a duration, a condition, or a contractual stipulation^{44 45 46}.

It is now interesting to verify to what extent GenAI identifies and addresses such polysemous terminology. Table 2 lists the polysemic terms described above and the ones identified and clarified by GenAI. For this purpose, the following chatbots are considered: ChatLaw, ChatGPT, and Copilot. Table 2 lists the polysemic terms as they

³³ P. GIAMPIERI, *Legal English & Contract Law: Contrattualistica Comparata*. Milan, 2021, p. 74.

³⁴ CAMBRIDGE ONLINE DICTIONARY: <https://dictionary.cambridge.org/it/dizionario/inglese/section>.

³⁵ P. GIAMPIERI, *Legal English & Contract Law*, cit., p. 28.

³⁶ M. CHROMÁ, *Synonymy and Polysemy in Legal Terminology*, cit., p. 45.

³⁷ B.A. GARNER, *Black's Law Dictionary*, VIII ed., St. Paul 2004, p. 1068.

³⁸ B.A. GARNER, *Black's Law Dictionary*, cit., p. 3477.

³⁹ CAMBRIDGE ONLINE DICTIONARY: <https://dictionary.cambridge.org/it/dizionario/inglese/order>.

⁴⁰ B.A. GARNER, *Black's Law Dictionary*, cit., p. 2055.

⁴¹ CAMBRIDGE ONLINE DICTIONARY: <https://dictionary.cambridge.org/it/dizionario/inglese/grant>.

⁴² B.A. GARNER, *Black's Law Dictionary*, cit., p. 3841.

⁴³ M. CHROMÁ, *Synonymy and Polysemy in a Bilingual Law Dictionary*, in E. Corino - C. Marelllo - C. Onesti (a cura di), *Proceedings of the 12th EURALEX International Congress*, Alessandria 2006, pp. 735-741.

⁴⁴ B.A. GARNER, *Black's Law Dictionary*, cit., p. 4596.

⁴⁵ M. CHROMÁ, *Synonymy and Polysemy in Legal Terminology*, cit.

⁴⁶ P. GIAMPIERI, *Corpus-Based Translation*, cit.

appear in the text of Table 1. If a chatbot considers such words to be ambiguous, a “Yes” is written in the corresponding table cell along with an explanation (or disambiguation) offered by the GenAI tool. Conversely, a “No” indicates the absence of a response, thereby informing that GenAI does not qualify such a term as polysemous.

Table 2. Polysemous words identified by the GenAI tools

Polysemous word	ChatLaw	ChatGPT	Copilot
Section	Yes It can mean a part of a document, a part of a statute, or a physical division. In the text, it refers to a numbered provision within a statute (an Act of Parliament).	Yes Its general meaning is “a part or portion of something”, whereas its legal significance is “a numbered clause or subdivision in a statute or legal document”.	Yes It is a part of a legal document or a physical division of space or property. In the text, it is a numbered clause within the <i>Landlord and Tenant Act 1954</i> (i.e., Section 29).
Provides, provided	No	No	No
Provisions	No	No	No
Act	Yes It can mean an action taken, or a statute passed by a legislative body. In the text, it refers to a specific piece of legislation enacted by the UK Parliament.	No	Yes It refers to the process of doing something, or a theatrical performance. In the text, it is a statute: the <i>Landlord and Tenant Act 1954</i> .
Application	Yes It can relate to the act of putting something to use, or a formal request to an authority. In the text, it means a formal request made to a court under the	Yes It is the act of putting something to use or requesting something. In the text, it is a formal request to a court or tribunal for a legal order or ruling.	Yes It describes a formal request; a software program, and the act of applying something In the text, it is a formal legal request made to the Court

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	relevant statutory provision.		under Section 24(1) for a new tenancy.
Court	Yes. It can indicate a judicial body, a royal residence, or an enclosed area. In the text, it denotes a judicial body (a tribunal or judge) with the authority to decide legal matters.	No	Yes. It can be a royal residence, or an enclosed area (e.g., tennis court). In the text, it is a judicial body empowered to decide tenancy disputes under the Act.
Order	Yes It is a command, a sequence, or a judicial decision. In the text, it refers to a formal decision or directive issued by a court.	No	Yes It is a command or directive, a sequence, or a religious group. In the text, it denotes a legal directive issued by the Court granting a new tenancy.
Grant	No	Yes It means “to give or bestow” in general language, whereas in the legal context it signifies “the legal creation and conferral of a new tenancy agreement by the landlord, as ordered by the court”	Yes It may refer to a financial award, or a legal conveyance. In the text, it refers to a legal bestowal of tenancy rights from landlord to tenant.
Property	No	No	Yes

