



THE ROLE OF NOTE-TAKING IN TRANSLATION IN THE AGE OF ARTIFICIAL INTELLIGENCE

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Abstract. *This article examines the evolving role of note-taking in translation practices in the context of rapid advancements in artificial intelligence (AI). Traditionally, note-taking has been regarded as a core cognitive and strategic component of translation, particularly in consecutive interpreting and complex written translation tasks. With the widespread adoption of AI-driven translation tools, questions have emerged regarding the relevance of human note-taking skills. Drawing on translation studies, cognitive linguistics, and AI-assisted translation research, this study analyzes how note-taking supports comprehension, memory management, and decision-making in translation, and how these functions interact with AI technologies. The findings suggest that while AI significantly enhances speed, consistency, and productivity, human note-taking remains indispensable for contextual interpretation, pragmatic accuracy, and ethical responsibility. The article further discusses pedagogical implications for translator education in the AI era.*

Annotatsiya. *Mazkur maqolada sun'iy intellekt (AI) texnologiyalarining jadal rivojlanishi sharoitida tarjima jarayonida konspekt (note-taking) yozishning o'rni va ahamiyati keng tahlil qilinadi. An'anaviy ravishda note-taking yozma va og'zaki tarjimada, ayniqsa ketma-ket tarjimada, muhim kognitiv va strategik vosita sifatida qaralgan. AI asosidagi tarjima tizimlarining keng qo'llanilishi inson tarjimonlarining bu ko'nikmalariga bo'lgan munosabatni qayta ko'rib chiqishni talab qilmoqda. Maqolada tarjimashunoslik, kognitiv lingvistika va AI-yordamchi tarjima tadqiqotlariga tayangan holda note-takingning tushunish, xotira boshqaruvi va tarjima qarorlarini qabul qilishdagi roli yoritiladi. Tadqiqot natijalari AI samaradorlikni oshirsa-da, insoniy note-taking kontekstual aniqlik va tarjima etikasi uchun muhimligicha qolishini ko'rsatadi.*

Аннотация. *В статье проводится расширенный анализ роли конспектирования (note-taking) в переводческой деятельности в условиях активного развития технологий искусственного интеллекта (ИИ). Традиционно конспектирование рассматривается как важный когнитивный и стратегический инструмент письменного и устного перевода, особенно в последовательном переводе. Расширение применения ИИ-переводческих систем требует переосмысления роли человеческих навыков фиксации информации. На основе исследований в области переводоведения, когнитивной лингвистики и ИИ-ассистированного перевода анализируется значение note-taking для понимания, управления памятью и принятия переводческих решений. Делается вывод о том, что несмотря на технологические достижения ИИ,*



человеческое конспектирование остается ключевым элементом качественного и этически ответственного перевода.

Keywords: *note-taking, translation, artificial intelligence, cognitive processes, translator training.*

Kalit soʻzlar: *konspekt yozish, tarjima, sunʼiy intellekt, kognitiv jarayonlar, tarjimon tayyorlash.*

Ключевые слова: *конспектирование, перевод, искусственный интеллект, когнитивные процессы, подготовка переводчиков.*

Introduction.


Note-taking has long been recognized as a fundamental component of translation and interpreting practice. In both written translation and consecutive interpreting, note-taking functions as a cognitive aid that allows translators to externalize information, structure meaning, and reduce cognitive overload. Rather than serving as a verbatim transcription of the source text, notes represent conceptual relations, logical structure, and key semantic elements, enabling translators to reconstruct meaning accurately in the target language.

In recent years, the translation profession has undergone significant transformation due to the rapid development of artificial intelligence, particularly neural machine translation and AI-assisted translation tools. These technologies have reshaped professional workflows, increasing productivity and changing expectations regarding translation speed and output. [3,24] As a result, traditional human-centered practices such as note-taking are sometimes perceived as less essential. This article challenges this assumption by arguing that note-taking remains a crucial human strategy that complements AI technologies rather than competing with them.

Theoretical Background. From the perspective of cognitive linguistics and translation process research, note-taking plays a vital role in managing limited working memory resources. Translation requires simultaneous processing of comprehension, storage, and reformulation, which places a heavy cognitive burden on translators. [5, 45] Note-taking alleviates this burden by allowing information to be encoded externally, freeing cognitive resources for higher-level decision-making.

In interpreting studies, note-taking is viewed as a symbolic system rather than a linguistic one. Notes consist of abbreviations, arrows, symbols, and spatial organization that reflect meaning, discourse relations, and speaker intention. This system enables interpreters to maintain coherence and accuracy even when dealing with dense or abstract content. [1, 390] Similar principles apply to written translation, particularly in specialized or academic texts where complex argumentation must be preserved.

Artificial intelligence has introduced new dimensions to translation practice. AI-based systems rely on large-scale corpora and probabilistic models to generate translations, offering remarkable speed and terminological consistency. However, these systems operate primarily at the level of pattern recognition and statistical likelihood, which limits their



ability to fully grasp context-dependent meaning, pragmatic intent, and cultural nuance. [6, 18]

Human translators, by contrast, engage in interpretive reasoning that goes beyond surface-level equivalence. Note-taking supports this reasoning process by enabling translators to track discourse structure, implicit meanings, and translation problems that AI systems may fail to detect. Thus, note-taking serves as a bridge between human cognition and automated translation technologies.

In AI-assisted translation environments, the function of note-taking is not diminished but transformed. While AI tools can generate draft translations rapidly, human translators increasingly use notes to evaluate, revise, and contextualize AI output. Notes may include observations about tone, register, audience expectations, and cultural constraints that are not captured by automated systems. [2, 204]

Moreover, note-taking facilitates critical distance from AI-generated text. By documenting translation choices and alternatives, translators avoid uncritical acceptance of machine output and maintain professional autonomy. This interaction highlights a shift from note-taking as a memory aid to note-taking as an analytical and evaluative tool.

Pedagogical Implications for Translator Training.

The integration of AI into translation practice has significant implications for translator education. Training programs must balance technological competence with the development of core cognitive skills such as note-taking, discourse analysis, and critical thinking. Teaching students to combine AI tools with effective note-taking strategies can help them develop reflective and responsible translation practices. Rather than treating AI as a replacement for human expertise, translator training should emphasize collaborative human–AI interaction. Note-taking can be positioned as a meta-cognitive skill that enables translators to monitor AI performance, identify errors, and make informed decisions.

Conclusion.

This study demonstrates that note-taking continues to play a central role in translation practice despite the growing influence of artificial intelligence. While AI technologies significantly enhance efficiency and support routine translation tasks, they cannot replace the human capacity for contextual interpretation, pragmatic judgment, and ethical responsibility. Note-taking remains an essential cognitive strategy that enables translators to engage critically with source texts and AI-generated output. In the age of artificial intelligence, note-taking should be viewed not as an outdated practice but as a key component of hybrid translation competence.



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