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Book of Conference Proceedings

III All-Ukrainian Stage of the Scientific and Practical Language Culture Student Contest

"Linguistic Synergy: Cognitive Strategies and Technological Tools in the Architectonics of Professional Communication"

April, 03-04 / 2026

Chernivtsi, Ukraine
2026

UDC 811.111'25:004.8
L75

Linguistic Synergy: Cognitive Strategies and Technological Tools in the Architectonics of Professional Communication. Book of the scientific and practical students' conference proceedings (in terms of the III All-Ukrainian Stage of the Scientific and Practical Language Culture Student Contest), April 3-4. Chernivtsi. Chernivtsi National University, 2026. 63 p.

Book of conference proceedings contains scientific theses of students of different specialities, research workers and practitioners from Yuriy Fedkovych Chernivtsi National University and V. I. Vernadsky Taurida National University. The research of the theses is aimed at the analyses of the transformation of a foreign language from an object of study into a strategic cognitive tool in the era of generative artificial intelligence dominance, reflecting the processes and changes in the structure of modern science. The collection of scientific theses is for students, postgraduate students, doctoral candidates, teachers, researchers, practitioners and people interested in the trends of modern science development.

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In the contemporary knowledge economy, cognitive performance has become one of the most critical determinants of professional success. Among the many strategies proposed to enhance mental capacity, language learning stands out as one of the most empirically well-supported and physiologically grounded. The acquisition and active use of more than one language is no longer regarded merely as a communicative skill – it is increasingly understood as a form of systematic cognitive training that induces measurable neurological changes. The scientific community has accumulated substantial evidence over the past two decades suggesting that bilingualism and multilingualism reshape the architecture of the brain, sharpen executive functions, and contribute to long-term cognitive resilience. Researchers including Bialystok, Mechelli, Green, and Stern have documented a range of structural and functional adaptations in the bilingual brain, from increased gray matter density to delayed onset of neurodegenerative disease. These findings carry significant implications not only for education but also for professional development and occupational performance.

One of the most foundational claims in the neuroscience of bilingualism is that the sustained management of two or more languages physically alters brain structure. Mechelli et al. (2004), in a landmark voxel-based morphometry study, demonstrated that bilingual individuals exhibit significantly greater gray matter volume in the left inferior parietal cortex compared to monolinguals, with the effect being most pronounced in early bilinguals [1]. This structural enhancement is interpreted as an adaptive response to the increased computational demands of managing two linguistic systems. Grundy et al. (2017) further confirmed that bilingualism correlates with increased gray matter density in regions associated with both motor control and sensory processing, indicating that the benefits of language use extend beyond purely linguistic cortices [1]. From our perspective, this is one of the most exciting findings in modern neuroscience – the idea that simply speaking two languages physically reshapes the brain challenges everything we assumed about cognitive development being fixed. We strongly believe this reframes language learning not as a soft skill, but as a measurable biological upgrade.

The cognitive demands of bilingualism are not limited to linguistic processing alone. Because both languages remain simultaneously active in the brain of a bilingual individual, the speaker must continuously suppress the non-target language to communicate effectively. Green (1998) formalized this mechanism in the Inhibitory Control Model, proposing that the habitual suppression of a competing linguistic system constitutes a form of sustained attentional training [2]. This training,

Khrystyna BYSTROVA, Oleksandra MARCHENKO Neuroplasticity and 'Language Biohacking': How Language Learning Optimizes a Specialist's Brain Function. Book of Conference Proceedings of the *III All-Ukrainian Stage of the Scientific and Practical Language Culture Student Contest: "Linguistic Synergy: Cognitive Strategies and Technological Tools in the Architectonics of Professional Communication"*. Chernivtsi National University, 2026. Pp. 6 – 8.

repeated across thousands of language interactions, produces long-term enhancements in the neural systems responsible for conflict resolution and cognitive control.

For professionals operating in complex, high-distraction environments – such as open-plan offices, intensive data analysis contexts, or real-time decision-making scenarios – this enhanced inhibitory control may translate directly into a superior ability to maintain focus on a primary task while filtering out irrelevant stimuli [2]. The cognitive mechanism underlying this advantage is not symbolic or motivational but neurophysiological, rooted in the physical organization of the brain itself. We strongly resonate with this thesis, as we personally notice how switching between languages demands constant mental discipline that feels like a cognitive workout in itself. From our perspective, this invisible daily effort is precisely what makes bilinguals more mentally agile in demanding professional situations.

Working memory – the cognitive system responsible for temporarily holding and actively manipulating information – is foundational to nearly all complex professional tasks, including analytical reasoning, strategic planning, and real-time decision-making. Research by Morales, Calvo, and Bialystok (2013) found that bilingual individuals frequently exhibit superior working memory performance compared to monolinguals [2]. The management of two languages requires the brain to maintain multiple lexical and grammatical representations in an active state simultaneously, which may constitute a form of continuous working memory training.

This advantage is particularly relevant in data-intensive professions. A financial analyst integrating multiple variables across financial models, or a clinician synthesizing several streams of patient data simultaneously, can benefit concretely from enhanced working memory capacity. The neurological basis for this enhancement is consistent with the broader literature on bilingualism and executive function: the same prefrontal and parietal circuits that support working memory are recruited during language management tasks, suggesting that bilingual experience may strengthen these circuits through regular use [2]. From our perspective, this thesis feels deeply intuitive – managing two grammatical systems, two vocabularies, and two sets of cultural contexts simultaneously is essentially a continuous working memory exercise. We strongly believe that professionals who invest in language learning are unknowingly building one of the most transferable cognitive tools available.

Beyond the immediate functional benefits of bilingualism, there exists a substantial body of evidence indicating that multilingual experience contributes to cognitive reserve – the brain's capacity to sustain function in the face of age-related neural deterioration or pathological damage. Stern (2009) conceptualized cognitive reserve as the product of an individual's lifetime of cognitively stimulating experience, which enables the brain to recruit alternative neural pathways when primary ones are compromised [1]. Bialystok et al. (2007) provided some of the most compelling evidence for the contribution of bilingualism to this reserve, reporting that bilingual patients with Alzheimer's disease showed an average delay of approximately four to five years in the clinical manifestation of dementia symptoms compared to monolingual patients with equivalent degrees of neuropathological damage [1]. The mechanism underlying this effect appears to be related to the increased neural efficiency and structural density associated with bilingualism. When the brain possesses a greater density of synaptic connections and a more extensively developed executive control network, it is better equipped to maintain adequate cognitive function even as some neuronal resources are lost to aging or disease [3]. In practical terms, this means that a professional who has maintained active multilingual use throughout their career may sustain high cognitive performance at an age when monolingual peers experience measurable decline. We strongly consider this the most personally motivating finding in the entire paper – knowing that active multilingualism can delay dementia by four to five years transforms language learning into an act of self-preservation. From our perspective, this single fact

alone should be sufficient to integrate language education into every professional development program.

A final and particularly consequential thesis concerns not the enhancement of raw cognitive capacity but the efficiency with which cognitive resources are deployed. Green and Abutalebi (2013) proposed the Adaptive Control Hypothesis, which posits that the bilingual brain adapts its executive control systems to the demands of managing multiple languages, resulting in a more economical and efficient neural architecture [1]. Functional neuroimaging studies have found that experienced bilinguals show less frontal lobe activation during executive tasks compared to monolinguals performing at equivalent accuracy levels – a finding interpreted as reflecting greater neural efficiency rather than diminished engagement [2]. The professional implications of this finding are considerable. If the brain of a bilingual individual completes equivalent executive tasks with lower metabolic cost, this may translate into greater mental stamina, reduced susceptibility to decision fatigue, and sustained high performance across extended working periods [3]. From our perspective, neural efficiency is the most underappreciated advantage of bilingualism – doing the same cognitive work with less effort means more mental energy left for creativity, resilience, and innovation. We strongly believe this finding redefines what it means to be a high-performing professional in the modern knowledge economy.

The body of scientific evidence reviewed in this paper supports a compelling and coherent thesis: bilingualism and multilingualism are not merely communicative capacities but constitute a form of systematic, neurophysiologically grounded cognitive enhancement. Across six distinct dimensions – structural neuroplasticity, inhibitory control, cognitive flexibility, working memory, cognitive reserve, and neural efficiency – the research literature consistently documents advantages associated with the active management of more than one language.

These findings, drawn from the work of researchers including Bialystok, Mechelli, Green, Abutalebi, Stern, and others, converge on a unified picture of the bilingual brain as a structurally denser, functionally more efficient, and cognitively more resilient system than its monolingual counterpart. The advantages are not confined to linguistic tasks but transfer broadly to executive function, attentional regulation, and resistance to cognitive aging – all of which have direct relevance to professional performance across virtually every knowledge-intensive domain.

References

1. Inan, S. (2024). A review of the neurobiology of the bilingual brain: What have we learned from the last two decades? *Iris Journal of Educational Research*, *3*(4). Pp. 1–5. https://doi.org/10.33552/IJER.2024.03.000568
2. Ithriyah, S. (2024). The impact of bilingualism on executive function: A meta-analysis. *Open Access Indonesia Journal of Social Sciences*, *7*(5). Pp. 1759–1772. https://doi.org/10.37275/oaijss.v7i5.268
3. Boliqulova, M. (2025). The cognitive benefits of bilingualism: How learning a second language enhances memory and problem-solving skills. *International Journal of Artificial Intelligence*, *1*(4). Pp. 784–787. https://inlibrary.uz/index.php/ijai/article/view/98956

SECTION I Neurolinguistic Dimension of Professional Training

COGNITIVE BENEFITS OF MULTILINGUALISM IN THE CONTEXT OF DIGITAL OVERLOAD

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In today's rapidly globalizing world, increasing migration has created opportunities for families to raise children in environments where two or more languages are acquired simultaneously. This societal shift represents a move away from traditional monolingual developmental norms and frames multilingualism as a complex neurobiological phenomenon shaped by communicative demands. Within the context of this study, multilingualism refers to a dynamic process in which multiple linguistic systems coexist and interact within a single brain.

Parallel to this linguistic evolution, the ongoing digitalization of work and everyday life has produced the growing challenge of "digital overload". This phenomenon, also described as "information smog," occurs when the volume and intensity of incoming data exceed an individual's cognitive processing capacity. Under such conditions, the ability to filter irrelevant digital input and sustain goal-directed focus becomes a key driver in cognitive performance.

The purpose of this study is to analyze and synthesize existing research to examine whether multilingualism provides a performance advantage in managing digital saturation. This work is particularly relevant as it explores how multilingual cognitive mechanisms may support individuals in coping with constant information overload. Unlike monolingual individuals, the multilingual brain develops enhanced cognitive flexibility, allowing it to regulate attention and ignore irrelevant information more efficiently. Research suggests that multilingual experience strengthens the brain's ability to monitor conflicts and allocate attention in complex environments. Consequently, multilingualism may function as a cognitive buffer in environments characterized by digital overload. This form of human intelligence enables a dynamic balance between speed and accuracy that artificial algorithms cannot fully replicate.

To support the claim that multilingualism enhances cognitive control in environments of digital overload, it is essential to first recognize the advantage of comprehensive cognitive adaptation. This concept explains that the cognitive benefits of bilingualism do not simply come from the "transfer" of specific language skills to non-verbal tasks, but rather result from a deep, comprehensive reorganization of the brain's entire attention network driven by the constant demand of managing competing language systems. Providing strong evidence for this, Ellen Bialystok, one of the most authoritative figures in bilingualism research, proposes a major shift in how we understand the bilingual brain by introducing the bilingual adaptation view in her landmark synthesis of decades of

Anna PROTSENKO, Anna NAZARENKO Cognitive Benefits of Multilingualism in the Context of Digital Overload. Book of Conference Proceedings of the *III All-Ukrainian Stage of the Scientific and Practical Language Culture Student Contest: "Linguistic Synergy: Cognitive Strategies and Technological Tools in the Architectonics of Professional Communication"*. Chernivtsi National University, 2026. Pp. 9 – 11.

research [1]. As a practical illustration of this adaptation, bilingualism reshapes the brain's overall cognitive structure to act as an advanced filter, strengthening the ability to block out distractions when navigating complex information. This fundamental change matters immensely in the context of modern "information smog", because a bilingual brain is adapted to use less energy on tasks that require high levels of attention. As a result, individuals can stay productive longer without being exhausted by digital overload, successfully protecting the individual from cognitive fatigue.

Extending this line of argument, the multilingual brain operates with the distinct advantage of unique neural efficiency. This signifies that the brain can perform complex attentional shifts more smoothly, achieving high-level outcomes while expending fewer neural resources. Compelling evidence for this comes from recent high-tech research using fMRI (functional Magnetic Resonance Imaging) by Zhang et al. Their investigation went beyond basic language proficiency and included measures of "language entropy". This concept reflects how frequently and how diversely individuals use their languages, together with their experience in translation and interpreting, allowing the researchers to capture the real complexity of multilingual language use [2]. As an example of this efficiency in action, researchers observed real-time brain activity while participants performed complex switching tasks, such as quickly changing between identifying letters and numbers based on visual cues. This efficiency is important because it enables the brain to maintain high performance with lower energy use, which is essential for managing frequent cognitive shifts in digital overload.

While acknowledging the neuroplastic effects of multilingualism, it is crucial to address the skeptical perspective, most notably represented by Kenneth R. Paap. He questions whether these changes lead to consistent cognitive advantages in real-world environments. According to Paap, even large-scale, strictly controlled studies tend to produce null results, showing no cognitive differences between monolinguals and bilinguals and often outnumbering positive findings [3]. On top of that, he also criticizes early influential studies for relying on small, "risky" sample sizes, which are more likely to produce non-replicable results and overstate the bilingual advantage [4]. For instance, he argues that the few positive effects reported in some studies are often the result of external factors, such as socioeconomic status, the demands of the immigrant experience, or broader cultural differences, rather than bilingualism itself. This perspective is important because it shows that when these demographic factors are carefully matched and controlled, the supposed bilingual advantage largely disappears, raising doubts about its consistency in real-world contexts.

To address the skepticism surrounding the bilingual advantage, we turn to the concept of a dynamic cognitive balance, where offsets are systematically compensated by corresponding benefits across tasks and populations. The multilingual cognitive profile operates as a "zero-sum game," since the brain relies on limited resources, meaning that improvement in one area inevitably comes at the expense of another [5]. To clarify how these cognitive trade-offs are balanced, comprehensive research by Dentella et al. combined insights from prior research with updated observations through Bayesian analysis involving 7,830 participants. As a clear example of this dynamic, their research indicates that in 100% of cases where bilingual populations exhibited minor disadvantages, such as delays in verbal fluency or word retrieval, they simultaneously demonstrated powerful compensatory advantages. These benefits in cognitive control, task switching, and error detection are vital for managing digital overload, as they allow the brain to efficiently filter information and maintain

Anna PROTSENKO, Anna NAZARENKO Cognitive Benefits of Multilingualism in the Context of Digital Overload. Book of Conference Proceedings of the *III All-Ukrainian Stage of the Scientific and Practical Language Culture Student Contest: "Linguistic Synergy: Cognitive Strategies and Technological Tools in the Architectonics of Professional Communication"*. Chernivtsi National University, 2026. Pp. 9 – 11.

situational awareness within a constant flood of data. For that reason, we believe that multilingualism does not magically enhance overall cognitive functioning, but it fundamentally adapts it by optimizing the use of available cognitive resources for these increasingly complex tasks.

In conclusion, the evidence presented throughout this study strongly supports the central claim established in our introduction - that multilingualism offers a distinct cognitive advantage in navigating the growing challenge of digital overload. The findings suggest that multilingualism strengthens attentional control, improves task-switching efficiency, and allows the brain to filter complex information with greater resilience. These advantages are particularly relevant in modern environments defined by digital saturation, as the multilingual brain, shaped by years of managing competing linguistic systems, develops a highly adapted attention system that sustains goal-directed focus more efficiently than monolingual ones. From Bialystok's bilingual adaptation view to Zhang et al.'s neuroimaging findings, and further reinforced by Dentella et al.'s large-scale Bayesian analysis, the research consistently demonstrates that multilingualism does not simply add cognitive skills, but rather optimizes the brain's use of available resources in precisely the ways demanded by the modern information-saturated environment. Notably, even Paap, who is the most prominent skeptic in this field, acknowledges the neuroplastic effects of multilingualism, providing common ground across the academic debate. Ultimately, in a world increasingly defined by digital saturation, the multilingual brain represents a living, adaptive system that grows stronger precisely because of the complexity it faces, and it is this uniquely human capacity for cognitive resilience that we aimed to highlight throughout this study.

References

1 Bialystok, E. (2024). Bilingualism modifies cognition through adaptation, not transfer. *Trends in Cognitive Sciences*, *28*(11). Pp. 987–997.

2 Zhang, H., Li, D., Lei, V. L. C., Leong, T. I., Leong, C. T., Li, J., & Huang, R.-S. (2025). Multifaceted multilingual experiences modulate neurocognitive mechanisms of task switching. *Bilingualism: Language and Cognition*, *28*. Pp. 1346–1362.