			It is a physical asset, a legal right, or a characteristic or trait. In the text, it refers to the physical premises subject to the tenancy.
Terms	Yes They are words or expressions, or conditions and stipulations in an agreement. In the text, they are the conditions or stipulations (such as duration, obligations, etc.) of the tenancy agreement.	Yes They identify conditions or stipulations. In the text, they indicate the specific conditions of the new tenancy that the court will determine.	Yes They can relate to the conditions of an agreement, words or expressions, or periods of time. In the text, they identify the contractual conditions of the new tenancy (e.g., duration, obligations).

At first glance, it is interesting to notice that no chatbots identify “provides/provided” and “provisions” as ambiguous. Additionally, the word “property” is not disambiguated by ChatGPT and Copilot. Among the various GenAI tools considered, ChatGPT is the one identifying fewer polysemous terms, whereas Copilot performs the best.

By analysing the chatbot responses in more detail, ChatLaw classifies the following terms as polysemous: “section”, “Act”, “application”, “Court”, “order”, and “terms”; hence, it excludes “grant” and “property” from the set of ambiguous terms, along with “provides/provided” and “provisions”, as already mentioned.

ChatGPT, conversely, does not identify “provide”, “provision”, “Act”, “Court” and “order” as polysemantic. Additionally, ChatGPT explains the general meaning of “grant” by considering it a verb, whereas it functions as a noun in the context under scrutiny. This means that the chatbot does not take into account the different grammatical functions of “grant” (noun) and “to grant” (verb) when addressing polysemy. Such an approach is erroneous, as polysemy should be identified and assessed on the basis of words with the same grammatical class⁴⁷. Furthermore,

⁴⁷ P. GIAMPIERI, *Legal Polysemy: Exploring polysemous legal terminology in English and Italian*. London forthcoming.

ChatGPT adds “thereinafter” to the list of ambiguous terms (not shown in Table 2) by stating that it signifies “as provided later in the Act”. According to the chatbot response, such an adverbial element expresses what the Act later describes and how the rent and contract terms should be determined. Nonetheless, this explanation does not entail ambiguity, as both the standard meaning of “thereinafter” (i.e., “later in this document”)⁴⁸ and the one intended in the text are the same.

As mentioned, Copilot overlooks “provides/provided” and “provisions”. Additionally, it labels “rent” as polysemous, defining it as “payment for use of property” (thus identifying it as a noun, as in the case of the text of Table 1) and “to tear apart” (where it functions as a verb). It is evident that this chatbot labels as polysemic a word with different syntactic functions. For the reasons stated above, “rent” cannot be considered polysemous.

The results reported in Table 2 highlight that the standards of clarity and disambiguation aimed at in ISO 24495-2:2025 can hardly be achieved if users resort to GenAI-based assistance. Indeed, intelligent machines are not always capable of interpreting terms on the basis of their word class and may provide different and inconsistent responses.

4.2.- Analysis of the second text

Table 3 illustrates the second text sourced from ToS EN dealing with the agreement of terms of service. Polysemous words are underlined and explained.

Table 3. First text extracted from ToS EN

In agreeing to the provision of any services by us, you are deemed to have read and understood the provisions of these Terms and Conditions and agree to be bound by the whole of the agreement. [...]

You and us agree that this clause is fully understood and that the Price and all other mutual agreements of the parties set forth in this agreement are arrived at having regard to the provisions of this clause 6.

In the text of Table 3, “provision” assumes not only the legal meaning of “dispositions” (as in “the provisions of these Terms”), but it is also imbued with a business or commercial sense (i.e., “furnishing”). This can be regarded as an instance of interdisciplinarity, whereby a non-legal term is employed in the legal domain and consequently acquires legal force. As already mentioned, “terms” is polysemous. In the text of Table 3, it is a synonym of “conditions”, and it forms the doublet “terms and

⁴⁸ COLLINS ONLINE DICTIONARY: <https://www.collinsdictionary.com/dictionary/english/thereinafter>.

