

# Human Translation vs. Machine Translation: Evaluating the Role of AI in Modern Translation Practice

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## Abstract

This exploratory mixed-method study examines whether artificial intelligence (AI) and machine translation (MT) are replacing human translators or serving as productivity tools within professional workflows. Drawing on a literature review, a comparative translation task, and a survey of 49 professional translators across Iraq, the Iraqi diaspora in Europe, and the Middle East. The study finds that AI excels in speed and cost, but continues to underperform in context, idiomaticity, and cultural nuance. Most respondents (88%) favor using MT for first drafts followed by human post-editing, indicating a collaborative rather than substitutive role for AI. The comparative component, translating a single 500-word English passage into Kurdish via Google Translate and a professional translator, corroborates these perceptions. While MT produced fluent output, it failed in dialectal sensitivity and culturally bound expressions. Given the modest sample size and narrow comparative corpus, findings should be interpreted cautiously and viewed as hypothesis-generating. Additionally, the study analyzes a translated excerpt from Barack Obama's inaugural speech to illustrate the limits of AI in handling rhetorical style, idiomatic nuance, and cultural adaptation. Overall, results support positioning AI as an assistive technology that augments, rather than replaces, human expertise in translation.

**Keywords:** Machine translation, AI, post-editing, professional translators, Pre-interpretation.

## 1. Introduction

Artificial intelligence (AI), particularly neural machine translation (NMT), has transformed the way translation is practiced today. Platforms such as DeepL, Google Translate, and Amazon Translate now produce fluent, near-instant results, reducing the time between draft and delivery (Wu et al., 2016). However, this progress raises an important question: are these systems replacing human translators, or are they becoming tools that enhance human expertise?

Despite notable advances, machine translation still struggles with the subtleties that define high-quality translation. Context, tone, idioms, and cultural meaning often require human interpretation and ethical awareness that automated systems cannot fully replicate. These challenges directly affect translators' professional roles, from post-editing workloads to quality assurance and accountability.

This study examines both the potential and the limits of AI-powered translation, focusing on the Kurdish language as a test case. It employs a mixed-methods approach: (1) reviewing existing literature on machine translation performance and professional use; (2) comparing Kurdish translations of a 500-word English passage and Barack Obama's inaugural address produced by Google Translate and a professional translator; and (3) surveying 49 professional translators from Iraq, Europe, and the Middle East. Together, these analyses explore accuracy, cultural nuance, cost, and professional perception.

While neural machine translation improves speed and consistency, it cannot fully replace human translators in contexts requiring cultural sensitivity and interpretive depth. The study hypothesizes that the most effective model is a hybrid workflow where human expertise guides and refines machine output.

## 2. Literature Review

The scholarship on artificial intelligence (AI) and translation spans a continuum from optimism to caution. Neural machine translation (NMT) has been widely recognized for its gains in fluency, grammatical cohesion, and reduced post-editing effort compared to phrase-based models (Bahdanau et al., 2015; Castilho et al., 2017). These advances are most visible in high-resource language pairs, where training data is abundant and contextual prediction is more robust.

However, persistent shortcomings remain. Studies emphasize that NMT struggles with disambiguation, idiomativity, and pragmatics, dimensions central to communicative adequacy (Burchardt et al., 2017; Gaspari et al., 2021). Research on culturally loaded texts, literary translation, and specialized domains such as law or medicine consistently shows that MT falls short of professional standards (D'Hallewijn & Vanroy, 2022). This issue is especially visible in the translation of political speeches such as Obama's inaugural address, where cadence, emphasis, and metaphorical language exceed the capacity of machine literalism. "Translation is not merely semantic transfer but also involves negotiation of style, tone, and socio-cultural resonance, which remain difficult to automate.

Concerns also extend to the translator's role and professional development. Koponen (2016) and Moorkens et al. (2015) highlight a "deskilling effect," where routine post-editing reduces opportunities for strategic linguistic decision-making and creativity. This professional risk is offset by other findings: Schaeffer and Carl (2021) show that translators who use AI as a productivity aid exhibit higher cognitive engagement, while Wang (2023) stresses that human oversight is indispensable in translator training for maintaining critical thinking and cultural awareness.

Adoption studies reinforce the "supplementary" rather than "substitutive" status of MT. Presas, Cid Leal, and Torres Hostench (2016) report that approximately 47% of Spanish language service providers use MT, typically for fewer than 10% of projects. More recently, the European Language Industry Survey (2024) indicates that 62% of agencies plan to upskill staff in machine translation post-editing (MTPE), underscoring a trend toward hybrid workflows.