2 Paap, K. R. (2019). The bilingual advantage debate: Quantity and quality of the evidence. In J. W. Schwieter (Ed.), *The handbook of the neuroscience of multilingualism*. Wiley-Blackwell. Pp. 701–735.

4 Paap, K. R., Johnson, H. A., & Sawi, O. (2014). Are bilingual advantages dependent upon specific tasks or specific bilingual experiences? *Journal of Cognitive Psychology*, *26*(6), 615–639.

5 Dentella, V., Masullo, C., & Leivada, E. (2024). Bilingual disadvantages are systematically compensated by bilingual advantages across tasks and populations. *Scientific Reports*, *14*. Article 2107.

Anna PROTSENKO, Anna NAZARENKO Cognitive Benefits of Multilingualism in the Context of Digital Overload. Book of Conference Proceedings of the *III All-Ukrainian Stage of the Scientific and Practical Language Culture Student Contest: "Linguistic Synergy: Cognitive Strategies and Technological Tools in the Architectonics of Professional Communication"*. Chernivtsi National University, 2026. Pp. 9 – 11.

SECTION I Neurolinguistic Dimension of Professional Training

MULTILINGUALISM COGNITIVE BENEFITS IN THE ERA OF DIGITAL OVERLOAD

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The modern world is characterized by a constant flow of digital information. People are exposed to large amounts of data through social media, digital platforms, and global communication networks. In such conditions, multilingualism becomes not only a communication tool but also an important cognitive advantage.

Research in neurolinguistics shows that learning and using several languages stimulates brain activity and improves mental flexibility. Therefore, multilingualism can help individuals process information more effectively in the era of digital overload.

In modern society, professionals must analyze information quickly and communicate in international environments. Multilingual competence helps people adapt to these conditions because switching between languages trains attention and cognitive control.

As a result, multilingualism is increasingly considered a valuable skill that supports both intellectual development and professional competitiveness.

Despite the growing importance of multilingualism, many people still view language learning only as a practical communication skill. However, studies in neurolinguistics suggest that multilingualism can significantly influence cognitive processes and brain development.

The problem is to understand how multilingual language use affects cognitive performance and helps individuals cope with the challenges of digital information overload.

Research indicates that multilingual individuals demonstrate several cognitive advantages. First, they often have better attention control and can switch between tasks more efficiently. Second, multilingualism improves memory and information processing because the brain constantly activates different linguistic systems.

Another important factor is neuroplasticity. Learning languages stimulates the brain's ability to create new neural connections, which strengthens cognitive flexibility and problem-solving abilities.

In conclusion, multilingualism provides important cognitive benefits in the modern digital environment. It improves attention, memory, and mental flexibility while stimulating neuroplasticity.

Therefore, learning foreign languages should be considered not only a communication skill but also a cognitive strategy that supports professional development and adaptation in the information age.

References

1. Bialystok E. (2001). Bilingualism in Development: Language, Literacy and Cognition. Cambridge University Press.
2. Costa A. (2020). The Bilingual Brain. Allen Lane.
3. Grosjean F. (2010). Bilingual: Life and Reality. Harvard University Press.

SECTION II Applied Linguistics and AI Toolkits

EFFECTIVENESS OF ROLE-PLAYING PROMPTS: MORE DETAILS EQUAL BETTER RESPONSE

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Currently, large language models (LLMs) have become a worldwide phenomenon. Effective interaction with them has become a must-have professional skill, especially in high-stakes fields such as legal contract translation for IT contractors. This research compares using role-playing prompts (detailed tasks with AI imagining itself as an expert in one or another profession) and standard prompts (basic instructions with basically near to no details) when translating English IT service agreements and software development contracts into Ukrainian.

Role-playing prompts force the AI to imagine itself as a professional in the domain of a given question, prompting it to provide additional details. Thus, allowing it to have a better view of the task given. As an example, we can use a request: “Imagine yourself being a perfect IT lawyer with years of experience who needs to secure the deal between the European Union and Ukraine. How would you do it using your proficiency in this field?” LLM now has a detailed picture, and in order to fulfill our request, it needs to work extra hard.

Moreover, adding the requirement to generate at least two alternative solutions significantly improves the results. This happens because AI must incorporate comparative reasoning into its work going forward, leading to a better understanding of the task and allowing the task-giver to choose the most appropriate variant.

In contrast, standard prompts are straightforward and leave no space for creativity or accuracy, leading to simpler answers. The simpler answer will often be misleading. For example: “Translate the given contract from English to Ukrainian”. Such wording doesn’t specify the field of science, which may lead to literal translations that often ignore the specific terminology that needs to be taken into account. The specific meaning of the word “damages” could be ignored, and instead of “відшкодування збитків” it could be translated as the simple “збитки” or “шкода”, which later would lead to a shift in meanings and misinterpretation. That’s only one of many situations in which standard prompts are inefficient.

Another case of a simple prompt malfunctioning could be a misinterpretation of the word “execution”. They would often interpret it as a technical performance of a code, while in a legal sense, it refers to the act of signing the document. If we assign the role of a professional lawyer to the LLM, it will consider the request conditions, leading to the correct interpretation of the word “execution” as “підписання договору”. Thus, preventing possible confusion between parties.

We can observe a clear difference in the quality of results if we compare those types of prompts. Role-playing prompts give the model a specific task that describes the role the neural network should take, along with context, so it can better understand what kind of answer is needed. This helps the

Serhii DRUHANOV Effectiveness of Role-Playing Prompts: More Details Equal Better Response. Book of Conference Proceedings of the *III All-Ukrainian Stage of the Scientific and Practical Language Culture Student Contest: "Linguistic Synergy: Cognitive Strategies and Technological Tools in the Architectonics of Professional Communication"*. Chernivtsi National University, 2026. Pp. 13 - 14.

model recognize the need to use the correct legal term and to follow the domain's logic. On the contrary, standard prompts do not provide enough detail to the LLM, so the result is more general.

Another noticeable difference is that stability or results differ quite strongly. Due to the fact that role-playing prompts usually assign the same role each time, they provide more consistent, predictable translations, whereas standard prompts give different results for similar tasks. They are also giving a translation that is either simple or even wrong.

The third major difference between these two types of prompts consists of the level of detail in translation. While standard prompts usually produce quite short translations that often miss important details, role-playing prompts offer longer and more detailed answers, where the AI carefully selects the right legal term and explains its meaning.

Most importantly, it is worth mentioning how these prompts affect the model's brain or thinking process. Role-playing prompts always lead the LLM step by step using logic, as if it were a real domain specialist who checks the meaning and context before translating. Standard prompts, in contrast, do not guide LLMs in this way. It allows faster work but at the cost of less attention to context. The outcome may appear right grammatically, but would still be wrong in a legal sense.

Theoretical background supporting the usefulness of role-playing prompts includes open-access research such as "Talk Less, Call Right: Enhancing Role-Play LLM Agents with Automatic Prompt Optimization and Role Prompting" by Ruangtanusak, S. et al. (2025), which provides a deep analysis of how automated role-playing prompts affect outcomes. In an experimental setting, the researchers demonstrated that allowing AI to always imagine itself as a professional, even without a detailed task, results in 5,2% higher efficiency than usual.

"Prompts and Large Language Models: A New Tool for Drafting, Reviewing and Interpreting Contracts?" by Wang, B. (2024) directly discusses the legal liability of instructive and factual prompts in contract drafting, confirming that role-playing instructions mostly yield results that can be traced.

Ultimately, both types of prompts are useful in their own fields. Standard prompts have a big advantage due to their faster generation, but when it comes to accuracy and detailed answers, role-playing prompts completely dominate in IT contract translation. It allows future specialists to be able to do more work. This work is much more efficient and useful. If we consider that AI also evolves rapidly, we can expect that standard prompts will be removed and the models will automatically generate details to add to your request based on their previous experience, giving you a more accurate answer.

References

1. Ruangtanusak, S. et al. (2025). Talk Less, Call Right: Enhancing Role-Play LLM Agents with Automatic Prompt Optimization and Role Prompting. https://arxiv.org/pdf/2509.00482
2. Wang, B. (2024) Prompts and Large Language Models: A New Tool for Drafting, Reviewing and Interpreting Contracts? https://www.researchgate.net/publication/382688050_Prompts_and_Large_Language_Models_A_New_Tool_for_Drafting_Reviewing_and_Interpreting_Contracts

SECTION II Applied Linguistics and AI Toolkits

VALIDATION AND POST-EDITING OF MACHINE TRANSLATION IN LEGAL PRACTICE

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The rapid development of digital technologies has increased demand for tools capable of processing and translating large amounts of text. One of the most widely used solutions for this purpose is Machine Translation (MT). Such systems enable automatic translation of texts. They are widely used across various professional fields, including legal practice.

However, the use of machine translation in the legal domain requires particular attention. Legal texts are characterized by a high level of precision, complex sentence structures and terminology. Additionally, legal language frequently employs fixed expressions and formal constructions that carry specific legal meanings. Even a minor translation error can alter the content of a document or lead to an incorrect interpretation of legal norms.

One of the biggest challenges in legal translation is the lack of understanding of cultural and legal differences. This can lead to misinterpretations of concepts and, as a result, changes in the text's meaning, sometimes even unnoticed by the translator. Another important problem is that not all translators have a legal education. If the translator lacks specialized legal terminology, the risk of errors that affect the interpretation of the contract or its compliance with legal norms increases.

Revising a human translation and editing a machine translation are different because of the amount of work needed. With human translations, the editor usually just improves the style, checks for consistency, and fixes small errors. For machine translations, more changes are often needed. The editor may need to correct repeated mistakes, fix awkward sentences, or sometimes rewrite parts to make the text clear and accurate. In general, editing a human translation is easier than working on one made by a machine.

Contemporary legal practice has evolved beyond traditional machine translation (MT) toward the adoption of Generative AI (GenAI) and Large Language Models (LLMs) such as Gemini and ChatGPT These technologies demonstrate improved contextual understanding and are capable of processing entire documents. They can summarize information, adapt style and ensure consistency of terminology within a document. At the same time, despite the obvious advantages, these technologies are associated with certain risks.

The most serious of them is the phenomenon of “linguistic hallucinations”, when artificial intelligence generates inaccurate or non-existent information [1]. For example, a model can create a fictional judicial precedent or incorrectly apply the legal norms of one jurisdiction to another. Such errors can have significant legal and financial consequences. To reduce such risks, an approach known as Linguistic Prompt Engineering is being developed. Its essence lies in formulating precise queries, which allows directing the work of AI and reducing the likelihood of errors. This improves the quality of machine translation and facilitates subsequent editing. However, despite rapid

Mariia KOLOMIICHUK Validation and Post-Editing of Machine Translation in Legal Practice. Book of Conference Proceedings of the *III All-Ukrainian Stage of the Scientific and Practical Language Culture Student Contest: "Linguistic Synergy: Cognitive Strategies and Technological Tools in the Architectonics of Professional Communication"*. Chernivtsi National University, 2026. Pp. 15 - 17.

technological development, human verification remains necessary to ensure the accuracy and reliability of the final result.

Translation errors in legal and official documents can result in significant political, economic, and legal consequences. For example, in 2011, the free trade agreement between the European Union and South Korea faced substantial obstacles due to translation errors in the Korean version of the treaty. Investigations identified 207 mistakes, ranging from incorrect terminology to grammatical errors. For instance, the word "transplantation" was rendered as "transfusion," and "epidemiology" appeared as "skin care service." Certain elements were omitted or added, and the omission of the word "any" in several negative sentences altered the intended meaning of specific provisions. These errors led to confusion and delayed the implementation of the agreement [2].

One well-known example is the dispute between Occidental Petroleum and the government of Ecuador in 2006. During arbitration proceedings concerning the expropriation of the company's oil assets, an error in translating the Spanish legal term "solemnidades" into English created ambiguity. The term was interpreted as either "legal requirements" or "formal requirements." Because of this translation issue in the legal documentation, the compensation initially awarded to the company increased by about 40%, which amounted to approximately 760 million dollars. Although the increase was later rescinded, the case demonstrated how mistranslation can significantly influence financial outcomes in legal disputes [3].

Translation errors can also affect contracts and agreements in fields beyond law. In 2018, for example, the transfer of Ecuadorian footballer Bryan Cabezas from Atalanta BC to Club Atlético Independiente failed because the contract was machine-translated. The system incorrectly translated the player's surname, "Cabezas" (meaning "heads" in Spanish), as "Heads," resulting in an inaccurate legal document and ultimately invalidating the agreement [4].

Within this context, validation and post-editing constitute essential stages in the processing of machine-translated legal texts. Validation entails a comprehensive assessment of the translated document to ensure its accuracy and fidelity to the source material. This process includes terminology checks, error identification, and confirmation that the translation accurately conveys the intended legal meaning. In legal settings, validation is especially critical, as even minor inaccuracies may have significant legal consequences. Post-editing involves correcting and refining machine-generated translations, typically by a professional translator to ensure grammatical accuracy, terminological precision, and stylistic appropriateness.

There is a globally recognized standard for machine translation services known as ISO 18587:2017. It sets requirements for full post-editing of machine translation output. Published by the International Organization for Standardization (ISO), this standard ensures that post-edited content meets professional quality norms comparable to traditional human translation. According to this standard, post-editing must always involve human intervention and is a vital component of professional translation workflows [5].

Post-editing can be divided into two main categories: light post-editing, which corrects only significant mistakes and is typically used for internal use, and full post-editing, which seeks to match the quality of human translation and is necessary for official legal documents. Both validation and post-editing are indispensable for ensuring that machine translation outputs meet professional and legal standards.

In summary, the rise of machine translation and artificial intelligence has brought significant changes to the practice of legal translation. Advanced tools such as large language models (LLMs) offer greater speed and deeper contextual understanding, yet they cannot fully replace the nuanced judgment and expertise of human translators. The processes of validation and post-editing remain essential, as they help to ensure the accuracy and legal reliability of translated documents. By combining the strengths of both AI and human professionals, the quality of legal translation can be greatly improved. Ultimately, effective collaboration between translators and AI supported by careful review is crucial for maintaining clear and reliable legal communication in today's digital world.

References

1. Ji, Z. et al. *Survey of Hallucination in Natural Language Generation*. ACM Computing Surveys, 2023. https://doi.org/10.48550/arXiv.2202.03629
2. European Commission. The EU–Korea Free Trade Agreement in Practice. Luxembourg: Publications Office of the European Union, 2011. http://data.europa.eu/eli/reg/2011/511/oj
3. Occidental Petroleum Corporation v. Ecuador, ICSID Case No. ARB/06/11, 2012. https://www.italaw.com/cases/767
4. Media reports on Bryan Cabezas transfer case, 2018 (sports contract translation error case). https://www.act-translations.com/en-gb/sport-translations-ten-legendary-mistakes/
5. ISO 18587:2017. *Translation services — Post-editing of machine translation output*. https://www.iso.org/standard/62970.html

Mariia KOLOMIICHUK Validation and Post-Editing of Machine Translation in Legal Practice. Book of Conference Proceedings of the *III All-Ukrainian Stage of the Scientific and Practical Language Culture Student Contest: "Linguistic Synergy: Cognitive Strategies and Technological Tools in the Architectonics of Professional Communication"*. Chernivtsi National University, 2026. Pp. 15 - 17.

SECTION II Applied Linguistics and AI Toolkits

AI IN LEGAL TRANSLATION: RISKS, ACCURACY AND THE NEED FOR HUMAN OVERSIGHT

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In recent years, artificial intelligence (hereinafter 'AI') has significantly transformed approaches to legal translation. Tools such as DeepL, Google Translate and ChatGPT enable the rapid and cost-effective processing of multilingual legal texts. However, their increasing use in the legal domain raises critical concerns regarding accuracy, reliability and legal validity.

This paper argues that the application of AI in legal translation constitutes a high-risk practice due to structural limitations in handling legal terminology and context. Therefore, human oversight, including systematic validation and post-editing of machine translation (PEMT), is not merely desirable but essential.

Legal translation differs fundamentally from general translation. It is not limited to linguistic transfer but directly affects legal meaning, obligations and rights. Even minor inaccuracies may lead to significant legal consequences, particularly in contractual or procedural contexts.

A key challenge arises from the lack of equivalence between legal systems. AI systems, trained on general multilingual corpora, often fail to accurately process jurisdiction-specific concepts and specialised terminology. One of the key reasons for this limitation lies in the nature of legal language itself. Legal discourse is highly context-dependent and requires precise interpretation within a specific legal system. AI models operate primarily on statistical patterns rather than true semantic understanding, which makes them prone to errors when dealing with ambiguity, polysemy and system-specific legal concepts. This limitation becomes particularly evident in cross-border legal communication, where differences between legal systems require not only linguistic but also legal interpretation.