conditions”⁴⁹. The past participle “bound” is ambiguous because it signifies “tied” or “constrained” in general language⁵⁰, whereas in legal language it is a synonym of “obligated” or “be imposed”⁵¹. Scholars also regard “agreement” as intra-legally ambiguous because it may identify a mutual understanding or consent, a contract, a transaction, or a bargain when used within the legal sphere^{52 53}. Indeed, in Table 3, “the whole of the agreement” and “this agreement” relate to a physical contract or the document signed; conversely, “other mutual agreements” indicate the parties’ (other) covenants or understandings. Furthermore, “clause” is polysemous because it denotes a contract article or section in the context described in Table 3⁵⁴. By contrast, from a grammatical or linguistic perspective, it refers to a group of words, consisting of a subject and a finite⁵⁵. According to the literature, “parties” identify the persons involved in a lawsuit or legal transaction, social events, and organisations with particular political beliefs^{56 57 58}. For this reason, “parties” is highly polysemous. Finally, the verb phrase “arrived at” does not signify “came at” but “obtained” or “agreed on”. As a matter of fact, Garner employs “arrived at” (clearly meaning “obtained”) in the following entry corresponding to “average valuable cost”: «[t]he average cost per unit of output, arrived at by dividing the total cost [...] by output»⁵⁹, thus confirming the multivalent senses of “arrive at”.

Table 4 exhibits the polysemous terms as they appear in the text of Table 3 and the chatbot answers on their level of ambiguity. If a chatbot flags a term as ambiguous, a “Yes” is shown in the corresponding table cell along with an explanation (or disambiguation) offered by the GenAI tool. Conversely, a “No” signifies that the chatbot does not label the term as polysemous. For the purposes of the analysis, the outputs of the following chatbots are taken into account: FreeLaw Chat, Gemini, and Grok.

Table 4. Polysemous words identified by the GenAI tools

Polysemous word	FreeLaw Chat	Gemini	Grok
Provision,	Yes	Yes	Yes

⁴⁹ P. GIAMPIERI, *Corpus-Based Translation*, cit.

⁵⁰ CAMBRIDGE ONLINE DICTIONARY: <https://dictionary.cambridge.org/it/dizionario/inglese/bound>.

⁵¹ B.A. GARNER, *Black’s Law Dictionary*, cit., p. 501.

⁵² B.A. GARNER, *Black’s Law Dictionary*, cit., p. 209.

⁵³ K.N. KAYUMOVA, *The Use of Polysemy in Legal Texts*, in *Eurasian Research Bulletin* 10 (2022), pp. 48-51.

⁵⁴ B.A. GARNER, *Black’s Law Dictionary*, cit., p. 754.

⁵⁵ CAMBRIDGE ONLINE DICTIONARY: <https://dictionary.cambridge.org/it/dizionario/inglese/clause>.

⁵⁶ CAMBRIDGE ONLINE DICTIONARY: <https://dictionary.cambridge.org/it/dizionario/inglese/party>.

⁵⁷ B.A. GARNER, *Black’s Law Dictionary*, cit., p. 3548.

⁵⁸ P.M. TIERSMA, *Legal Language*, Chicago 1999.

⁵⁹ B.A. GARNER, *Black’s Law Dictionary*, cit., p. 414.

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provisions	It refers to the act of supplying or making available services. It also refers to specific clauses or stipulations within the terms and conditions.	It denotes the act of supplying or making something available. Hence, it means the furnishing or delivery of the services. However, it also identifies the stipulations, clauses, or conditions within a legal document or agreement.	It identifies both the act of supplying or providing something and the individual clauses or stipulations within the document.
Terms	No	No	No
Bound	No	Yes It may generally signify “tied” or “restricted in movement”. In the context of the text it corresponds to “legally obliged”.	Yes Its common meaning is “physically tied or restricted”. In the text, it means “legally obligated or committed”.
Agreement, agreements	No	Yes In its everyday meaning, it denotes general consensus or harmony between people. In the text, it is a legally enforceable contract between two or more parties, specifically referring to the entire set of terms	Yes It can be a mutual understanding or arrangement between parties, the act or process of agreeing, and a formal contract. In the text, it refers to the contract and the shared understandings.

		and conditions referenced.	
Clause	No	Yes In general language it refers to a group of words containing a subject and a verb. In the text, it refers to a specific, numbered section or article within a contract.	Yes It may denoted a distinct section or provision in a legal document or contract, a group of words containing a subject and predicate in grammar, and a condition or stipulation in non-legal contexts (e.g., a Santa Claus reference colloquially).
Parties	No	No	No
Arrived at	No	No	No

As can be seen, “terms” is not marked as polysemous in Table 4, although it is described as such in scholarly studies⁶⁰. Other terminology that is not flagged as ambiguous includes “parties” and “arrived at”. This is quite surprising, since “parties” is a polyvalent word that is often referred to in the literature^{61 62 63}. In the same way, the verb “arrived at” is not considered to have multiple senses by the GenAI systems.