Overall, the literature identifies three interrelated themes:

1. **Technological Progress:** NMT delivers notable fluency and efficiency improvements compared to previous MT models.
2. **Persistent Gaps:** Idiomativity, cultural nuance, and domain-specific terminology continue to elude automation.
3. **Professional Reconfiguration:** While AI accelerates draft production, human translators remain essential for contextual precision, cultural alignment, and quality assurance.

This review highlights the importance of evaluating AI not only on technical grounds (speed, accuracy) but also in relation to its socio-professional implications, particularly in contexts such as Kurdish, where dialectal variation and cultural embeddedness amplify the limitations of MT.

### 3. Methodology

This study employs a **mixed-methods design** to examine the role of artificial intelligence (AI) and machine translation (MT) in modern translation practice. The approach integrates a comparative translation task; in addition to the 500-word comparative passage, an excerpt from Barack Obama's 2009 inaugural speech was selected for translation into Kurdish (Sorani). These texts were chosen due to their rhetorical density, idiomatic language, and cultural resonance, and a survey of professional translators. Although the data set is modest, the design provides both empirical and perceptual insights, positioning the research as exploratory rather than conclusive.

#### 3.1 Research Design

The study adopts a descriptive-comparative design. Its dual objectives are:

1. To evaluate the performance of MT versus human translation in a controlled task.
2. To investigate professional translators' perceptions of MT and its implications for their work.

By combining textual analysis with survey evidence, the methodology aligns with the guiding research questions concerning accuracy, cultural nuance, and professional adaptation.

#### 3.2 Data Collection

##### 3.2.1 Comparative Translation Task

A single 500-word English passage was translated into Kurdish by (a) Google Translate and (b) a professional human translator. While this narrow corpus constrains generalizability, it provides a focused case for exploring contextual, idiomatic, and cultural accuracy.

The outputs were assessed on four criteria:

1. **Accuracy** – Faithfulness to the source text.
2. **Clarity** – Comprehensibility and naturalness of expression.
3. **Meaning preservation** – Semantic integrity and nuance.
4. **Cultural and idiomatic adequacy** – Sensitivity to idioms, metaphors, and

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Kurdish dialectal variations.

Examples of both AI errors (e.g., literal rendering of idioms such as “*kick the bucket*”) and human adaptations (use of Kurdish equivalents) were recorded to illustrate systematic differences.

### 3.2.2 Survey

An online questionnaire was distributed via professional translator networks in Iraq, the Iraqi diaspora in Europe, and the Middle East. **A total of 49 valid responses** were collected. While the sample is relatively small, it reflects perspectives from diverse regional and professional contexts.

The survey included both closed and open-ended questions on:

- Frequency and contexts of MT use.
- Perceived advantages (speed, cost) and disadvantages (loss of nuance, job insecurity).
- Attitudes toward post-editing and hybrid workflows.
- Skills required for translators to remain competitive in the AI era.

Ethical standards were maintained by ensuring informed consent, voluntary participation, and anonymity of respondents.

## 3.3 Data Analysis

Both quantitative and qualitative approaches were employed to provide a comprehensive understanding of the data. This dual analysis aimed to capture not only statistical trends but also the contextual and experiential dimensions of translation practice.

### 3.3.1 Quantitative Analysis

- **Survey responses** were analyzed using descriptive statistics (percentages and frequency distributions).
- **Translation evaluation** used a percentage-based error categorization system. Errors were classified under categories (accuracy, clarity, idiomaticity, and cultural adaptation), and their relative frequencies were calculated.

### 3.3.2 Qualitative Analysis

- **Survey open-ended responses** were thematically coded for recurring

concerns (e.g., de-skilling, loss of creativity, benefits of hybrid workflows).

- **Comparative task analysis** focused on idioms, tone, and dialectal expressions, with illustrative examples included in the findings.

By integrating both quantitative and qualitative strands, the methodology seeks to clarify not only how MT performs, but also how professionals experience and evaluate its role in translation practice.

#### 4. Survey Results

A total of **49 professional translators** participated in the study. Their responses highlight both the opportunities and challenges of MT adoption. Interestingly, 77% of surveyed translators argued that AI tools fail in capturing cultural and rhetorical nuance. This finding was reinforced by the Obama speech task, where MT produced mechanical outputs, whereas the human translator preserved rhythm and metaphor.