Empirical research confirms that while AI may perform adequately in general translation tasks, its accuracy decreases significantly when applied to legal texts [1], [2].

The risks associated with such inaccuracies are substantial. Errors in translation may alter the scope of legal obligations, affect the interpretation of contractual provisions, or compromise procedural fairness. In cross-border transactions, such errors may lead to disputes regarding the interpretation of contractual terms, potentially resulting in financial losses or litigation. In criminal proceedings, inaccurate translation may affect the ability of a defendant to understand the charges, thereby undermining the principle of equality of arms. These risks demonstrate that translation quality in legal contexts is directly linked to the protection of fundamental rights.

Specific examples further illustrate this issue. The term 'warrant' has been incorrectly translated as 'court order', distorting its legal meaning. The Spanish phrase 'me maltrata' ('he/she mistreats me') has been translated without specifying gender, creating ambiguity in domestic violence

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proceedings. The phrase ‘due date’ has been rendered as ‘delivery date’ in a legal-medical context, demonstrating AI’s inability to resolve lexical ambiguity depending on context [3].

Given the high stakes involved, the use of AI in legal translation cannot rely on the “good enough” standard.

From a regulatory perspective, this approach is reinforced by Regulation (EU) 2024/1689 (EU AI Act), which classifies AI systems used in the administration of justice as high-risk. This classification reflects the potential impact of AI systems on fundamental rights and access to justice. High-risk systems are subject to strict compliance requirements, including documentation, human supervision and continuous monitoring. This regulatory framework confirms that the use of AI in legal contexts must be carefully controlled and cannot be fully automated [4].

In this context, the “human-in-the-loop” model represents the most appropriate approach. AI is used to generate a preliminary translation, which is subsequently reviewed, corrected and validated by a qualified professional. In practice, post-editing involves terminological verification, correction of ambiguities and alignment with the legal system of the target jurisdiction. In addition, post-editing requires critical evaluation of the source text, identification of inconsistencies and adaptation to the conventions of the target legal system.

Post-editing of machine translation (PEMT/MTPE) is recognised as a complex and specialised activity. According to ISO 18587:2017, full post-editing requires that the final output be indistinguishable from human translation in terms of both accuracy and fluency [5]. Furthermore, MTPE is described as a more complex form of work than the revision of human translation, as it requires the translator to identify and correct both linguistic and algorithmic errors simultaneously [6]. Research also emphasises that MTPE frequently creates a tension between industry expectations of high-quality output and the actual performance of translators, highlighting the demanding and cognitively intensive nature of this process [6].

In addition to post-editing, validation plays a crucial role in ensuring the reliability of AI-generated legal translations. Validation involves systematic verification of accuracy, consistency and legal equivalence, particularly in high-risk contexts where errors may have direct legal consequences.

In the legal domain, PEMT goes beyond general linguistic correction. It requires the preservation of legal effect within the target jurisdiction, which demands interdisciplinary expertise combining legal knowledge, linguistic competence and critical evaluation of AI outputs. This further confirms that reliance on AI without proper post-editing may lead to a gap between expected and actual translation quality [6].

Thus, the integration of AI into legal translation necessitates a hybrid model in which technological efficiency is balanced by professional responsibility. Artificial intelligence should be regarded as a supportive tool, while final authority must remain with qualified human experts.

In conclusion, the use of AI in legal translation remains inherently high-risk. Empirical evidence and regulatory frameworks confirm that human oversight, validation and post-editing are indispensable elements of this process. As the use of AI tools continues to expand, the role of legal professionals will increasingly involve supervising and validating machine-generated outputs rather than producing translations from scratch. For future legal professionals, the ability to work effectively with AI while ensuring legal accuracy is becoming a critical professional competence.

References

1. Ding, Lijie (2024). A comparative study on the quality of English-Chinese translation of legal texts between ChatGPT and neural machine translation systems. Theory and Practice in Language Studies, 14(9), 2823–2833.

DOI: https://doi.org/10.17507/tpls.1409.18

2. Abdel Rahman Mitib Altakhaineh, Ghazi Ayed Alghathian, Mashal Mufleh Jarrah A Comparative Study of Accuracy in Human vs. AI Translation of Legal Documents into Arabic*Altakhaineh et al.*, JLL 14 (2025), 63-80.

DOI: 10.14762/jll.2025.063

3. Llop, C. (2025). *AI, machine translation, and access to justice*. Stanford Legal Design Lab, AI and Access to Justice Research Webinar, 7 February 2025.

https://justiceinnovation.law.stanford.edu

4. Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence (AI Act). *Official Journal of the European Union*.

https://eur-lex.europa.eu/eli/reg/2024/1689/oj/eng

5. ISO 18587:2017. *Translation services — Post-editing of machine translation output — Requirements*. International Organization for Standardization.

https://www.iso.org/standard/62970.html

6. Rico Pérez, C. (2024). Re-thinking Machine Translation Post-Editing Guidelines. *The Journal of Specialised Translation*, (41), 26–47.

https://doi.org/10.26034/cm.jostrans.2024.4696

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SECTION II Applied Linguistics and AI Toolkits

LINGUISTIC PROMPT ENGINEERING: THE ART OF CRAFTING HIGH-PRECISION PROMPTS FOR LLMS (CHATGPT, CLAUDE, GEMINI)

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The rapid development of digital technologies and Artificial Intelligence has transformed human-computer interaction. Large language models (LLMs) such as ChatGPT, Claude Al, and Gemini can generate text, answers, questions, and assist in decision-making. However, the quality of their output depends heavily on the precision of user prompts.

As Al becomes more integrated into education, science, and professional communication, understanding how to interact effectively with LLMs is crucial. Linguistic prompt engineering merges Applied Linguistics and computational methods, showing how syntactic and semantic structures influence Al performance.

Any users provide vague or unstructured prompts, resulting in general or inaccurate outputs. Bridging the gap between Al capabilities and practical use requires analyzing how linguistic structures affect response quality.

An experiment was conducted using ChatGPT with three prompts:

Table 1 Chat GPT linguistic precision

Prompt Type	**Example**	**Observed Result**
Minimal	“Explain climate change”	Broad, unstructured response
Structured	"Explain climate change in three paragraphs and describe its main causes and consequences."	More organized, better thematic structure
Engineered	"You are an environmental science lecturer. Explain climate change to first-year university students in 150 words. Include three main causes and two consequences."	Clear, coherent, audience-specific, and structured response

The experiment demonstrated that the level of linguistic precision in prompts significantly influences the quality of AI-generated responses. Minimal prompts produced general and relatively

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unstructured explanations, while more detailed prompts resulted in clearer and more organized outputs. The most effective response was generated by the engineered prompt that included role assignment, audience specification, and structural constraints. This indicates that carefully constructed prompts improve the coherence, relevance, and informational value of AI-generated content.

The scientific novelty of this study lies in demonstrating how subtle differences in natural language structure can influence the quality of responses generated by large language models. The research also proposes a simple systematic approach to prompt construction based on linguistic principles such as clarity, contextualization, and structural constraints. In addition, the study highlights the interdisciplinary connection between applied linguistics and artificial intelligence in optimizing human-AI communication.

In conclusion, linguistic prompt engineering plays a crucial role in improving the effectiveness of interaction with large language models. The study confirms that clear, context-rich, and well-structured prompts lead to more accurate and coherent AI-generated responses. Therefore, the ability to formulate effective prompts should be considered an important digital and communicative competence in the era of artificial intelligence.

References

1. Tom B. Brown et al. (2020). Language Models are Few-Shot Learners. In Proceedings of the Neural Information Processing Systems Conference.
https://doi.org/10.48550/arXiv.2005.14165
2. Jason Wei et al. (2022). Chain-of-Thought Prompting Elicits Reasoning in Large Language Models.
https://doi.org/10.48550/arXiv.2201.11903
3. OpenAI (2023). Prompt Engineering Guide.
https://community.openai.com/t/openais-dec-17th-2023-prompt-engineering-guide/562526

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SECTION II Applied Linguistics and AI Toolkits

THE ART OF CRAFTING HIGH-PRECISION QUERIES FOR LLMS (CHATGPT, CLAUDE, GEMINI)

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Artificial Intelligence (AI) has had significant growth in the world, and Long Language Models (LLMs) have become essential instruments in science and the real world. Prompt engineering makes sure that the model provides correct results by making sure that the prompts are clearly designed. It also enables the execution of complex tasks without the need to adjust the underlying settings. AI-generated responses have to be developed in such a way that researchers, teachers, and other AI professionals need to have the know-how to develop the prompts in an appropriate manner.

The work discusses the crucial sections of the application of prompt engineering, the basic regulations, and the advanced practices, such as thought, iteration, and several experiments. The research also revealed that such technologies as the Prompt Canvas could provide instructions in a systematic approach to creating queries in a structured approach. The study discusses issues such as hallucinations and bias and unreliable outcomes and when to be wary and how to get the most out of the LLMs.

Modern professional communication undergoes a deep transformation through generative artificial intelligence integration [2]. Large language models require complex cognitive strategies to ensure high-precision linguistic outputs [1]. This synergy between human logic and machine processing defines the new architectonics of digital interaction. Effective prompt engineering emerged as a crucial technique for maximizing model utility [1]. The relevance of this study lies in the necessity of mastering AI tools for future scientific and professional activities. The primary goal is to determine how specific linguistic strategies improve communication quality.

Architecting a professional query strictly depends on well-structured input data [1]. Precise linguistic instructions shape the context and specificity of generated responses [1]. Five essential elements form the foundation of effective prompt engineering in applied linguistics [2]. These elements include persona, audience, context, instructions, and output specification [2]. Specialized cognitive methods facilitate complex reasoning within the model's architecture. The chain-of-thought strategy enables step-by-step logical processing [4]. Furthermore, the tree-of-thoughts framework allows for managing multiple reasoning paths simultaneously [4].

Iterative prompting serves as another vital tool for refining professional communication [2]. This method utilizes sequential rounds of feedback to improve generated outputs. The self-refine

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technique effectively mimics human revision by using model-generated feedback loops [4]. Choosing between one-shot and few-shot prompting strategies directly influences result accuracy [1]. Providing clear examples helps the model align with professional linguistic standards. Additionally, code prompting reformulates natural language into structured formats for better interpretability [4].

Unified frameworks help systematize fragmented knowledge within this rapidly evolving field [3]. The Prompt Canvas serves as a structured guide for students and professionals alike [3]. Such tools support the responsible application of large language models in various disciplines. Well-constructed queries effectively mitigate common issues like machine hallucinations [1]. They also reduce linguistic biases and protect data privacy during professional interactions [2]. However, safe use requires a deep understanding of the model's underlying structures [1].

Based on the evidence, several important conclusions are established. It is determined that cognitive strategies significantly enhance the precision of professional AI-driven communication [1, 4]. It is established that advanced prompting techniques improve logical reasoning capabilities [4]. It is classified that successful interaction requires a synergy of context, persona, and clear instructions [2]. It is argued that frameworks like the Prompt Canvas facilitate the integration of AI tools into education [3]. Finally, mastering these technological tools is recognized as an essential competency for modern specialists [1].

The integration of generative artificial intelligence, particularly large language models, is transforming modern professional communication. Effective prompt engineering has emerged as a critical technique for ensuring precise, context-aware, and high-quality outputs. Utilizing cognitive strategies, such as chain-of-thought, tree-of-thoughts, iterative, self-refine, and code prompting, enhances reasoning, accuracy, and alignment with professional linguistic standards. Structured frameworks like the Prompt Canvas help systematize knowledge, guide users, and support responsible application of AI across disciplines. Mastering these techniques and tools is essential for professionals and researchers, as it ensures effective human-AI collaboration, mitigates common challenges such as hallucinations and biases, and strengthens the overall quality of AI-driven communication.

References

1. Chen, B., Zhang, Z., Langrené, N., & Zhu, S. (2025). *Unleashing the potential of prompt engineering for large language models*. *Patterns, 6*(6), Article 101260. https://doi.org/10.1016/j.patter.2025.101260
2. Lin, Z. (2024). *Prompt engineering for applied linguistics: Elements, examples, techniques, and strategies*. *English Language Teaching, 17*(9), 14-25. https://doi.org/10.5539/elt.v17n9p14
3. Hewing, M., & Leinhos, V. (2024). *The Prompt Canvas: A literature-based practitioner guide for creating effective prompts in large language models*. arXiv. https://doi.org/10.48550/arXiv.2412.05127
4. Sahoo, P., Singh, A. K., Saha, S., Jain, V., Mondal, S., & Chadha, A. (2024). *A systematic survey of prompt engineering in large language models: Techniques and applications*. arXiv. https://doi.org/10.48550/arXiv.2402.07927

Kateryna SHARA, Mariia SYLKA The Art of Crafting High-Precision Queries for LLMs (Chatgpt, Claude, Gemini). Book of Conference Proceedings of the *III All-Ukrainian Stage of the Scientific and Practical Language Culture Student Contest: "Linguistic Synergy: Cognitive Strategies and Technological Tools in the Architectonics of Professional Communication"*. Chernivtsi National University, 2026. Pp. 23-24.

SECTION II Applied Linguistics and AI Toolkits

POST-EDITING OF MACHINE-TRANSLATED LEGAL DOCUMENTS: TERMINOLOGICAL ACCURACY AND LEGAL MEANING

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The rapid development of neural machine translation (NMT) systems has significantly transformed the practice of professional translation, including in specialized domains such as law. Modern tools such as Google Translate, DeepL and AI-based systems are capable of producing translations within seconds, creating an impression of reliability and efficiency. However, in the legal domain, translation is not merely a linguistic process but a complex transfer of meaning between different legal systems, where even minor inaccuracies may lead to serious legal consequences.

Legal documents, including contracts, legislative acts and regulatory instruments, are characterized by a high degree of precision, terminological consistency and structural rigidity. Each formulation carries specific legal implications and directly affects the interpretation of rights and obligations. Therefore, the use of machine translation without proper human intervention poses significant risks, particularly in ensuring the accuracy of legal meaning [2].

Despite considerable progress in machine translation technologies, NMT systems still demonstrate significant limitations when dealing with legal texts. These limitations are primarily related to incorrect rendering of modality, literal translation of legal terms without regard to their functional equivalence, inconsistency in terminology and misinterpretation of complex syntactic constructions. Such issues are widely observed in machine-translated legal documents and often require substantial correction during post-editing.

In addition, machine translation systems are not capable of fully accounting for differences between legal systems, which is essential for achieving equivalence in legal translation. As a result, the generated output may distort the intended legal meaning and create ambiguity in interpretation, which is unacceptable in legally binding texts [3].

The purpose of this study is to analyze the role of post-editing in ensuring the quality of machine-translated legal documents, with a particular focus on terminological accuracy and preservation of legal meaning. The research aims to identify typical errors of machine translation in legal texts and to justify the necessity of professional post-editing as an essential stage of the translation process in the legal domain.

Legal translation differs fundamentally from general translation due to its strict requirements for precision, consistency and functional equivalence. Legal language operates within a specific system of norms and concepts, which means that terms cannot be translated in isolation from the legal context in which they function. In many cases, direct lexical equivalents do not exist, and the translator must ensure that the translated term performs the same legal function in the target system.

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One of the key features of legal texts is the importance of modality. Modal verbs such as *shall*, *may*, *must* and *should* express different degrees of obligation, permission or recommendation. Machine translation systems often fail to distinguish these nuances, rendering them as identical or interchangeable forms. As a result, a provision expressing a right may be incorrectly translated as an obligation, which leads to a fundamental distortion of the legal meaning.

Another common issue is the literal translation of legal terminology. Terms such as *consideration*, *tort* or *common law* are deeply rooted in specific legal traditions and cannot be adequately translated without taking into account the differences between legal systems. Machine translation tends to produce word-for-word equivalents, which may be linguistically correct but legally meaningless or misleading. This problem is particularly evident in cross-system translation, where concepts do not have direct counterparts.

Terminological inconsistency also remains a significant challenge. Within a single legal document, the same term must be translated consistently to avoid ambiguity. However, machine translation systems may render the same term differently in various parts of the text, which undermines coherence and may create interpretative conflicts. In legal practice, such inconsistencies can lead to disputes regarding the interpretation of contractual provisions.

In addition, machine translation often struggles with complex syntactic structures and conditional clauses that are typical for legal texts. Phrases such as *"subject to"*, *"notwithstanding"* or *"in the event that"* carry specific legal meanings and cannot be simplified without loss of precision. Automated systems frequently either oversimplify these constructions or translate them incorrectly, which affects the logical structure of the document.

Another important limitation concerns internal references and document structure. Legal texts contain numerous cross-references to sections, clauses and other нормативні акти. Machine translation may misinterpret these references or translate them inconsistently, thereby disrupting the internal coherence of the document.

These issues demonstrate that, despite technological advancements, machine translation is not capable of ensuring the level of accuracy required in legal communication. Therefore, the output generated by such systems must be treated as a preliminary draft that requires careful verification and correction by a qualified specialist [5].