In Table, 4 the chatbot performing the worst is the legal one, i.e., FreeLaw Chat, as it only analyses the lemma “provide”. By contrast, Gemini and Grok show similar results, although Grok hallucinates in the disambiguation of “clause”, as it proposes the explanation «a Santa Claus reference colloquially» (see the words marked in bold in Table 4).

By exploring the chatbot outputs more in detail, it is possible to observe that Gemini only foregrounds one legal meaning of “agreement” by classifying it as a legally enforceable contract (or document). By doing so, it overlooks other legal senses, such as

⁶⁰ P. GIAMPIERI, *Legal Polysemy*, cit.

⁶¹ P.M. TIERSMA, *Legal Language*, cit.

⁶² B.A. GARNER, *Black’s Law Dictionary*, cit.

⁶³ P. GIAMPIERI, *Legal Polysemy*, cit.

the ones arising from formal understandings among parties. Gemini also considers “services” ambiguous (not reported in Table 4) because, as explained by the chatbot, it generally refers to actions or work done for others. In the text, conversely, it denotes specific tasks described in the contract. This disambiguation, however, seems surface-level, as “services” are generally defined as actions performed for others in either legal or non-legal contexts⁶⁴.

As mentioned, Grok hallucinates in the various definitions of “clause” by stating that it can be a condition or stipulation in non-legal contexts as, for example, «a Santa Clause reference colloquially» (marked in bold in Table 4). Grok also flags “regard” as ambiguous (not displayed in Table 4) because it can signify “respect” or “esteem”, and “attention” or “notice” in general language. In the text, according to the chatbot, it has a different usage (i.e., “having regard to”). To some extent, such a remark can be deemed insightful. Nonetheless, “having regard to” is a multi-word expression signifying “considering”. It is by virtue of such a gerund phrase that “regard” loses its lexical nature to acquire a syntactical, or cohesive, character. For this reason, it cannot be considered polysemous or ambiguous.

The results showcased in Table 3 corroborate the fact that chatbots are not fully capable of meeting the challenges posed by legal polysemy. This implies that their frequent failure to identify ambiguous legal terminology and to offer context-relevant explanations could hinder adherence to ISO 24495-2:2025.

5.- Discussion

This analysis brought to the fore the fact that intelligent machines can only partly identify and disambiguate polysemy in legal texts (or, at least, in the extracts addressed). AI may give rise to inconsistencies and hallucinations when examining different legal documents or genres. For example, the word “terms” was deemed to be polysemic when addressing the first text. Nonetheless, it was overlooked in the second chatbot-driven examination, although it is relevant to note that the two texts were analysed by different chatbots; therefore, full comparability is not possible. Also, the use of field-related chatbots was not particularly advantageous. In the first examination, ChaLaw performed quite satisfactorily, although Copilot outperformed it (see Table 2). In the second one, FreeLaw Chat provided the poorest results, as it only identified one lemma (i.e., “provision/provide”) as ambiguous (see Table 4).

In the extracts analysed in this paper, some GenAI tools hallucinated (see Grok when explaining “clause”). In other circumstances, AI labelled words as ambiguous without distinguishing or taking into account syntactical or grammatical functions. In this

⁶⁴ CAMBRIDGE ONLINE DICTIONARY: <https://dictionary.cambridge.org/dictionary/english/service>.

respect, it should be noted that polysemy embraces terms belonging to the same word class⁶⁵. By way of example, ChatGPT identified “grant” as a polysemous term by classifying it as a verb in general language and as a noun in legal contexts. The same occurred to Copilot when categorising “rent”. The chatbot stated that in legal contexts, “rent” refers to the payment for the use of property, thereby ascribing it to the category of nouns. In everyday language, conversely, the chatbot asserted that it denotes the verb “to tear apart”. Such conclusions are highly debatable, as the analysis of polysemous terminology must only consider terms pertaining to similar word classes. Other times, chatbots classified certain terms as ambiguous, although they were not. This was the case of “thereinafter”, whose apparently different meanings provided by ChatGPT were actually identical. In some cases, chatbot-driven disambiguation was shallow or not robust enough. This occurred with the word “services”, which was labelled as polysemous by Gemini. The reasons were due to the fact that (as stated by the chatbot) “services” generally refer to actions performed for other people, whereas in the contract, they related to something more specific.