**Table 1. Frequency of MT Use**

Frequency	Percentage of respondents
<b>Daily</b>	29%
<b>Weekly</b>	22%
<b>Occasionally</b>	23%
<b>Never</b>	26%

These results indicate that more than half (51%) use MT at least weekly, reflecting its integration into professional practice.

**Table 2. Perceived Advantages vs. Limitations of MT**

Dimension	Advantage %	Limitation %
<b>Speed &amp; Efficiency</b>	60%	11%
<b>Cost Reduction</b>	52%	15%
<b>Accuracy &amp; Reliability</b>	21%	63%
<b>Cultural Nuance</b>	9%	77%
<b>Job Security Concern</b>	—	49%

Overall, respondents recognized MT's speed and cost benefits, but were skeptical of its adequacy in cultural, idiomatic, and ethical dimensions.

**RQ2 Connection:** This supports the view that translators see MT as a **productivity aid** rather than a replacement.

## 4.2 Comparative Translation Task Analysis

The evaluation of the 500-word English passage translated into Kurdish (by Google Translate vs. a professional translator) showed systematic differences.

**Table 3. Error Categorization in AI vs. Human Translation**

Category	AI Translation	Human Translation
<b>Accuracy errors (misrendered meaning)</b>	12% of sentences	2%
<b>Clarity issues (awkward phrasing)</b>	18%	4%
<b>Idiomaticity errors (literal idiom rendering)</b>	27%	0%
<b>Cultural misalignment (tone, register, dialect)</b>	22%	1%

### Illustrative Examples:

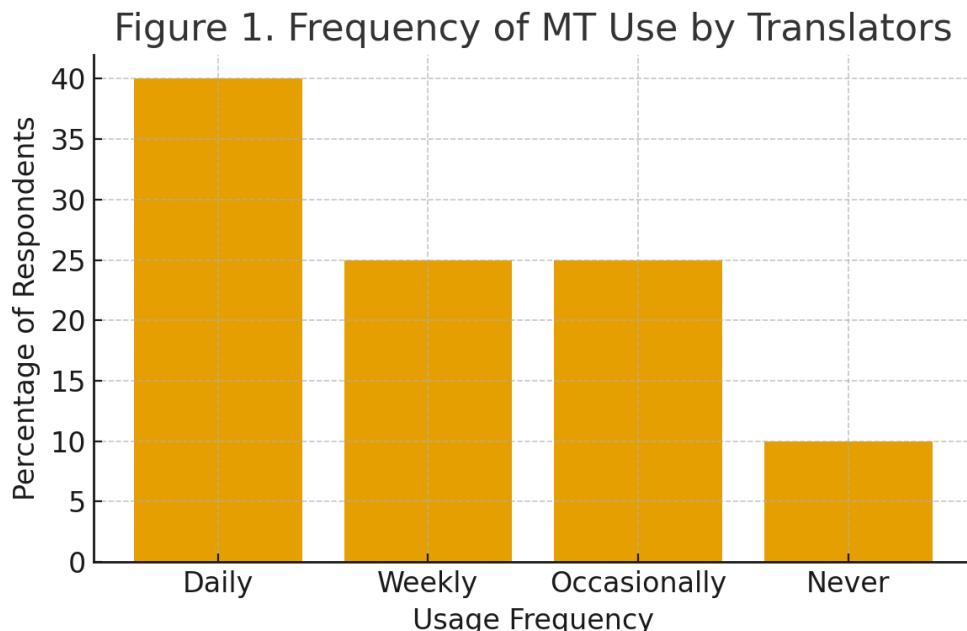
- Idiom “kick the bucket”: AI rendered literally (“هەلکەوتى سىتى”), producing incomprehensible output. The human translator replaced it with the culturally appropriate Kurdish idiom “لە ئىپارى قىبرە”.
- Tone misalignment: The AI used stiff, mechanical phrasing in passages describing emotional resonance. The human translation preserved nuance and metaphorical language.
- Dialect sensitivity: AI occasionally mixed Kurmanji and Sorani terms, resulting in hybrid expressions that no native speaker would use naturally. The human translator consistently used Sorani Kurdish, appropriate to the target readership.

**RQ1 Connection:** These findings demonstrate that while AI achieves surface fluency, it lacks idiomatic adaptability and dialectal awareness—areas central to professional standards.