Given the limitations of machine translation in the legal domain, post-editing becomes a crucial stage in the translation process. Its primary function is not only to correct linguistic inaccuracies but also to ensure the preservation of legal meaning, terminological consistency and compliance with the norms of the target legal system.

Post-editing of legal texts involves several key tasks. First, it requires verification of the correct rendering of rights and obligations, particularly in relation to modal verbs and conditional constructions. Second, it ensures consistency in the use of legal terminology throughout the document. Third, it involves adapting the translation to the legal and cultural context of the target language, which is essential for achieving functional equivalence.

In addition, post-editing includes the verification of internal references, document structure and formatting, which are integral components of legal texts. Special attention must be paid to standardized legal expressions and formulaic language, as their incorrect translation may alter the

legal effect of the document. These aspects highlight that post-editing in the legal field requires not only linguistic competence but also a deep understanding of legal systems and concepts [4].

Machine translation has become an important tool in modern translation practice, offering speed and accessibility. However, in the legal domain its application remains limited due to the high requirements for accuracy and the complexity of legal language.

The analysis has shown that machine translation systems are prone to a range of errors, including incorrect rendering of modality, literal translation of legal terms, terminological inconsistency and misinterpretation of complex structures. Such errors may significantly distort legal meaning and lead to incorrect interpretation of legal provisions.

Therefore, post-editing should be considered an essential and mandatory stage in the translation of legal documents. It ensures terminological accuracy, preserves the intended legal meaning and adapts the text to the target legal system. The effectiveness of this process largely depends on the qualifications of the specialist, who must possess both linguistic and legal expertise.

In this context, machine translation should be viewed not as a substitute for professional translation, but as a preliminary tool that requires thorough human revision. Only the combination of technological efficiency and expert post-editing can ensure the quality and reliability of legal translation.

References

1. Holovash, I., Shcherbyna, T. Machine Translation and Its Post-Editing as Means of Forming the Foundations of Translation Competence. Naukovyi Visnyk Uzhhorodskoho Universytetu. Series: Philology. 2025. Vol. 1, no. 53. P. 78–83. Available at: https://doi.org/10.24144/2663-6840.2025.1.(53).78-83 (accessed: 24.03.2026).
2. Riabova, K. Some Aspects of the Impact of Neural Machine Translation Systems on the Quality of Translation of Texts in the Field of Law. Humanities Science Current Issues. 2024. Vol. 2, no. 78. P. 220–225. Available at: https://doi.org/10.24919/2308-4863/78-2-32 (accessed: 24.03.2026).
3. Profpereklad. Machine Translation of Legal Documents: Why Contracts and Legislative Acts Require Professional Editing. Available at: https://profpereklad.ua/mashinnij-pereklad-juridichnih-dokumentiv-chomu-dogovori-j-zakonodavchi-akti-potrebujut-redaguvannja-fahivcem/ (accessed: 24.03.2026).
4. Higher School of Advocacy of the National Bar Association of Ukraine. Legal Regulation of Translation Activities and Translation. Available at: https://www.hsa.org.ua/blog/pravnice-reguliuvannia-perekladackoyi-diialnosti-ta-perekladu (accessed: 24.03.2026).
5. Khodakovska, O. O., Babaievska, L. V. Machine Translation of English-Language Legal Texts: Distinctive Characteristics of Post-Editing. Transcarpathian Philological Studies. 2023. Vol. 1, no. 32. P. 156–161. Available at: https://doi.org/10.32782/tps2663-4880/2023.32.1.28 (accessed: 24.03.2026).

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THE 'LOST IN COMPUTATION' EFFECT: VALIDATING AI-TRANSLATED EVIDENCE IN INTERNATIONAL ARBITRATION

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Relevance of the topic: Artificial intelligence has advanced so far that it has become a mundane tool for translating text. However, risks arise from its limitations. Legal professionals overlook substantive errors masked by syntactic perfection. This phenomenon, where such perfection obscures the distortion of legal meaning, is explored in this research under the term «lost in computation».

Research subject: The study examines the "lost in computation" effect in AI-assisted legal translation within international arbitration and proposes a validation framework to mitigate its procedural risks.

What makes this effect distinct is not the fact of error itself, but how it is produced. This is unlike any other type of linguistic error, as it is of a technical nature. Incomplete text processing leads the algorithm to lose the context of the macro-level of the document [1]. Moreover, the algorithm constructs the text through a simulation of the context, filling the gaps with the most probable information. This is referred to as hallucinations in academic literature [2]. An instance of this is the experiment conducted with the International Commercial Arbitration Court (ICAC), during which the algorithm started producing evidence for the parties through the simulation of invoices and false charges of forgery. Additionally, it failed to adhere to the procedural requirements prior to arbitration [3].

The danger is not in the presence of the mistake but in the fact that it is almost impossible to detect [1]. When specialists are presented with a finished text produced with the help of an AI tool, they immediately start checking grammar rather than questioning the text's content [4]. This is particularly distinctive when working with legal texts, which often contain culture-specific vocabulary. In such situations, the syntactical technical perfection masks the absence of pragmatic understanding. For instance, while working with Arabic legal texts, the AI strictly followed grammatical rules but did not take pragmatic aspects into account, such as culture-specific forms of address and dates in the Hijri calendar, which led to a distortion of the text's legal content [2].

Both AI evidence fabrication and culturally inaccurate terminology stem from a deeper structural problem, as different legal systems have different terminologies, which are not easily comparable or analogous. This is called legal anisomorphism, where an algorithm based on statistical probability cannot comprehend the differences between various legal systems' terminologies, leading to the misuse of two concepts that are actually different from one another. This is called

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terminological diffusion, as seen in the concepts of damages and injuries, where damages refer to compensation, whereas injuries refer to harm in law. Although both of these concepts are similar in nature, they are actually different in terms of the burden of proof and the determination of the compensation amount [1].

Beyond translation accuracy, these errors carry direct professional and legal consequences in terms of professional responsibility and international recognition of the award. This is confirmed by the precedent of the Mata v. Avianca case, where a lawyer was held liable not for the use of artificial intelligence, but for the presentation of incorrect citations as facts, which is a violation of the standard of technological competence. In any case, responsibility remains with the professional [5]. At the international level, these risks cannot be tolerated. The New York Convention allows refusal of recognition when a party could not properly present its case. The use of translations with significant distortions, especially because of algorithmic errors, can be seen as such a procedural defect [4].

However, the question arises about the optimal manner in which work is organized with machine translation. Increased review of the AI output without changing the approach does not guarantee an adequate level of control, especially because the nature of the output may hinder critical perception. The alternative to the approach described is the "Augmented Translation" model, used by the Court of Justice of the European Union (CJEU). The distinguishing feature is that the translator does not work from 'a ready-made machine-generated text'. Instead, the specialist works with the 'terminological options and fragments from the authoritative databases Euramis and IATE and builds the translation independently, using the algorithm as a reference tool'.

This kind of approach would allow the acquisition of a given professional skill named cognitive courage, which is the ability to think critically about the text that has been fluently created, to identify discrepancies, and to propose solutions that go beyond the literal meaning of the word as described in the dictionary. Moreover, as shown through the survey of 101 professional legal translators, such a skill is becoming a necessity in the context of working with artificial intelligence. At the same time, the dominant position of the lawyer-linguist is secured [6].

From the perspective of practical implementation, it is proposed that arbitral tribunals adopt a set of protocols that make it mandatory to incorporate, along with the translation of evidence produced through the application of artificial intelligence and which is relevant to the merits, a “Certificate of Independent Human Validation.” This makes it obligatory rather than merely recommended that the verification process be followed [3].

Taken together, the integration of artificial intelligence in international arbitration processes poses a significant risk of errors. What makes this risk particularly critical is its nature: in the "lost in computation" phenomenon, syntactical perfection hides substantive inaccuracies in law and semantics, which are difficult to detect. If the issue of errors is not addressed properly, it would compromise the procedural integrity of the international arbitration processes. To address the issue of errors properly, the following proposals have been made: the adoption of the "Augmented Translation" model, whereby "AI is used only as a reference tool, but never as a source of output"; the mandatory requirement of a "Certificate of Independent Human Validation" of the AI-produced evidentiary translations; and, in general terms, the adoption of the "Human-in-the-Loop" model of international arbitration processes. It is only through the adoption of these models that the

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international arbitration processes would be able to take full advantage of the efficiency benefits of artificial intelligence without compromising the fundamental principles of "due process" and "rule of law" [4]. Efficiency without accountability is not progress, it is a liability waiting to materialize.

References

1. Setkowicz-Ryszka, A. (2025). Post-editing of machine translation output in the training of legal translators. Lodz: Doctoral School of Humanities of the University of Łodź.

DOI: 10.55019/plr.2023.1.27-44

2. Badah, A. M., et al. (2025). The usage of artificial intelligence in legal translation: Bridging the gap between law and language. Ampersand, 10, 1–15. https://doi.org/10.1016/j.amper.2025.100248.

3. Padura, A. (2024). AI (artificial intelligence) in international arbitration: Risks vs advantages. Vilnius: Mykolas Romeris university law school.

DOI:10.1007/978-3-032-09127-7_2

4. Kalanauri, Z. (2024). Artificial intelligence in the realm of international arbitration. Lahore: Lahore University of Management Sciences.

5. Chude, M. (2024). The role of generative artificial intelligence in streamlining of arbitration process. International Journal of Civil Law and Legal Research, 5(1), 9–12.

6. Wright, S. (2025). Artificial intelligence in legal translation at the Court of Justice of the European Union. International Journal of Language & Law, 14, 120–142. https://doi.org/ 10.14762/jll.2025.120.

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SECTION II Applied Linguistics and AI Toolkits

INTEGRATING GENERATIVE AI INTO LEGAL TRANSLATION: PRECISION AND FUTURE PROSPECTS

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With the rapid development and implementation of artificial intelligence (AI) across various domains, especially high-stakes sectors like medicine, engineering, and legal practice, the proper use of generative AI has become crucial. Although modern large language models (LLMs) continue to evolve, they remain prone to flaws such as hallucinations and syntactic ambiguity. Despite these limitations, the responsible use of generative AI holds immense promise for humanity, particularly in the field of international law. This paper explores the potential integration of generative AI into legal translation and the difficulties lawyer-linguists might face when adapting to the ever-evolving modern technology.

International law is a vast and complex legal system vital to humanity's existence. Even after decades of evolution, it remains imperfect, and the problem of most documents not being granted multilingual access is still relevant to this day. Legal translation is quite a complicated process requiring competence, determination and profound knowledge of legal terminology in at least two languages. Furthermore, the same concept in different languages might take different forms that don't necessarily align and are often impossible to translate directly. It's especially challenging to accurately express concepts when translating to a language of a different origin, since the translator might view it through the prism of their own mother tongue. Needless to say, translating legal documents requires a significant investment of time, money, and human resources, yet it remains necessary to ensure access to justice and transparency for as many people as possible.

Use of machine translation (MT) can help reduce repetitive and mundane work, allowing lawyer-linguists to focus more on creative and dependent on human intellect tasks. Machine translation was demonstrated in the 1950s and has been actively used ever since. Over the years, it has undoubtedly improved; however, despite increased quality of the generated content, it still requires human revision and, in some cases, editing. Validation and proofreading are essential when translating legal documents, especially since the translation must accurately reflect the original content of a legal act in order to be authenticated. Even modern large language models are prone to mistakes. So-called "hallucinations" or syntactic ambiguity in generated responses are not so rare and impose risk, as they are subtle and much more deceiving than obvious absurdity.

However, such malfunctions are not the only drawbacks of machine translation: firstly, it also cannot detect intentionally ambiguous statements. If the passage provided in the original document has been contemplated to be vague or imprecise, the LLM won't recognize it as such and therefore will provide an inaccurate statement; secondly, the probability of the LLM using inappropriate terminology is quite high, especially in languages with complicated legal terminology (such as German, Chinese, etc.). While all these flaws are indeed unfortunate, they only highlight the

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importance of human supervision when using generative AI and don't negate the positive prospects that effective use of it can bring.

Numerous mitigation strategies focus on refining machine translation. And although imperfect, empirical research shows that modern AI-powered tools can provide decent results, even when translating slightly less common languages, such as Dutch and Polish:"The comparative analysis of machine translation of the chosen legal text has shown that there are problems that are typical for legal translation in general and especially in the analyzed language combination, resulting from complex legal terminology and phraseology or lexical features of legal texts written in both languages. In both cases of open domain machine translation systems, terminology errors were noted"[1; p. 5552].

Authoritative institutions like theCourt of Justice of the European Union (CJEU) are already actively using AI-powered tools in order to translate legal acts. According to Susan Wright's analysis based on her experience as an ex-Director in Legal Translation at the Court of Justice of the European Union, eventhough the future of AI is vague and unpredictable, it is actively reviewed by the Court [2]. Whether the Court will officially adopt the approach of using generative AI directly is still undecided.

However, it is clear that it will significantly impact the role of a lawyer-linguist as such. The skill set required for such a position will likely expand to include profound digital literacy, an understanding of AI's capabilities and limitations, and, especially, an unbiased outlook on AI. Machine translation might instigate undue skepticism and, as a result, get dismissed by an individual. While a lack of trust in a newly discovered tool may seem reasonable, the ability to objectively analyze and execute tasks, even in an unpredictable environment, is of utmost importance.

In conclusion, the forthcoming implementation of generative AI into legal translation promises to be highly effective and beneficial. While it requires significant adjustments across the entire system and a re-evaluation of a lawyer-linguist's role in it, the proper use of machine translation can reduce unnecessary and repetitive work, allowing professionals to focus on more creative aspects of translation. The evolution of artificial intelligence is fast and unpredictable; thus, many questions regarding its future remain unanswered. Still, it's certain that it will unavoidably affect the domains of international law and legal translation.

References

1. Greńczuk, A., Chomiak-Orsa, I., & Tryczyńska, K. (2024). AI-supported translation tools for legal texts: A comparative analysis. In Proceedings of the 28th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems (KES 2024). Procedia Computer Science, 246, 5545–5554. https://doi.org/10.1016/j.procs.2024.09.707
2. Wright, S. (2025). Artificial intelligence in legal translation at the Court of Justice of the European Union. Journal of Language and Law, 14, 120–142. https://www.languageandlaw.eu/jll/article/view/216/103

SECTION III Sociolinguistic Transformation of the Labor Market and Pragmatics of Intercultural Communication

LINGUISTIC CAPITAL AS A FACTOR IN THE CAPITALIZATION OF SPECIALISTS IN THE GLOBAL LABOR MARKET

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In the context of globalization and the intensification of international economic and professional interactions, language competencies are acquiring the status not only of a communication tool but also of an important socio-economic resource. The growing role of transnational companies, international labor mobility, and the digitalization of the professional environment highlight the relevance of studying linguistic capital as a factor in the capitalization of specialists in the global labor market.

The theoretical foundation of this study is based on the concept of linguistic capital developed by Pierre Bourdieu in Language and Symbolic Power, where language practices are considered a component of cultural capital that determines an individual's social position and access to resources. In this context, language competence functions as a form of symbolic power that can be transformed into economic advantages in the labor market.

This idea is further developed in the works of Abram de Swaan, particularly in A Political Sociology of the World Language System, where the existence of a hierarchical structure of languages in the global space is substantiated. This hierarchy leads to the unequal distribution of linguistic capital and determines the competitive advantages of specialists depending on their proficiency in languages of international communication.

Particular attention is given to the English language as a global linguistic resource, as analyzed in Robert Phillipson's Linguistic Imperialism. The dominance of English in international business, science, and technology creates new requirements for professional training and increases the importance of language skills in the economic realization of specialists.

The economic dimension of linguistic capital is revealed in contemporary research, particularly in the work of T. Schroedler, which demonstrates that foreign language proficiency directly correlates with income level, professional mobility, and career advancement. At the same time, Jörg Rössel and Johannes H. Schroedter emphasize the unequal access to linguistic capital, which affects opportunities for integration into the transnational economic space.

In the modern professional environment, linguistic capital also serves as a factor in shaping status and professional identity, as evidenced by the studies of Jacob Lauring, Ivaylo Vulchanov, and Sören Stoermer, as well as publications in the Journal of English for Academic Purposes focusing on the formation of linguistic capital in international academic and professional contexts.

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Thus, the relevance of the topic lies in the need for a comprehensive understanding of language competencies as a strategic resource that ensures the competitiveness of specialists in the global market. The aim of this report is to analyze linguistic capital as a factor in the capitalization of specialists and to determine its impact on professional mobility, economic opportunities, and the formation of professional identity in a globalized world.

I. Theoretical Foundations of Linguistic Capital

According to Pierre Bourdieu, linguistic capital is the set of language skills possessed by an individual that determines their position in society, delegated by powerful institutions. The capitalization of a specialist occurs through the "linguistic market," where a specialist's statements are evaluated as "linguistic products." The value of these products depends on the context:

-Language has market value if it can be used for financial gain or if a price can be assigned to it (for example, higher wages for proficiency in a particular language).