Furthermore, although ChatGPT is generally considered one of the most widely used GenAI tools among businesspeople and lawyers (Thomson Reuters, 2025), it neither outperformed the other GenAI tools considered in the first analysis nor produced particularly appropriate or targeted responses (see Table 2).

6.- Conclusions

The present investigation revealed that the employment of AI in the disambiguation of legal polysemy may not be as satisfactory as expected. Hence, users and professionals should take a cautious approach when dealing with GenAI in high-stakes environments such as the legal one. This implies that they ought to find a trade-off between the need for fast-generated outputs and high-quality (and sensible) results.

Despite performing tasks expeditiously, chatbots demonstrated an inability to discern nuanced legal meanings in context. Therefore, human expertise and supervision are necessary to grasp and elucidate linguistic subtleties. As a matter of fact, the disambiguation of multi-sense terms is a cognitive process that requires knowledge and an understanding of legal nuances, principles and implications.

Implicitly, this paper also showed that polysemy is deeply entrenched in legal language. This was evident in the two short text extracts analysed, which featured several polysemic words.

The research questions posed at the beginning of this paper were the following ones: 1) Can GenAI identify and disambiguate polysemous terms in short legal passages? 2) Is AI-powered disambiguation satisfactory in light of the ISO 24495-2:2025 standard? The first question has already been answered. As noticed, GenAI tools were able to pinpoint

⁶⁵ P. GIAMPIERI, *Legal Polysemy*, cit.

and address ambiguity only partially and in a non-uniform manner. In other words, the various chatbots provided diverse answers, which were sometimes debatable or surface-level; at other times, they were inconsistent with one another (see the different results for “terms”). Some chatbots touched upon the polysemic nature of legal terminology only partly, whereas others hallucinated. In answering the second question, it can be asserted that the disambiguation provided by GenAI cannot fully satisfy the requirements of ISO 24495-2:2025 because results were often inaccurate and of little robustness. More precisely, as regards ISO 24495-2:2025 principle to «define or explain words and phrases that can be unfamiliar or confusing to readers»⁶⁶, this paper has shown that GenAI is not fully capable of identifying terms that may be ambiguous for readers; consequently, its ability to define or explain such elements is limited. Likewise, its aptitude to «choose familiar, legally accurate words»⁶⁷ is also compromised, especially in view of the training-based nature of its responses. Indeed, the six chatbots under scrutiny did not show the ability to interpret legal terms in context and legal subtleties accurately. Users need certainty and clarity when addressing legal concepts. Therefore, chatbots are currently unsuitable for the easification or disambiguation of legal communication and making it understandable and usable for its intended audience. Although AI may seem to provide sensible responses, inexactness and approximation come to the fore when analysing outputs in detail. This means that AI-generated responses are not reliable and consistent, as they can differ from one query to another. The implications of the paper’s findings for the scientific community are compelling and multifaceted. On the one hand, this investigation proved that intelligent machines can, to some extent, detect legal ambiguity. On the other hand, however, they were not able to discern and make a coherent and cohesive assessment of polysemy. They exhibited a certain incongruity in their judgments and confirmed that their evaluations are mainly based on trained data, thereby lacking the capacity to grasp linguistic and legal nuances, and present consistent results. This highlights the fact that smart technologies still have to be perfected before replacing human mental capacities. The limits of this paper lie in the length of the texts considered. Having addressed longer documents may have provided more insightful results, thereby allowing for the generalisation of the findings. Indeed, two legal texts of 60-70 words and a single query per GenAI system may not be enough to scrutinise and make generalisations about the ability of intelligent machines to disambiguate legal language. For these reasons, this initial study is tentative but insightful. Namely, it described a methodology that can be replicated in future studies. Therefore, further research may explore and assess the accuracy of GenAI-powered outputs in the analysis and disambiguation of other

⁶⁶ ISO 24495-2:2025, p. 6

⁶⁷ ISO 24495-2:2025, cit., p. 6.

polysemous words. For example, longer texts could be examined, thereby comprehending different legal genres and/or contexts. Also, the same chatbots could be used to analyse several texts, thus allowing for the comparability of the results.