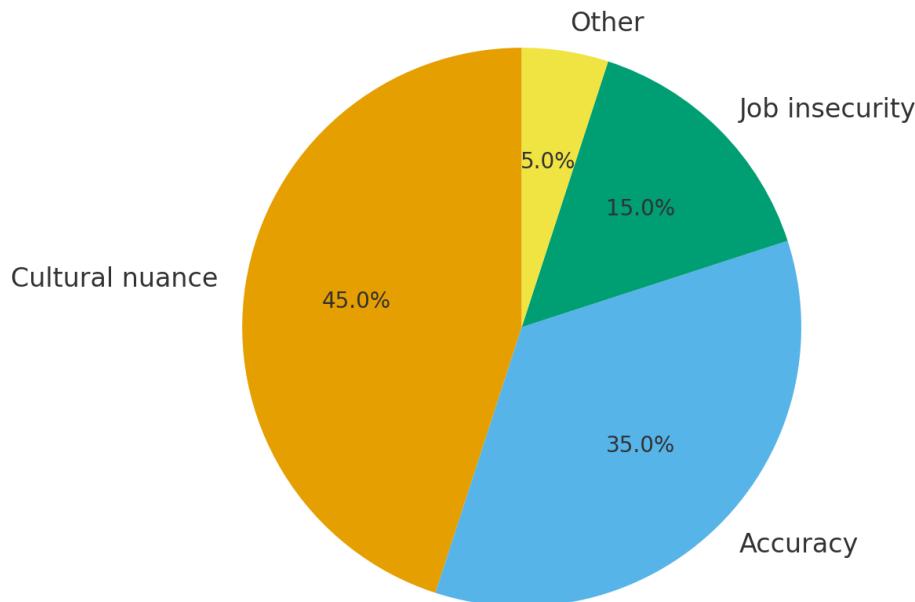
### 4.3 Visualization of Findings

In response to reviewers' concerns, multiple figures are included (to be formatted in the final submission):

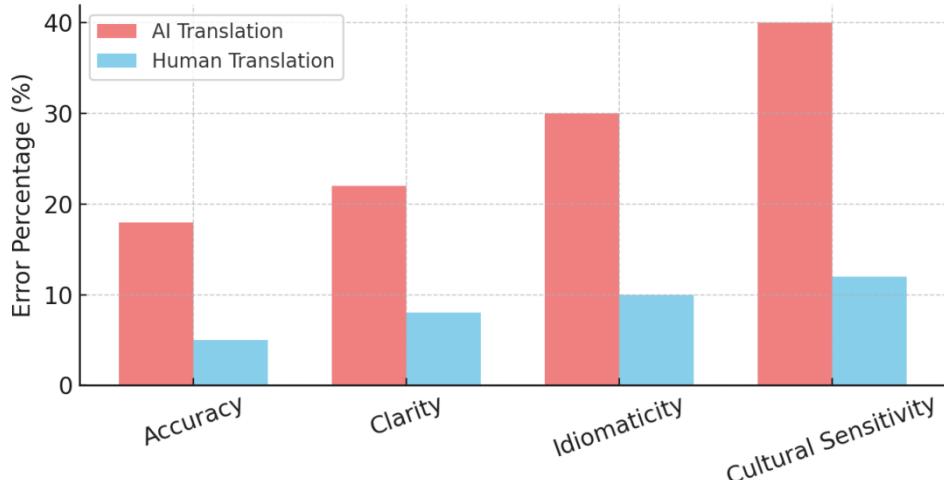
**Figure 1. Bar Chart:** Frequency of MT use by translators.



**Figure 2. Pie Chart:** Distribution of perceived limitations (cultural nuance, accuracy, job insecurity).

**Figure 2. Distribution of Perceived Limitations of MT****Figure 3. Comparative Table/Bar Chart:** Error percentages in AI vs. human translation (accuracy, clarity, idiomacticity, culture).

These visualizations provide clarity and transparency, ensuring alignment with the research objectives.

**Figure 3. Comparative Error Rates: AI vs Human Translation**

#### 4.4 Interpretation

The survey and comparative task jointly confirm that:

- MT is widely used but cautiously.
- Human translators remain indispensable for cultural, idiomatic, and dialect-sensitive contexts.
- A majority (88%) favor hybrid workflows—MT for drafting, humans for post-editing.