-Specialists vary their linguistic expressions (register, style) so that they meet the requirements of a specific market (workplace, educational environment), anticipating a higher value of their "product" in these contexts. [1] In our opinion, Bourdieu's concept of linguistic capital remains highly relevant in the modern globalized world, where language proficiency directly influences professional opportunities and social mobility. The idea of a "linguistic market" is especially evident today, as employers increasingly evaluate specialists not only by their technical skills but also by their ability to communicate effectively in international environments. This demonstrates that the value of linguistic capital has grown even more in the digital era, where communication across borders has become a routine part of many professions. Therefore, the ability to adapt one's language to different professional contexts can be considered a strategic competence that enhances both employability and career advancement.

II. English as a Global Linguistic Resource

In the global market, English functions as the main tool of capitalization due to its role as a lingua franca. [3] According to the Power Language Index, English provides specialists with the greatest opportunities in five areas: travel, earning potential, communication, access to knowledge, and diplomacy. [6]

In South Korea, proficiency in English is considered a valuable asset that enables individuals to obtain prestigious degrees and well-paid jobs, thereby increasing their personal competitiveness in employment and career advancement. [6] In Ukraine, research shows that the level of English proficiency directly correlates with higher social status, greater material well-being, and employment in the most profitable sectors of the economy. [7] In our view, the dominance of English as a global lingua franca has transformed it into one of the most valuable forms of linguistic capital in the contemporary world. The examples of South Korea and Ukraine clearly demonstrate that English proficiency is not only a communication tool but also a mechanism of social stratification and professional differentiation. This situation creates both opportunities and inequalities in access to global communication and professional mobility [3]. English proficiency today functions as a key factor of competitiveness, shaping an individual's chances for economic mobility and integration into the global professional community.

III. Transnational Linguistic Capital and Multilingualism

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For a specialist in the global market, capitalization also depends on the level of transnational linguistic capital — the ability to operate fluently in several foreign languages. Using the example of Switzerland, fluency in several national or foreign languages significantly expands opportunities in the labor market, especially for high-level positions and roles in public administration. Transnational experience (such as working abroad or maintaining international professional contacts) directly contributes to the accumulation of this capital, increasing the professional value and competitiveness of a specialist [4].

The global language system forms a hierarchical network that connects humanity, usually distinguished in four levels:

- Peripheral languages: About 98% of the world's languages, used mainly for oral communication within small communities.
- Central languages: Around 100 languages (national and official) with a written tradition, used in education and media.
- Supercentral languages: 12 languages (including Arabic, Chinese, French, German, Russian, Spanish, and Hindi) functioning as connectors between central languages.
- Hypercentral language: Today, English is the only language at this level, connecting the supercentral languages and serving as a global standard in science, international business, and law [2].

The power of a language and its potential for the capitalization of a specialist are determined by five key opportunities: to travel, to earn, to communicate, to access knowledge, and to engage in diplomacy. [6] In our opinion, the concept of transnational linguistic capital reflects the realities of the modern global labor market, where multilingualism is becoming an essential professional advantage rather than an optional skill. The example of Switzerland illustrates how the ability to function in several languages allows specialists to move more freely between regions, institutions, and professional fields. We believe that the hierarchical structure of the global language system further reinforces this process: languages with greater international influence provide their speakers with broader access to economic, educational, and political resources. In this context, the Power Language Index demonstrates that the value of a language is determined not only by the number of its speakers but also by the opportunities it creates. Therefore, multilingual competence can be seen as a strategic form of capital that significantly increases a specialist's mobility, adaptability, and long-term career prospects.

IV. Economic Mechanisms of Specialist Capitalization

Linguistic capital produces measurable economic effects, like wage premia. Studies in United States, Canada, and Israel show that fluent English proficiency (at a "good" or "very good" level) can increase earnings by 30%–50%. In United Kingdom, the lack of basic literacy may lead to an income penalty of around 15%.

Language competence also contributes to reducing transaction costs, lowering the expenses of information search and overcoming cultural barriers, which is particularly important in areas such as international trade, tourism, and financial flows. For migrant specialists, knowledge of the language of the host country acts as a tool that allows them to "translate" and apply their previous human capital (education and professional experience) in a new labor market [8].

The presented data demonstrate that linguistic capital should be considered not merely a cultural or communicative resource, but also a significant economic asset that directly influences a specialist's position in the labor market. The existence of wage premia associated with foreign language proficiency confirms that language skills are monetized and integrated into the mechanisms of professional stratification. At the same time, the ability to reduce transaction costs through effective communication increases the efficiency of professional interactions and strengthens the competitiveness of multilingual specialists in international economic environments.

From this perspective, language competence functions as a key medium that enables the transferability of human capital across national borders. For migrant professionals in particular, insufficient language proficiency may lead to the underutilization of their education and professional experience, while high proficiency allows them to convert previously acquired skills into tangible economic outcomes. This indicates that linguistic capital plays a decisive role in ensuring not only employment, but also the adequacy of occupational placement in accordance with a specialist's qualifications.

V. Symbolic Capital: Status and Reputation

Linguistic capital also performs an important symbolic function in shaping professional status and reputation. A high level of proficiency in a dominant working language, particularly English, may act as a compensatory mechanism that offsets a lower level of professional recognition when the success of cooperation or teamwork is evaluated. In such cases, linguistic competence influences not only communication efficiency but also the perception of expertise. This phenomenon is often described as an "unearned status gain" whereby specialists with strong linguistic skills are perceived as more capable and authoritative than colleagues whose technical competence may be higher but whose language proficiency is weaker. Conversely, specialists whose linguistic resources are devalued—due to factors such as a strong accent or insufficient mastery of the socially legitimate language—are frequently perceived as less competent. This perception can lead to the devaluation of their professional contributions, a reduction in social and professional status, and ultimately to limited career opportunities. [5] In addition to its economic dimension, linguistic capital significantly affects the symbolic hierarchy within professional communities. The ability to communicate fluently in a dominant language often shapes perceptions of competence, authority, and professionalism. As a result, language proficiency may serve as a compensatory mechanism that enhances a specialist's perceived expertise, even when their technical competence is not superior to that of their colleagues. Such dynamics illustrate how linguistic capital can generate symbolic advantages that are not always directly related to objective professional performance.

In conclusion, linguistic in the contemporary globalized world functions as a multidimensional resource combining economic, social, and symbolic value. Proficiency in dominant international languages, particularly English, facilitates communication, access to education, employment, and professional mobility. The global hierarchy of languages and unequal access to linguistic resources contribute to the reproduction of social and economic inequalities among specialists.

At the same time, linguistic capital enables the conversion of human capital into economic and symbolic advantages, influencing wage levels, career trajectories, and professional recognition.

Language proficiency should be regarded as a strategic component of professional development and a crucial factor in the successful integration of specialists into the global labor market.

References

1. Bourdieu, P. (1991). Language and symbolic power. Harvard University Press. URL:https://monoskop.org/images/4/43/Bourdieu_Pierre_Language_and_Symbolic_Power_1991.pdf
2. De Swaan, A. (2001). Words of the world: The global language system. Polity Press. URL:https://content.e-bookshelf.de/media/reading/L-3863310-10b30006b5.pdf
3. Phillipson, R. (1992). Linguistic imperialism. Oxford University Press. URL:https://www.academia.edu/84488883/Robert_Phillipson_Linguistic_imperialism_Oxford_applied_linguistics_Oxford_and_New_York_Oxford_University_Press_1992_Pp_ix_365
4. Rössel, J., & Schroedter, J. H. (2021). The unequal distribution of linguistic capital. PLOS ONE. URL:https://pmc.ncbi.nlm.nih.gov/articles/PMC8022684/
5. Lauring, J., Vulchanov, I., & Stoermer, S. (2022). Linguistic capital and status. URL:https://researchapi.cbs.dk/ws/portalfiles/portal/94155144/jakob_lauring_et_al_linguistic_capital_and_status_publishersversion_2_.pdf
6. 6. Chan, K. L. (2016). The Power Language Index. URL:http://www.kailchan.ca/wp-content/uploads/2016/12/Kai-Chan_Power-Language-Index-full-report_2016_v2.pdf
7. . Soroka, Y., Kudriavtseva, N., & Danylenko, I. (2023). Language and social inequalities in Ukraine: Monolingual and bilingual practices. Ideology and Politics Journal, 2(24). URL: https://doi.org/10.36169/2227-6068.2023.02.00003
8. Isphording, I. E. (2014). Language and labor market success (IZA Discussion Paper No. 8572). Institute of Labor Economics (IZA). URL: https://www.econstor.eu/bitstream/10419/104646/1/dp8572.pdf

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SECTION III Sociolinguistic Transformation of the Labor Market and Pragmatics of Intercultural Communication

SOCIOLINGUISTIC APPROACH: THE RELATIONSHIP BETWEEN LANGUAGE AND SOCIETY, SOCIAL ROLES OF DISCOURSE PARTICIPANTS

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The sociolinguistic approach to the study of socio-political discourse is grounded in the understanding of language as a social phenomenon that operates in close interaction with society, its structures, norms, and systems of power. Within this framework, language is not merely a neutral medium for conveying information; rather, it is an active instrument of social interaction through which relationships are constructed, maintained, negotiated, and transformed. Special attention is paid to the dependence of speech on such factors as the speaker's social status, institutional role, communicative intentions, and the expectations and characteristics of the audience. Consequently, socio-political discourse is conceptualized as a complex, dynamic system in which every linguistic choice carries social meaning and contributes to broader processes of social organization and influence.

A central dimension of this approach is the exploration of the relationship between language and society. Linguistic choices in political discourse invariably reflect underlying social interests, ideological positions, and value systems. For instance, the same policy may be framed as "economic modernization" by its proponents, while critics may describe it as "market liberalization at the expense of social protection." Similarly, military actions can be labelled as "defensive measures," "peace enforcement," or "aggression," depending on the ideological stance of the speaker. Even subtle lexical differences—such as "undocumented migrants" versus "illegal immigrants" — carry significant ideological weight, shaping how audiences perceive social groups and political realities. These examples demonstrate that language functions not only as a descriptive tool but also as a mechanism for framing, evaluating, and legitimizing particular interpretations of reality.

Equally important is the analysis of the social roles of participants in political communication. Different actors—politicians, journalists, experts, activists, and ordinary citizens—employ distinct discursive strategies aligned with their roles and objectives. Politicians often rely on carefully crafted rhetoric designed to persuade, unify, and mobilize. Their speeches frequently include inclusive pronouns ("we," "our nation"), emotionally resonant phrases, and simplified narratives that appeal to shared values. For example, statements like "we will overcome these challenges together" or "this is a historic moment for our country" are intended to foster collective identity and optimism. Journalists, by contrast, may adopt investigative or critical tones, using questioning strategies such as "what are the real consequences of this decision?" or "who benefits from this policy?" Experts tend to employ specialized terminology and analytical frameworks, contributing authority and credibility to public debates. Meanwhile, citizens, particularly in digital environments, often use informal, expressive,

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and sometimes confrontational language, including sarcasm, irony, and humor, as seen in comments like “another promise, same result” or “nothing ever changes.”

The sociolinguistic perspective also highlights how language operates as an instrument of power and control. Political discourse frequently employs euphemisms, metaphors, and strategic ambiguity to shape public perception. For example, phrases such as “collateral damage” instead of “civilian casualties,” or “enhanced security measures” instead of “restrictions on civil liberties,” serve to obscure or soften potentially negative realities. Metaphors play a particularly powerful role: economic processes may be framed as “engines of growth,” migration as a “wave” or “flood,” and political competition as a “race” or “battle.” These metaphorical frameworks guide interpretation by emphasizing certain aspects of reality while downplaying others. Additionally, the use of repetition, slogans, and simplified binaries—such as “progress vs. stagnation” or “order vs. chaos”—helps reinforce particular narratives and makes them more accessible and memorable to the public.

In the contemporary media environment, the nature of socio-political discourse has become increasingly complex and multifaceted. The rise of digital platforms has led to the emergence of hybrid forms of communication that combine text, visuals, audio, and interactive elements. Political messages are often condensed into brief, impactful formats—tweets, headlines, slogans, or short videos—that prioritize immediacy and emotional resonance over detailed argumentation. For example, a short post stating “we choose freedom” or “time for change” may carry significant persuasive force despite its brevity. Hashtags such as “#democracy,” “#reform,” or “#resistance” function not only as organizational tools but also as symbolic markers of political alignment. At the same time, memes and viral content introduce humor and satire into political discourse, enabling users to critique authority in indirect yet highly effective ways.

Another important aspect is intertextuality, which refers to the way political texts draw upon and reference other texts, historical events, or cultural symbols. For instance, invoking phrases like “a new chapter in our history” or referencing past struggles and victories allows speakers to situate current events within a broader narrative framework. Quotations from influential leaders or echoes of well-known slogans can lend legitimacy and emotional depth to political messages. This layering of meanings enriches discourse and enhances its persuasive potential.

The sociolinguistic approach also pays close attention to linguistic variation shaped by social factors such as age, education, class, region, and political orientation. Political actors often tailor their language to resonate with specific audiences. For younger audiences, communication may include informal expressions, digital slang, or references to popular culture, such as “this is your moment” or “be part of the change.” In contrast, messages directed at more traditional audiences tend to emphasize formality, stability, and continuity, using phrases like “we remain committed to our principles” or “it is our duty to ensure stability.” Multilingual contexts further complicate this picture, as the choice of language itself can signal identity, solidarity, or political positioning.

Identity construction remains a key function of socio-political discourse. Through linguistic means, speakers create and reinforce group boundaries, defining who belongs and who does not. The opposition between “we” and “they” is particularly significant: statements like “we stand united” versus “they threaten our values” establish clear divisions and can mobilize support or justify certain

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actions. Such constructions are especially prominent during periods of conflict, crisis, or electoral competition, when the need for cohesion and differentiation becomes more acute.

The pragmatic dimension of discourse further reveals how meaning extends beyond literal expression. Political statements often rely on presuppositions and implied meanings. For example, the phrase "we must restore order" presupposes that disorder exists, while "once again, we face challenges" implies a pattern of recurring difficulties. These subtle mechanisms allow speakers to influence perception without making explicit claims, thereby shaping audience interpretation in a more indirect yet powerful way.

Finally, the sociolinguistic approach encompasses issues of language policy and planning, recognizing that language itself can be a site of political struggle. Decisions about which language or variety to use in official communication, education, or media are deeply connected to questions of identity, power, and inclusion. For instance, promoting a national language may strengthen unity but also marginalize minority groups, while multilingual policies may reflect attempts to balance diversity and cohesion.

In conclusion, the sociolinguistic approach offers a comprehensive and nuanced framework for analysing socio-political discourse as a dynamic and multifaceted phenomenon. It demonstrates that language is not simply a passive reflection of social reality but an active force in shaping it. Through countless examples—from lexical choices and rhetorical strategies to digital communication practices—it becomes evident that language plays a crucial role in constructing meaning, influencing public opinion, and organizing social and political life. In an era characterized by rapid information exchange and intense communicative competition, understanding these processes is more important than ever.

References

1. Norman Fairclough. Language and Power. London: Longman, 1989.
2. Norman Fairclough. Critical Discourse Analysis: The Critical Study of Language. London: Routledge, 1995.
3. Teun A. van Dijk. Discourse and Power. New York: Palgrave Macmillan, 2008.
4. Ruth Wodak, Michael Meyer (eds.). Methods of Critical Discourse Analysis. London: Sage, 2001.
5. Dell Hymes. Foundations in Sociolinguistics: An Ethnographic Approach. Philadelphia: University of Pennsylvania Press, 1974.
6. William Labov. Sociolinguistic Patterns. Philadelphia: University of Pennsylvania Press, 1972.

Valeria KUMANYOK Sociolinguistic Approach (the Relationship Between Language and Society, Social Roles of Discourse Participants). Book of Conference Proceedings of the *III All-Ukrainian Stage of the Scientific and Practical Language Culture Student Contest: "Linguistic Synergy: Cognitive Strategies and Technological Tools in the Architectonics of Professional Communication"*. Chernivtsi National University, 2026. Pp. 38 - 40.

SECTION III Sociolinguistic Transformation of the Labor Market and Pragmatics of Intercultural Communication

THE POLITICAL SCIENCE APPROACH TO DISCOURSE (DISCOURSE AS AN INSTRUMENT OF POLITICAL STRUGGLE AND POWER)

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The political science approach considers discourse not simply as a medium for communication or a neutral exchange of information, but as a sophisticated, multi-layered instrument used to influence public opinion, shape political realities, and maintain or challenge existing power structures. In this academic perspective, language transcends its basic communicative function and becomes a strategic tool that political actors—ranging from heads of state and international organizations to grassroots activists and opposition movements—utilize to construct meanings, promote specific ideologies, and legitimize their authority. Political discourse is an all-encompassing phenomenon; it is not limited to formal parliamentary speeches or manifestos. It includes televised debates, sophisticated political campaigns, official government statements, media interviews, and the increasingly influential, rapid-fire nature of social media interactions. Through these diverse channels, politicians attempt to persuade citizens, mobilize apathetic supporters, and systematically discredit their opponents. Therefore, discourse plays a fundamentally crucial role in the nature of political competition and the overarching struggle for dominance in the public sphere. To understand discourse as an instrument of power, one must delve into the theoretical frameworks provided by 20th-century political philosophy.

The Foucaultian Perspective: One of the foundational ideas in this approach is that discourse is inextricably linked to the exercise of power. Michel Foucault argued that discourse is not merely that which translates struggles or systems of domination, but is the power which is to be seized. It is a system that determines the "regime of truth": who is allowed to speak with authority, what topics are considered "sane" or "rational" to discuss, and what ideas are discarded as marginal. By controlling the discourse, a political regime effectively defines the boundaries of "common sense" and social acceptability.

Gramscian Hegemony and Manufactured Consent: Antonio Gramsci's concept of "cultural hegemony" further illuminates how ruling classes maintain their position not through overt coercion or violence, but through a discursive process that makes their leadership and values seem natural, inevitable, and beneficial for all. This is achieved by saturating the public sphere with specific narratives that align the private interests of the elite with the general aspirations of the population, thereby creating a "manufactured consent."

A fundamental issue of the political science approach is the realization that language does not merely reflect a pre-existing reality; rather, it actively helps to create the reality. The way politicians and media outlets describe events can fundamentally alter how a society perceives and understands them. This process is known as "framing." The framing of an issue involves a selective emphasis on

Kristina MACHVARYANI The Political Science Approach to Discourse (Discourse as an Instrument of Political Struggle and Power). Book of Conference Proceedings of the *III All-Ukrainian Stage of the Scientific and Practical Language Culture Student Contest: "Linguistic Synergy: Cognitive Strategies and Technological Tools in the Architectonics of Professional Communication"*. Chernivtsi National University, 2026. Pp. 41 - 43.

certain aspects of a reality while obscuring others to promote a particular problem definition or moral evaluation. For example, a significant shift in a nation's border policy might be framed by the incumbent government as "the restoration of national sovereignty and the rule of law," aiming to evoke feelings of security and patriotism. Conversely, the opposition might frame the exact same policy as "a humanitarian crisis and a violation of international human rights," shifting the focus to morality and empathy. Similarly, a military intervention can be sanitized through the label of a "peacekeeping mission" to garner moral support, while critics may describe it as an "imperialist invasion" or "unprovoked aggression." These lexical choices are never accidental; they are precisely engineered to trigger specific cognitive frames and emotional responses in the citizenry.

Modern political actors employ highly sophisticated rhetorical devices designed to bypass critical thinking and resonate with the subconscious biases of the audience.

Simplification and Cognitive Anchoring: In an era of information overload, complex geopolitical or economic issues—such as global inflation, trade deficits, or systemic climate change — are often reduced to pithy, digestible slogans. For instance, slogans like Barack Obama's "Yes we can" or the Brexit campaign's "Take Back Control" function as powerful discursive anchors. These phrases are intentionally vague, serving as "empty signifiers" that allow diverse groups of people to project their own individual hopes and frustrations onto a single political movement.

Metaphorical Mapping: The use of metaphors is a key strategy for making the abstract feel concrete. Terms like "the war on poverty," "the iron curtain," or "economic headwinds" map familiar concepts onto complex political processes. This framing makes certain political actions (like increased spending or restrictive legislation) seem not only logical but morally imperative.

Perhaps the most potent use of discourse as a tool of struggle is the construction of a binary social identity: "Us" versus "Them." This strategy of "othering" is a cornerstone of populist and nationalist rhetoric, designed to mobilize a loyal base by creating an external or internal enemy.

In-group/Out-group Dynamics: Political leaders frequently utilize collective pronouns—"our nation," "our workers," "our values"—to create a sense of belonging and protection. Simultaneously, opponents, minorities, or foreign entities are portrayed as "threats to our way of life."

Moral Polarization: During times of international or civil conflict, this discourse intensifies. Consider the statement: "We must stand together to defend our freedom and protect our democracy from the dark forces of external aggression." This sentence does more than inform; it categorizes the world into a moral hierarchy. It frames the political struggle in existential, binary terms—good versus evil—which effectively serves to silence internal criticism and build a unified, emotional support base for potentially high-stakes or violent political decisions.

Political discourse serves two diametrically opposed functions in the struggle for power: it can be a tool for legitimation (maintaining the status quo) or a tool for subversion (challenging the status quo).

Technocratic Legitimation: Governments often use "officialese" or highly technical language to justify controversial policies. For example, severe budget cuts to social services may be discursively transformed into "fiscal consolidation" or "structural adjustments for long-term competitiveness." This clinical language strips the policy of its human impact, making it appear as a scientific necessity rather than a political choice.

The Discourse of Resistance: On the other hand, discourse remains the primary weapon of the marginalized. Opposition leaders, social movements, and underground activists use "counter-discourse" to deconstruct state-sponsored myths. Through the use of political satire, protest slogans, and alternative media, they aim to "unmask" the power dynamics hidden behind official rhetoric, proposing entirely new visions for how society should be organized.

The 21st century has introduced a radical shift in how political discourse is disseminated and consumed. The rise of social media platforms has fundamentally altered the "gatekeeping" process of political communication. Disintermediation and Echo Chambers: Platforms like X (Twitter), Facebook, and TikTok allow for "disintermediation," where political actors speak directly to the masses without the filter of traditional journalism. However, the algorithmic nature of these platforms often creates "echo chambers," where citizens are only exposed to discourse that confirms their pre-existing ideological biases.

The Weaponization of Disinformation: In the modern struggle for power, "fake news" and state-sponsored disinformation campaigns have become legitimate discursive strategies. By flooding the digital space with contradictory narratives, political actors can induce a state of "epistemic nihilism," where the public loses faith in the very possibility of objective truth. This confusion benefits those in power by making collective organized resistance much more difficult to achieve.

In conclusion, the political science approach reveals that discourse is the primary mechanism through which political power is not only expressed but fundamentally constructed, maintained, and contested. Language in the political arena is never neutral or objective; it is a permanent battlefield where competing ideologies clash for the right to define reality. Whether through the subtle framing of a tax policy or the aggressive, polarizing rhetoric of an election campaign, discourse shapes the very boundaries of what is possible and thinkable within a society. By rigorously analysing these discursive patterns, we gain the critical capacity to see beyond the surface level of political messaging and understand the deep-seated power dynamics that govern our lives in the modern world.

References

1. Foucault, M. (1972). The Archaeology of Knowledge & The Discourse on Language. Pantheon Books.
2. Gramsci, A. (1971). Selections from the Prison Notebooks. International Publishers.
3. Goffman, E. (1974). Frame Analysis: An Essay on the Organization of Experience. Harvard University Press.
4. Lakoff, G. (2004). Don't Think of an Elephant: Know Your Values and Frame the Debate. Chelsea Green Publishing.
5. Fairclough, N. (2013). Critical Discourse Analysis: The Critical Study of Language. Routledge.
6. Van Dijk, T. A. (2008). Discourse and Power. Palgrave Macmillan.
7. Chomsky, N., & Herman, E. S. (1988). Manufacturing Consent: The Political Economy of the Mass Media. Pantheon.
8. Ott, B. L., & Dickinson, G. (2019). The Twitter Presidency: Donald J. Trump and the Politics of White Rage. Routledge.

SECTION III Sociolinguistic Transformation of the Labor Market and Pragmatics of Intercultural Communication

WHY AI STILL FAILS: THE ROLE OF CULTURAL AND COGNITIVE CONTEXT IN MACHINE TRANSLATION

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The field of artificial intelligence has become a significant component of contemporary communication, particularly in the domain of translation. Prior to the widespread availability of sophisticated AI systems, the majority of individuals utilised conventional tools such as Google Translate. The efficacy of these systems was evident; however, they frequently exhibited deficiencies in terms of precision and situational awareness.

However, recent technological advancements have led to significant improvements in machine translation quality. In the contemporary era, artificial intelligence (AI)-powered tools have been developed to produce more natural and coherent translations, and real-time translation is becoming more prevalent. For instance, it has been incorporated into online video platforms such as YouTube, where automatic translation features are employed to facilitate content consumption. Consequently, an increasing number of individuals are opting for machine translation as a substitute for professional human translators.

However, significant disparities persist between AI-generated translation and human translation. AI systems frequently lack the incorporation of these nuanced linguistic components that are instrumental in shaping meaning. This deficiency can be observed in the selection of words based on context, the presence of implicit nuances, and the utilisation of expressions that are integral to a particular culture. A more literal, dictionary-based approach to translation is often adopted, with the potential consequence of erroneous interpretation or the loss of meaning.

The present study posits that AI-based translation systems frequently demonstrate deficiencies in their functionality due to their inability to comprehend cultural nuances and the cognitive processes underpinning human thought, a capability that is imperative for effective communication and interpretation. The present study demonstrates the significance of context, pragmatics and cultural knowledge in professional communication by means of an analysis of common errors in machine translation. To get your head around the limitations of AI in translation, you've got to think about some key linguistic concepts, like context, pragmatics and cultural meaning.

Firstly, context is really important for understanding language. Words and phrases don't usually have one fixed meaning; it depends on the situation. When we talk about context, we're talking about more than just the words around it. It's also about the bigger picture of how people are communicating, what the speaker's intentions are, and the shared knowledge between the people involved. Human translators naturally understand what they're saying in the context, but AI systems often rely on statistical patterns, which can sometimes lead to the wrong translation or a translation that's too literal.

Oleh MISIURKO Why AI Still Fails: The Role of Cultural and Cognitive Context in Machine Translation. Book of Conference Proceedings of the *III All-Ukrainian Stage of the Scientific and Practical Language Culture Student Contest: "Linguistic Synergy: Cognitive Strategies and Technological Tools in the Architectonics of Professional Communication"*. Chernivtsi National University, 2026. Pp. 44 - 47.

Secondly, pragmatics refers to how meaning is constructed beyond the literal definitions of words. It's all about getting your tone, intention and politeness right, and understanding the implied meaning (Yule, 1996). For example, the same sentence can be a request, a command or a suggestion, depending on how it's used. AI often has trouble with this level of interpretation because it doesn't have true communicative awareness.

At the end of the day, cultural meaning is a key part of language. A lot of expressions, idioms and linguistic choices are deeply rooted in cultural experience and can't be directly translated without adaptation (Newmark, 1988). Human translators can spot these cultural elements and tweak the language to fit, but AI systems usually process language in a more universal and standardised way, often missing out on the cultural specifics (Venuti, 1995).

So, even though AI-based translation tools are pretty efficient, they still can't always fully capture meaning because they don't have the same cognitive and cultural understanding as humans.

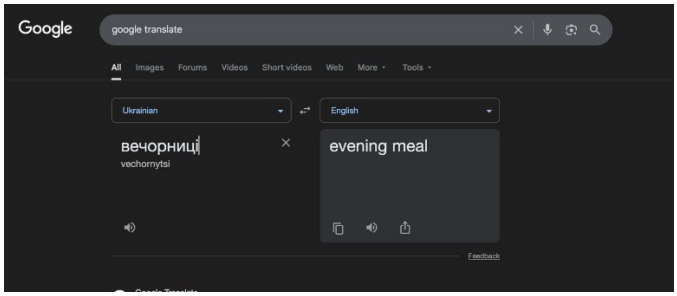
AI translation systems often struggle to handle contextual ambiguity, which is a big limitation. Lots of words in natural language have more than one meaning, depending on the situation. Human translators rely on their knowledge of the situation and what they know about the world to work out what is meant, while AI systems mostly depend on statistical probabilities.

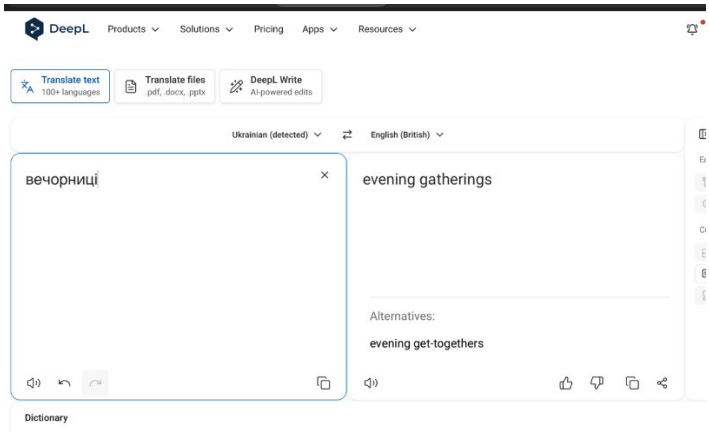
Koehn (2020) explains that neural machine translation works by predicting the most likely word sequences rather than truly understanding meaning. This can lead to errors, especially when there's no context given. Take the word 'bank', for example. It can mean a financial institution or the side of a river. Modern AI systems can often get the meaning right, but they still struggle in more complex or ambiguous situations, which shows they don't really understand what's going on at a deep level.

Another big challenge for AI translation is understanding culturally specific expressions. Idioms, metaphors and informal phrases are very much part of a culture, and often don't have an exact equivalent in other languages.

As Newmark said (1988), you have to adapt these expressions rather than translate them literally to keep the meaning. Take the English expression "break the ice", for example. If you try to translate it straight away, you'll find that you've lost the meaning. While AI systems can come up with decent alternatives, they often go for direct translations, which can make the output seem unnatural or even misleading. This limitation is actually linked to a basic problem: AI can't have any kind of cultural experience, so it can't really understand the deeper meanings in language.

A good example of this issue is the translation of the Ukrainian word "вечорниці". When you use different AI translation systems, like Google Translate and DeepL, the term comes out as "evening meal" or "evening gatherings." These translations might seem fine at first, but they don't really capture the full cultural and historical meaning of the concept.





In Ukrainian culture, "вечорниці" are more than just a way to pass the time in the evening - they're a big part of the culture. These gatherings were important social spaces where young people met, formed relationships, created songs and developed elements of folk culture. So, the term has a lot of cultural, social and historical meanings that can't be easily translated.

Newmark (1988) says that expressions that are tied to a culture need to be adapted to keep their meaning, rather than being translated straight up. With these systems, they rely on a basic, dictionary-based interpretation, which can sometimes miss out on cultural nuances and the deeper meaning behind what's being said. This example shows that AI translation can't really understand language in its full cultural context.

AI systems also have major issues with pragmatics, especially when it comes to interpreting tone, intention and communicative purpose.

As Yule (1996) explains, pragmatics is all about how speakers convey meaning that goes beyond the literal interpretation of words and depends on context, intention, and social interaction. This part of language is a big problem for AI translation systems.

Take this sentence, for example: "Could you open the window?" It's grammatically a question, but it's also a polite request. While AI systems usually translate these sentences correctly, they often don't manage to keep the same level of politeness or subtle details in the target language.

This means that AI-generated translations can sometimes come across as overly direct, unnatural, or even inappropriate in certain situations. This shows a basic problem with AI: it can't take part in real conversations and so can't understand what speakers mean in the same way as humans.

AI has its limits when it comes to translation, and these limits have real-world consequences, especially in professional contexts where accuracy is vital.

In medicine, even small mistakes in translation can cause big problems when healthcare providers and patients don't understand each other. It is important to correctly interpret symptoms, make the right diagnoses, and follow treatment instructions. If these steps are not taken, medical decisions may be made that do not match the best interests of the patient. As Koehn (2020) says, machine translation systems are designed to be efficient, not to be completely accurate. This makes them unreliable in important situations where precision is essential.

In legal communication, the risks are equally important. Legal language must be very precise, because even small changes to the words can change what they mean and cause misunderstandings or arguments. Lawrence Venuti (1995) says that translation is a process of interpretation, not just a mechanical process. This shows a big problem with AI systems. They can't make decisions by understanding what they're doing.

When doing business in other countries, it's not just about using the right words. You also need to understand the culture and the way things are done in that country. As Yule (1996) explains, to communicate successfully you need to understand what is meant by words that are not said, the tone of what is said, and the rules of society. AI systems often miss these things, which can lead to messages that come across as the wrong thing to say or that don't work well in a professional setting.

These examples show that, even though AI translation tools are efficient and easy to use, you can't always trust them in situations that need a lot of accuracy and understanding of the context. So, AI should be seen as a helpful tool that improves how well humans do their jobs, not as something that will replace human translators.

In conclusion, although AI-based translation systems have significantly improved in recent years and offer fast and accessible solutions, they still face fundamental limitations. The findings of this study demonstrate that these limitations are predominantly associated with an absence of contextual understanding, cultural awareness, and pragmatic competence.

The operation of AI systems is predicated on pattern recognition and probability, rather than true comprehension, which engenders errors in interpreting meaning, especially in complex or nuanced situations. In contrast, human translators leverage cognitive and cultural knowledge, enabling them to adapt language in a way that preserves the intended meaning.