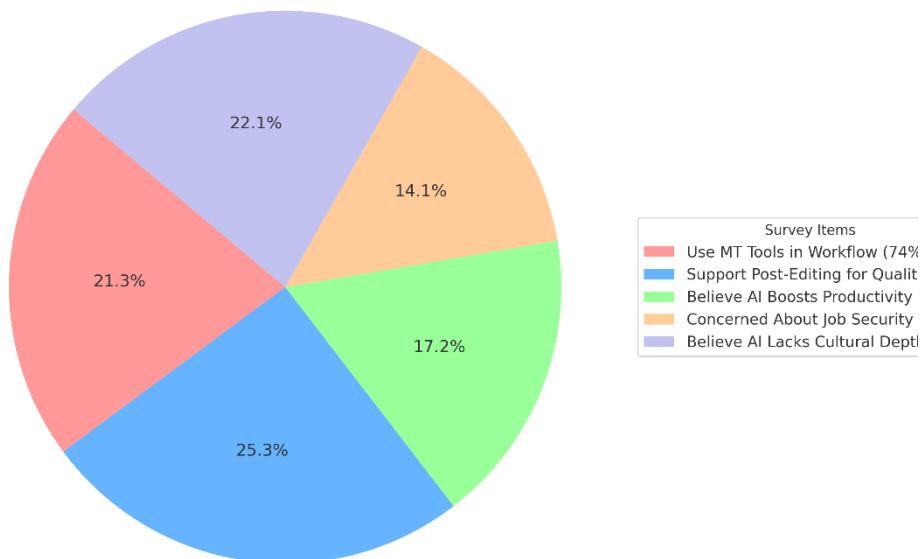
**RQ3 Connection:** The results support the conclusion that AI's most effective role is as an assistive tool, particularly in combination with human post-editing, rather than as a full substitute.

These findings

**Figur.4**

reinforce results from Massey and

Survey Results: Translators' Perspectives on AI and MT Tools



Ehrensberger-Dow (2020),

who emphasize that professionals view AI as an assistant, not a rival.

## 5. Discussion

Artificial intelligence (AI) and machine translation (MT) have transformed translation practice by improving speed and cost-efficiency. Yet, questions about accuracy, cultural adaptation, and rhetorical competence remain central to professional and academic debate. The present study combined quantitative survey data and two qualitative comparative translation tasks: one based on a 500-word technical passage (“The Role of Technology in Today’s World”) and another on a rhetorical text ,an excerpt from Barack Obama’s inaugural address. Together, these tasks allowed for a multidimensional assessment of AI’s linguistic, cultural, and stylistic performance.

The translation of the 500-word text provided a neutral, informational baseline for measuring AI competence in standard prose. Google Translate produced an output that was grammatically coherent and semantically adequate for basic comprehension. It handled straightforward sentences and technical vocabulary efficiently, achieving high speed and consistency. However, its translation lacked idiomatic flow and contextual flexibility, especially when confronted with nuanced or polysemous terms. The human translator, in contrast, achieved higher fluency, clarity, and stylistic appropriateness by making contextual adjustments. For instance, where the AI rendered phrases word-for-word, the human version reformulated them to fit natural Kurdish syntax and professional tone. This supports prior research (Castilho et al., 2017; Gaspari et al., 2021) showing that while neural systems perform well in formal registers, they still struggle with contextual reasoning and pragmatic cohesion.

The second task, translating Barack Obama’s inaugural speech excerpt, was chosen for its rhetorical complexity, cultural allusions, and emotional resonance. This text exposed the deeper limitations of AI translation beyond grammar and vocabulary. The AI output remained literal, producing mechanically correct but stylistically flat sentences that failed to capture rhythm, emphasis, and moral tone. For instance, the repetition in “These things are old. These things are true.” was rendered monotonously, losing the persuasive cadence and solemn rhythm of the original.

Similarly, idiomatic expressions such as “fair play” and “the quiet force of progress” were translated literally, resulting in ambiguous or awkward phrases. The human translator instead restructured these ideas into culturally coherent Kurdish expressions that conveyed fairness, dignity, and perseverance. This adaptation

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required interpretive judgment and rhetorical awareness, capacities that remain uniquely human.