Consequently, despite the rapid advancements in the field of artificial intelligence, it remains incapable of fully replacing human translators. Instead, the most effective approach lies in the collaboration between humans and AI, where technology serves as a supportive tool rather than a substitute. The employment of such a combined model is conducive to ensuring both efficiency and accuracy in professional communication.

References

1. Yule, G., 1996. *Pragmatics*. Oxford: Oxford University Press.
2. Newmark, P., 1988. *A textbook of translation*. New York: Prentice Hall.
3. Venuti, L., 1995. *The translator's invisibility: A history of translation*. London: Routledge.
4. Koehn, P., 2020. *Neural machine translation*. Cambridge: Cambridge University Press.

SECTION III Sociolinguistic Transformation of the Labor Market and Pragmatics of Intercultural Communication

CRITICAL DISCOURSE ANALYSIS: POWER, IDEOLOGY, AND INEQUALITY IN SOCIO-POLITICAL DISCOURSE

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The given paper presents Critical Discourse Analysis, focusing on the role of power, ideology, and inequality in socio-political discourse. Critical Discourse Analysis, or CDA, is an interdisciplinary approach that examines language as a form of social practice. It emphasizes the ways in which language both reflects and reproduces social structures, including systems of power and inequality. In political contexts, discourse is not neutral; it can legitimize authority, exclude certain groups, reinforce dominant ideologies, and influence public perception. By studying discourse critically, we gain insight into the hidden mechanisms by which language shapes society, constructs social hierarchies, and communicates ideological positions.

CDA emerged in the 1980s as a reaction to traditional linguistics, which often treated language as autonomous and neutral. Pioneering scholars such as Norman Fairclough, Teun van Dijk, Ruth Wodak, Pierre Bourdieu, and Michel Foucault emphasized that language is deeply connected to social power and ideology. Fairclough defined CDA as the study of how social events, practices, and texts are shaped by and reproduce relations of power, highlighting the interconnection between text, discursive practice, and social practice. Van Dijk focused on the cognitive dimension, exploring how shared knowledge and mental models influence the interpretation and production of texts. Wodak stressed the importance of historical and socio-cultural context, showing how ideologies evolve over time and become normalized. Foucault examined the ways in which dominant discourses regulate knowledge and define social norms. Bourdieu introduced the concept of symbolic power, demonstrating how language can serve as cultural capital that reinforces social hierarchies and legitimizes authority. Together, these frameworks provide a comprehensive understanding of how language, power, and ideology are mutually constitutive.

A central concept in CDA is ideology, which refers to the system of beliefs and values that legitimize social arrangements and power relations. Ideologies are often embedded subtly in language and shape the way people interpret social reality. Another key concept is power, which can be exercised both directly, through explicit authority, and indirectly, through discursive means that influence perception and social norms. Othering is the process by which certain groups are defined as “different” or “outsiders,” reinforcing an in-group versus out-group dichotomy. Hegemony describes the dominance of a particular ideology or worldview that is presented as common sense and rarely questioned. CDA also identifies discursive strategies, including nomination, predication, argumentation, perspectivation, and mitigation or intensification, which are used to construct meaning, influence audiences, and transmit ideology.

Valentyn PIATKIVSKYI Critical Discourse Analysis: Power, Ideology, and Inequality in Socio-Political Discourse. Book of Conference Proceedings of the *III All-Ukrainian Stage of the Scientific and Practical Language Culture Student Contest: "Linguistic Synergy: Cognitive Strategies and Technological Tools in the Architectonics of Professional Communication"*. Chernivtsi National University, 2026. Pp. 48 - 50.

The methodology of CDA involves multiple levels of analysis. At the micro-level, researchers examine grammar, vocabulary, sentence structure, modality, metaphors, and pronoun use to uncover subtle ideological cues. At the meso-level, the focus is on discursive practices, including how texts are produced, distributed, and received, as well as intertextual links and genre conventions. At the macro-level, texts are placed in broader historical, political, and social contexts to understand how discourse is shaped by and shapes power relations. Ethical CDA practice requires reflexivity, transparency, and careful consideration of the researcher's positionality.

Analysts must recognize their own biases and avoid misrepresenting the participants or texts they study.

To illustrate CDA in practice, consider the following example from a political speech: “From this day forward, every decision on trade, on taxes, on immigration, on foreign affairs will be made to benefit American workers and American families. We will follow two simple rules: buy American and hire American. We will protect our borders, and make great trade deals for our country. We will make America strong, America proud, and America safe. And we will make America great again.” In this speech, the repeated use of the pronoun “we” creates a sense of unity and inclusion between the speaker and the audience, positioning the speaker as part of the in-group. Positive adjectives like “strong,” “proud,” and “safe” enhance emotional appeal, while the implied opposition between Americans and outsiders constructs an us-versus-them narrative. The ideological focus is nationalist and protectionist, emphasizing the interests of the in-group while marginalizing others. This example demonstrates how language can legitimize power and convey ideology subtly yet effectively.

Another example comes from media discourse: “Activists urge stronger emissions cuts as oil companies lobby against new regulations.” In this headline, activists are framed positively, while corporations are represented negatively. Nomination and predication emphasize moral evaluation, portraying one group as socially responsible and the other as obstructive or self-interested. Such framing reflects and reproduces power imbalances in society, highlighting the influence of language in shaping public perception and social attitudes.

Parliamentary debates offer another rich field for CDA. For instance, statements like “We must protect our national identity against foreign influence” or “Those who oppose this legislation are ignoring the will of the people” use persuasive strategies such as moral evaluation and polarization. These statements construct social hierarchies and legitimize the speaker’s political position while marginalizing opposing voices. The repeated use of inclusive and exclusive pronouns, evaluative adjectives, and strategic argumentation illustrates how ideology and power are embedded in everyday political discourse.

CDA can also be applied to campaign materials, social commentary, and editorials, revealing how language is used to shape public opinion, maintain inequality, and reproduce dominant ideologies. By systematically analyzing these texts, scholars can identify patterns of inclusion and exclusion, strategies for legitimizing authority, and mechanisms through which social hierarchies are maintained.

In conclusion, Critical Discourse Analysis is a vital tool for understanding the complex relationship between language, power, ideology, and inequality in socio-political contexts. Language is not simply a neutral instrument of communication; it actively constructs social reality, legitimizes

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authority, and reinforces social hierarchies. By examining texts critically, we can uncover hidden ideologies, recognize subtle mechanisms of power, and develop a deeper understanding of how discourse shapes and reflects society. CDA equips us not only with analytical tools for academic research but also with the ability to approach political communication and media critically, fostering informed, reflective, and socially aware individuals.

References

1. Fairclough, N. (1995). Critical Discourse Analysis: The Critical Study of Language.
2. Van Dijk, T.A. (2001). Discourse, Ideology and Context.
3. Wodak, R., & Meyer, M. (2009). Methods of Critical Discourse Analysis. Bourdieu, P. (1991).
4. Language and Symbolic Power. Foucault, M. (1969/2002). The Archaeology of Knowledge.

Valentyn PIATKIVSKYI Critical Discourse Analysis: Power, Ideology, and Inequality in Socio-Political Discourse. Book of Conference Proceedings of the *III All-Ukrainian Stage of the Scientific and Practical Language Culture Student Contest: "Linguistic Synergy: Cognitive Strategies and Technological Tools in the Architectonics of Professional Communication"*. Chernivtsi National University, 2026. Pp. 48 - 50.

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CDA: EVALUATING THE LANGUAGE AS A VITAL MECHANISM FOR FORMING SOCIAL RELATIONS

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Critical Discourse Analysis (CDA) is an interdisciplinary approach that combines linguistics, sociology, political psychology, and philosophy. It explores the relationship between linguistic practice and social structure. The fundamental principle of CDA is the thesis that discourse is a form of social action that both shapes society and is shaped by it. This dialectical relationship means that every linguistic event (text or speech) reproduces or challenges existing power relations. In this context, the "criticality" of the analysis signifies denaturalization - revealing how ideologically colored statements become perceived as "natural," "obvious," or "universal".

To achieve this goal, CDA focuses on the following areas of practical analysis:

- Identifying the ideological foundation: analyzing the mechanisms through which discourse forms and reproduces power relations in society. This allows for the explication of hidden manipulative and political ideas behind the text.
- Researching social inequality: determining the role of language in reinforcing gender, racial, or ethnic discrimination. Using the concept of critique, CDA exposes relations of implicit subordination that are often masked as neutral messages.
- Analyzing intertextual links: studying how a text is "embedded" in other discourses. This helps to understand how the interaction of different texts constructs a new socio-cultural reality.
- Contextual analysis of the "information iceberg": According to T. van Dijk, words are only the tip of the iceberg, while its main part is filled with non-verbalized scripts and models that CDA seeks to make visible.
- Deconstructing stereotypes and concepts: explaining how cognitive processes combined with discursive practices create social biases and form key concepts such as "citizenship" or "political participation". This allows for a critical evaluation of the knowledge embedded in discourse and its links to ideological structures.
- Analyzing communicative strategies: studying discursive patterns as forms of social interaction. CDA identifies macro-strategies, tactics, and specific semantic moves that participants use to realize their socio-communicative roles.

The outlined research orientations are associated with three main schools of Critical Discourse Analysis:

1. Norman Fairclough proposes viewing discourse as a three-dimensional phenomenon, where the linguistic analysis of the text is only the initial stage. The second level - the analysis of discursive practice - examines the processes of production, distribution, and consumption of texts.

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For example, how the same political statement is interpreted by liberal media (MSNBC) compared to conservative ones (Fox News). The third level - social practice - considers the ideological effects of discourse. Fairclough emphasizes the concept of hegemony (after Antonio Gramsci), where dominant groups secure the consent of subordinate groups through the discursive "naturalization" of their power.

2. Teun van Dijk focuses on "social cognition" - the shared knowledge and beliefs of social groups. According to his approach, social power is determined by control over scarce resources, and access to public discourse is one such resource. Elites (politicians, journalists) have privileged access to communication channels, allowing them to influence the mental models of the audience. Van Dijk describes the "ideological square": we emphasize our positive qualities, emphasize their negative qualities, hide our negative qualities, and hide their positive qualities.

3. The Discourse-Historical Approach (DHA) by Ruth Wodak is particularly effective for studying how identities and images of the "other" are constructed in politics. She identifies five main strategies: nomination (how we name people), predication (what qualities we attribute to them), argumentation (how we justify exclusion), perspectivization (from whose point of view the story is told), and intensification/mitigation of statements.

Thus, despite differences in approaches, all three schools agree that language is the primary battlefield for power. Power in discourse manifests through the asymmetry of communicative roles and control over the topic of conversation. For instance, in political press conferences, government representatives often use generalized formulations that create a sense of stability but provide no concrete information. For example, in 2022, during a press conference, Joe Biden stated: “Now we need to finish the job to get COVID-19 under control”. Such formulations create the impression that the situation is under the control of the authorities and that a clear plan exists. From a CDA perspective, such statements perform the function of discursive control, shaping a specific interpretation of events while reducing the space for critical discussion.

Thus, power is realized not through direct coercion, but through control over the public narrative and social perception of the situation. Similar linguistic strategies can be observed in British political discourse. For example, in 2022, Prime Minister Boris Johnson, commenting on support for Ukraine, stated: “We will continue to give the Ukrainians the military equipment they need to defend themselves”. Such statements emphasize the government's resolve and create an image of control over the international situation.

Ideology often manifests through linguistic categories and evaluative markers. In British and American media, migration is frequently described through metaphors of natural disasters, such as “wave of migrants” or “flood of refugees”. These metaphors create an image of an uncontrollable phenomenon or threat. Similarly, in Canadian news regarding the housing market, the term "crisis" is often used (“Canada is facing a housing crisis”) to create a sense of emergency.

Social inequality is reproduced through the negative representation of "other" groups. For example, Donald Trump once stated: “They make our criminals look like babies...” in the context of illegal migration. Such rhetoric creates a sharp opposition between "us" (citizens) and "them" (migrants). Similarly, David Cameron stated in 2013: “Britain is not a soft touch for illegal

immigrants". These examples illustrate Van Dijk's "ideological square" by emphasizing negative characteristics of "other" groups to influence social reality.

In conclusion, Critical Discourse Analysis allows for the viewing of language as a vital mechanism for forming social relations. The approaches of Fairclough, Van Dijk, and Wodak demonstrate that discourse plays a key role in constructing power, ideology, and inequality. CDA serves as an important tool for the critical understanding of societal processes and identifying hidden mechanisms of influence in modern discourse.

References

1. Vodak P. Language, Power and Ideology: Studies in Political Discourse. Amsterdam : John Benjamins Publishing Company, 1989. С. 137-165.

2. Омелянюк В. Р. Критичний дискурс-аналіз комунікативних стратегій в японській кінематографічній драмі : Кваліфікаційна робота магістра. Київ, 2022. С. 1-19.

3. Тулан М. What is critical discourse analysis and why are people saying such terrible things about it?. Language & Literature. 1997. Т. 6, № 2. С. 83-103.

4. Boris Johnson promises additional military aid in call to Volodymyr Zelensky. The Standard. URL: https://www.standard.co.uk/news/uk/volodymyr-zelensky-boris-johnson-president-prime-minister-government-b997336.html (дата звернення: 15.03.2026).

5. Canada is facing a housing crisis. Could it take a page from Europe? CBC. URL: https://www.cbc.ca/news/world/europe-social-housing-models-1.7565611 (дата звернення: 15.03.2026).

6. David Cameron: Foreigners' access to UK benefits under review. BBC News. URL: https://www.bbc.com/news/uk-politics-21442046 (дата звернення: 14.03.2026).

7. Remarks by President Biden in Press Conference. U.S. Embassy & Consulates in Italy. URL: https://it.usembassy.gov/remarks-by-president-biden-in-press-conference-2/ (дата звернення: 15.03.2026).

8. TRANSCRIPT: President Trump Leads the Press Briefing at the White House, 1.20.26. Senate Democrats. URL: https://www.democrats.senate.gov/newsroom/trump-transcripts/transcript-president-trump-leads-the-press-briefing-at-the-white-house-12026 (дата звернення: 16.03.2026).

9. Trump says criminal illegal aliens 'make Hells Angels look like the sweetest people on Earth'. Fox News. URL: https://www.foxnews.com/politics/trump-criminal-illegal-aliens-make-hells-angels-look-like-sweetest-people-earth (дата звернення: 16.03.2026).

Viktoriia SHOLUDKO CDA: Evaluating The Language as a Vital Mechanism for Forming Social Relations. Book of Conference Proceedings of the *III All-Ukrainian Stage of the Scientific and Practical Language Culture Student Contest: "Linguistic Synergy: Cognitive Strategies and Technological Tools in the Architectonics of Professional Communication"*. Chernivtsi National University, 2026. Pp. 51 - 53.

SECTION III Sociolinguistic Transformation of the Labor Market and Pragmatics of Intercultural Communication

PROBLEMS OF TRANSLATION WITH THE HELP OF ARTIFICIAL INTELLIGENCE

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Today translation technology is developing at a faster pace in world. One of the important updates in translation technology is the machine translation based on artificial intelligence. Machine translation is a computer-generated translation of human text from one language to another. It has become a common application in many places these days such as online translation tools, multilingual websites and various communication channels.

Machine translation using artificial intelligence (AI) technology has made a huge leap in translation quality compared with legacy machine translation technology such as statistical machine translation using language models, which is traditionally based on rule-based methods and using neural networks and large language models that enable the output to sound and look more natural and human. Although the outcome is a huge improvement to legacy machine translation technology, it is important to remember that the use of the technology is not yet void of limitations and challenges.

The main problem of machine translation is related to linguistic complexity. Ambiguity is a term used to describe the number of possible meanings of words or phrases in a language. Most natural language words are ambiguous, meaning a word can have more than one possible interpretation given a particular context. An AI may choose an incorrect interpretation if it does not adequately understand the context of the word.

In everyday communication one of the biggest problems for learners of a language arise from the use of idioms and fixed expressions. An idiom or fixed expression is a phrase that cannot be understood from the individual words which make it up. An example of such an expression is the phrase “kick the bucket”. This can be interpreted as “to die”. Thus, if a machine were to translate this phrase literally, an incorrect interpretation would be the result.

There are also many grammatical differences. For instance, word order, grammatical gender, and more complex morphological structures all vary from language to language. And current AI systems that attempt to translate one language to another are quite prone to making grammatical errors, or producing very awkward sentences that sound somewhat nonsensical.

Context and Meaning Our AI struggles to understand context. Human translators have to take into account every word, phrase and sentence of the original language. They understand the subject matter, the intent of the author and the cultural background of the message. Our AI takes each sentence on its own and loses valuable context in the process.

Sometimes artificial intelligence is simply not familiar with the cultural references, the different forms of humour or the history behind expressions and words, and this can result in translations that sound exaggerated and ridiculous to people in the target culture.

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Marketing slogans are another excellent example where cultural adaptation may be required. A marketing slogan translated directly from one language to another can frequently result in a completely different or even offensive meaning. A human translator would know instinctively how to avoid these kinds of pitfalls in order to produce a natural and culturally appropriate translation. Can an AI system produce the same level of adaptation?

It's hard to get the right level of formality and politeness into a translation when it is generated by a computer rather than a person. Some languages have formal forms of address depending on the level of social interaction which are often lost in machine translation. The AI systems may not realize how out of place a formal translation can sound in an informal context and vice versa.

Another important problem is the lack of training data for many languages.

To train a modern AI translation system you need a huge amount of bilingual text data to learn the correspondence between languages. There is plenty of that for popular languages like English, Spanish or French. That is why translations for these language pairs are so accurate.

There are many languages for which there is little to no presence in the digital world. We call such languages low-resource languages. Low-resource languages are often indigenous or minority languages. Currently, there is not enough training data for many of these languages, which means that many AI-based translation systems cannot translate or inaccurately translate these languages. This problem is particularly important for linguistic diversity and language preservation.

Hallucinations and Errors in AI System, specific problem of modern AI systems

An artificial intelligence term that describes how a program generates information that does not exist in the input text. In the context of translation, an AI-powered translation tool may introduce extra words or phrases to the output that are not present in the source text. This issue is particularly severe in high-stakes domains such as law, medicine and journalism. A hallucinated translation can cause misinformation and in the worst case, serious and unintended repercussions.

Many also worry that Google Translator contains "algorithmic bias." These computer programs take the language from the thousands of texts to which they have access and try to teach themselves how to translate it. Unfortunately, the underlying texts in all computer systems often contain negative stereotypes and biases about gender and culture. These stereotypes and biases can often appear in translations of the Translator itself.

Despite these problems, researchers are actively working on improving machine translation.

As an alternative, some have suggested that human translators could work in conjunction with a machine or computer program which utilizes some form of AI. The idea being that the computer generates an initial draft, which the person would then revise.

Artificial intelligence has significantly changed the field of translation. Modern machine translation systems can produce fast and relatively accurate translations for many languages. This technology is useful for international communication, business, education, and everyday use. However, AI translation still faces many challenges. Linguistic ambiguity, idiomatic expressions, cultural differences, lack of contextual understanding, and limited data for some languages create difficulties.

In addition, modern AI systems can generate false information, as well as quickly generate their own websites to create illusions. For these reasons, human translators continue to be important in the field of translation. The most effective approach today is a collaboration between human expertise and artificial intelligence technologies. In the future, improvements in AI models, larger data sets,

and better evaluation methods may significantly reduce current problems. Still, translation is likely to remain a complex task that requires both technological tools and human linguistic competence.

References

1. K. P. Nikitchenko Theory and practice of editing and post-editing of pruoffesionaly oriented translate
2. Hetman, T. E. (Ed.) Editing Translations: A Study Guide
3. Штучний інтелект у перекладі: загроза чи помічник? https://share.google/lJvVZ65REmPSNkwxR
4. Koehn, Philipp. Neural Machine Translation. Cambridge University Press
5. Hutchins, John. "Machine Translation: History and General Principles."

Daria VLASIUK Problems of Translation with the Help of Artificial Intelligence. Book of Conference Proceedings of the *III All-Ukrainian Stage of the Scientific and Practical Language Culture Student Contest: "Linguistic Synergy: Cognitive Strategies and Technological Tools in the Architectonics of Professional Communication"*. Chernivtsi National University, 2026. Pp. 54 - 56.

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LINGUISTIC CAPITAL OF A MODERN SPECIALIST

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The theory of linguistic capital examines language not as a neutral tool of communication, but as a specific form of asset functioning within a social hierarchy. At the core of this concept lies the idea of the linguistic market, where every utterance receives its "price" depending on its conformity to the established standard — legitimate language. Legitimate language is recognized as lawful, rightful, and generally accepted within a society, adhering to established legal or social norms. It holds official status and is utilized in state institutions, education, and mass media, ensuring legal regulation and social recognition.

The theory of linguistic capital was developed by Pierre Bourdieu in the second half of the 20th [2] as a critical response to the abstract approaches of Ferdinand de Saussure and Noam Chomsky. While Saussure, in his Course in General Linguistics, viewed language as a detached system of signs, and Chomsky [4] regarded it as an innate cognitive competence, Bourdieu proposed a model in which linguistic practice is examined through the prism of economics and power.

The central principle of this theory is the assertion that the ability to speak in a specific manner — utilizing appropriate vocabulary, accent, and complex grammatical structures — is not merely a skill, but an inherited or acquired resource that converts directly into social status and economic privileges. This mastery of language forms the linguistic habitus — a system of deeply ingrained dispositions that determine not only the semantic content of an utterance but also the bodily aspect of communication: demeanor, confidence, and self-presentation. Since the educational system and key state institutions recognize only one "high" form of language as the standard, they de facto exercise symbolic violence against those social groups whose initial linguistic capital deviates from the established norm. In such a discourse, linguistic competence transforms into a latent mechanism for the reproduction of social inequality: an individual's institutional success begins to depend not so much on the informativeness of their speech, but on their "right to speak", which is legitimized by society through the recognition of the volume of their linguistic capital in a specific linguistic market.

However, the mechanism for realizing this capital in specific acts of interaction is revealed through the pragmatics of discourse. While Bourdieu describes language as an "asset," the founders of pragmatics — John Austin [1] and John Searle [8] — focus on language as an "action". They demonstrated that every utterance possesses illocutionary force, meaning the capacity to perform a social function: to command, to promise, or to establish facts. In conjunction with Paul Grice's Cooperative Principle [5], pragmatics explains how an individual utilizes their habitus for the strategic management of context. Thus, pragmatic competence serves as an instrument for the actualization of linguistic capital: it transforms potential linguistic knowledge into real

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communicative influence, allowing the speaker to effectively manoeuvre within the labor market and the field of intercultural communication.

The founders of pragmatics brought about a paradigm shift in linguistics by proving that the minimal unit of communication is not the sentence, but the speech act — a specific action (such as a command, a promise, or an assertion) aimed at transforming reality.

The impact of these findings on an individual's linguistic capital is decisive, as pragmatics transforms static linguistic knowledge into a dynamic instrument of social influence. From the perspective of Bourdieu's theory, pragmatic competence functions as an "operating manual" for the existing linguistic resource: it determines an individual's ability not only to select lexemes but also to strategically manipulate context to achieve illocutionary force — the ability to be heard and to prompt action. Consequently, pragmatics directly capitalizes language, transforming it into a tool for the legitimization of power. An individual with a high level of pragmatic capital is capable of effectively "promoting" their own interests in any linguistic market, avoiding communicative failures and transforming their speech into tangible social impact.

In today's highly competitive environment, a professional's expertise ceases to be a self-sufficient category; it acquires market value only through effective communicative translation. The modern labour market demands not merely the possession of linguistic capital in Pierre Bourdieu's terms, but the capacity for its dynamic, real-time transformation. Consequently, there emerges the figure of the "linguistic chameleon" — a specialist whose capitalization depends on the ability to simultaneously employ elite legitimate language to protect their own interests and a "human", less formalized language to ensure internal team cooperation.

This approach transforms linguistic capital into a tool for strategic manoeuvring. On one hand, a specialist must operate within a high register (legal, corporate, academic) to legitimize their status before the "linguistic elite" and employers. This is what Bourdieu termed the struggle for symbolic power: the ability to protect one's own interests and the right to agency through the mastery of the dominant code. On the other hand, the pragmatics of interaction, developed in the works of John Austin and John Searle, indicates that horizontal cooperation is essential for the instrumental realization of ideas. A specialist with a high level of pragmatic skills deliberately chooses a communicative code oriented toward collaboration with colleagues and subordinates, thereby avoiding the alienation often caused by excessive intellectualization or linguistic unification.

Within the context of globalization, the synthesis of Pierre Bourdieu's sociological approach with the linguistic relativity hypothesis of Edward Sapir [8] and Benjamin Lee Whorf [9] acquires particular significance. While the global market seeks to reduce communication to a unified, sterile code (a corporate "newspeak"), the preservation of linguistic individuality becomes a form of intellectual resistance. According to the ideas of Sapir and Whorf, language does not merely reflect reality but also shapes the way we think; therefore, rejecting total linguistic unification in favour of maintaining one's own unique code allows a specialist to remain a multi-functional personality rather than a mere replaceable "working unit".

Consequently, the capital of a modern specialist is profoundly multifaceted: it encompasses the capacity for vertical dominance within hierarchical structures and horizontal empathy in cooperative processes. The "linguistic chameleon" does not simply adapt to the environment — they use pragmatic flexibility to convey an idea, preserve their own identity, and, ultimately, transform their

intellectual potential into real social impact. Today, the capitalization of a specialist is a balance between the perfect mastery of the legitimate norm and the ability to remain human within a discourse that strives for total automation and standardization.

References

1. Austin, J. L. (1962). *How to do things with words*. Oxford University Press.
2. Bourdieu, P. (1991). *Language and symbolic power* (G. Raymond & M. Adamson, Trans.; J. B. Thompson, Ed.). Polity Press. (Original work published 1982).
3. Bourdieu, P., & Passeron, J.-C. (1990). *Reproduction in education, society and culture* (R. Nice, Trans.; 2nd ed.). Sage Publications. (Original work published 1970).
4. Chomsky, N. (1957). *Syntactic structures*. Mouton.
5. Grice, H. P. (1975). Logic and conversation. In P. Cole & J. L. Morgan (Eds.), *Syntax and semantics: Vol. 3. Speech acts* (pp. 41–58). Academic Press.
6. Sapir, E. (1921). *Language: An introduction to the study of speech*. Harcourt, Brace & World.
7. Saussure, F. de. (2011). *Course in general linguistics* (W. Baskin, Trans.; P. Meisel & H. Saussy, Eds.). Columbia University Press. (Original work published 1916).
8. Searle, J. R. (1969). *Speech acts: An essay in the philosophy of language*. Cambridge University Press.
9. Whorf, B. L. (1956). *Language, thought, and reality: Selected writings of Benjamin Lee Whorf* (J. B. Carroll, Ed.). MIT Press.

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AI AND THE STRATEGIES REQUIRED TO PROTECT THE CULTURAL CODE OF LANGUAGE

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In the contemporary era of digitalization and global connectivity, translation has evolved beyond a mere linguistic exercise into a cultural bridge that facilitates mutual understanding across diverse societies. The success of communication does not lie solely in linguistic accuracy but in its capacity to carry the cultural context, emotional subtext, and social norms embedded within language.

While Artificial Intelligence (AI) tools like Google Translate, DeepL, and ChatGPT have revolutionized access to multilingual content through speed and syntactic accuracy, they often struggle with the subtle elements of language. These tools excel at processing vast quantities of text but frequently fail to grasp the nuances that vary significantly between cultures. This report analyses the sociolinguistic shifts in the labor market, the specific pragmatic failures of AI, and the strategies required to protect the cultural code of language.

The integration of AI into professional spheres has fundamentally redefined the role of language experts, shifting the industry toward a hybrid model known as Machine Translation Post-Editing (MTPE). In this framework, AI handles the "heavy lifting" by processing standardized or technical text, which makes basic communication fast and cost-effective.

As machines handle these routine tasks, human professionals are increasingly moving toward higher-level work that requires deep discernment, such as interpreting poetry, mediating sensitive cross-cultural business negotiations, and managing complex diplomatic nuances. The role of the translator is shifting from a mechanical converter of words to a sophisticated cultural mediator.

Furthermore, this transformation highlights the concept of the symbolic marketplace, where language serves as a space where certain varieties possess more social and symbolic power than others. AI models often prioritize "Standard" varieties, which may inadvertently marginalize local dialects and vernaculars that hold significant cultural identity and local capital.

The primary reason AI fails in complex communication is its lack of communicative competence, which involves the ability to use language appropriately according to social norms rather than just following grammatical rules. AI operates primarily on statistical patterns and probabilistic associations derived from massive datasets, but it lacks the lived cultural experience and human intuition necessary to "read between the lines".

One of the most significant challenges for AI is the trap of literalism. Because machines lack experiential understanding, they often interpret idiomatic expressions literally. For example, a phrase like "break the ice" might be rendered as a physical action rather than a social opening, resulting in nonsensical output in the target language.

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AI also struggles profoundly with implicature, where meaning is suggested rather than explicitly stated. While a human can discern when a literal statement like "I'm a vegetarian" serves as a functional request for a specific menu at a dinner party, a machine may process it only as a declarative fact without understanding the speaker's intent.

Furthermore, AI frequently mishandles politeness strategies and the concept of face work, which is the maintenance of a positive self-image during social interactions. In high-context cultures, such as those in Asia or the Middle East, communication relies heavily on unsaid cues, social hierarchy, and specific honorifics like the Japanese wakimae. AI often fails to select the correct level of formality, potentially translating an informal phrase too formally or vice versa, which can be perceived as disrespectful in hierarchical societies.

Finally, AI is susceptible to algorithmic bias. Systems are only as objective as the data on which they are trained. If source data contains stereotypes, AI will perpetuate them, such as automatically assigning male pronouns to doctors and female pronouns to nurses when translating from gender-neutral languages like Turkish. Because AI lacks emotional intelligence, it cannot genuinely interpret irony, sarcasm, or empathy, which are often closely tied to cultural expressions.

Real-world examples illustrate that the cost of ignoring cultural nuance can range from brand damage to life-threatening medical errors. A classic marketing failure occurred when Pepsi's slogan "Come alive with the Pepsi generation" was translated into Mandarin as "Pepsi brings your ancestors back from the grave". Because Chinese culture approaches ancestors with profound reverence, associating a soft drink with the resurrection of the dead was viewed as offensive.

Similarly, Kentucky Fried Chicken's (KFC) iconic slogan "Finger-lickin' good" was initially rendered in Mandarin as "Eat your fingers off". This literal interpretation sounded grotesque to local consumers and lacked the intended sensory appeal, necessitating an immediate adjustment to the localized message.

In the field of healthcare, contextual misunderstanding can have severe consequences, as seen in a documented case in Florida where the Spanish word "intoxicado" was misinterpreted. While the word refers broadly to being unwell due to any ingested substance, including food poisoning, hospital staff interpreted it literally as "intoxicated" by drugs or alcohol. This linguistic error led to the misdiagnosis of a brain hemorrhage, resulting in permanent disability for the patient.

To safeguard the cultural code — the unique way a community perceives and describes reality — human oversight must remain central to technological development. Paradoxically, AI can be used as a language resuscitator to save endangered languages like Ainu in Japan or Livonian in Latvia. By processing massive datasets, AI can decipher ancient scrolls and cuneiform tablets, connecting modern societies to their historical cultural roots.

However, protecting the cultural code also requires addressing Eurocentric taxonomies in AI training data, which often fail to accurately represent Indigenous artifacts and marginalized cultural narratives. International frameworks like UNESCO's Recommendations on the Ethics of AI provide foundational principles for transparency, inclusivity, and respect for human dignity. To preserve the linguistic cultural code, AI systems must be explainable and auditable, involving community stakeholders in the design of algorithms to prevent the erasure of diverse cultural expressions.

The future of intercultural communication does not lie in choosing between AI and humans, but in finding a productive balance. AI provides the speed and scalability necessary for a globalized

economy, while human translators provide the empathy, intuition, and ethical judgment required to preserve the integrity of a message.

By prioritizing cultural competence over mechanical rendering, the labour market can ensure that language remains a living vessel of identity and emotion.

References

1. Day Translations. (2024, May 20). The Impact of Artificial Intelligence on Language Preservation: Coding a Legacy. Day Translations Blog.
2. European Commission. (2024). AI Act | Shaping Europe's Digital Future. Official Website of the European Union.
3. Marchese, I. (2025). Preserving Cultural Heritage in the Age of Artificial Intelligence: an overview between protection and weaponisation. The CoESPU Magazine – Advanced Studies, IV, 77.
4. UNESCO. (2021). Recommendation on the Ethics of Artificial Intelligence. Paris: UNESCO Publications.
5. Wardhaugh, R., & Fuller, J. M. (2015). An Introduction to Sociolinguistics (7th ed.). Wiley Blackwell.
6. Williams, A. S. (2025). Cultural Nuances in Translation: AI vs Human Translators. Obafemi Awolowo University.

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Scientific publication

BOOK OF CONFERENCE PROCEEDINGS

III All-Ukrainian Stage of the Scientific and
Practical Language Culture Student Contest

"LINGUISTIC SYNERGY: COGNITIVE STRATEGIES AND TECHNOLOGICAL TOOLS IN THE ARCHITECTONICS OF PROFESSIONAL COMMUNICATION"

April 3-4, 2026

Published as submitted by the authors

Proceedings Editor *Natalia Holovatska*

Compiled by *Nataliia Holovatska, Olena Verenchanska, Veronika Aurite*

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