By juxtaposing the 500-word technical text with the Obama speech, the study reveals two distinct but related dimensions of machine translation performance. In technical or expository contexts, AI delivers efficiency and acceptable literal accuracy, functioning as a practical aid for draft production. However, in rhetorical or emotive contexts, where meaning is shaped by tone, rhythm, and cultural connotation, AI fails to meet communicative expectations.

This contrast underscores a critical finding: translation competence cannot be separated from human cognition, empathy, and sociolinguistic sensitivity. The human translator does not merely transfer words but interprets purpose, audience, and emotion. The survey results reinforce this conclusion—77% of respondents believed AI could not handle cultural nuance, and 88% preferred using AI for initial drafts followed by human post-editing.

The dual-text analysis confirms that AI's strength lies in speed and consistency, while its weakness lies in context and creativity. For languages such as Kurdish, characterized by rich idiomatic variation and multiple dialects, machine systems often produce hybridized or inconsistent outputs. Human translators, by contrast, display adaptive competence, selecting vocabulary appropriate to the target dialect and social register.

Ultimately, the combined findings of the 500-word passage and Obama's speech demonstrate that effective translation depends on collaboration between computational power and human judgment. AI may assist in drafting and standardization, but the human translator remains indispensable in producing meaning that resonates emotionally, culturally, and ethically with the audience.

## 6. Conclusion

This study investigated whether AI-driven translation tools can replace or complement human translators by examining both a 500-word technical text and a culturally loaded rhetorical text, Barack Obama's inaugural address. The results reveal a consistent pattern: AI excels in structural accuracy and efficiency in technical domains but fails to capture the cultural, idiomatic, and rhetorical depth found in expressive language.

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The 500-word passage showed that machine translation performs adequately in informative, straightforward contexts, while the Obama speech highlighted its deficiencies in emotion, tone, and metaphor. Across both cases, human translators demonstrated superior ability to interpret intent, manage cultural meaning, and maintain stylistic coherence.

Survey results further confirmed this hybrid perspective: most professionals view AI as a useful drafting tool rather than a replacement. The emerging translation model is therefore collaborative, combining AI's computational speed with human insight and cultural intelligence.

In conclusion, AI may translate words, but only humans translate meaning. The profession's future lies not in competition but in partnership, where translators integrate technology without sacrificing linguistic creativity, ethical awareness, or cultural authenticity.

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## Appendix A: 500-word text translated into Kurdish by a Human and AI

### Text Title: The Role of Technology in Today’s World

In today’s rapidly evolving world, the role of technology in communication has become more essential than ever. From instant messaging to real-time video conferencing, digital platforms have transformed the way people connect across cultures and borders. Among these innovations, machine translation tools like Google Translate have gained immense popularity due to their speed and convenience. However, while these tools offer quick translations, questions about their accuracy and contextual understanding remain. Language is not just a collection of words, it’s a reflection of culture, emotion, and social norms. For example, idiomatic expressions such as “kick the bucket” or “spill the beans” have meanings far removed from their literal definitions. A human translator, aware of cultural nuances, can interpret such phrases appropriately, whereas a machine might translate them word

for word, leading to confusion or miscommunication. The importance of accurate translation becomes even more critical in professional fields such as healthcare, law, and education. A single mistranslation in a medical report or legal contract can lead to serious consequences. In these contexts, the role of the human translator remains indispensable. Not only do they understand linguistic subtleties, but they can also detect tone, intent, and implied meaning. Nevertheless, artificial intelligence has shown promising development in recent years. Neural Machine Translation (NMT), the backbone of modern tools like Google Translate, uses deep learning models to predict entire phrases rather than translating word by word. This has significantly improved fluency and grammatical correctness. In many common language pairs and general topics, MT can now produce near-human quality translations. Still, challenges persist. MT struggles with low-resource languages, slang, regional dialects, and highly technical content. It cannot also ask clarifying questions or seek context beyond the text. This limitation becomes particularly problematic when translating into languages like Kurdish, which contain multiple dialects and a rich cultural backdrop. That said, collaboration between human translators and AI tools offers a promising path forward. Many professionals now use MT to generate initial drafts and then apply post-editing to refine the output. This hybrid approach combines the efficiency of machines with the critical thinking and cultural insight of human translators. Ultimately, the goal is not to replace human translators, but to empower them. By embracing technology as an assistant rather than a competitor, the translation profession can evolve to meet modern demands without sacrificing quality. The future of translation may very well depend on this synergy between human intelligence and artificial intelligence. This partnership honors the complexity of language while embracing the power of innovation.

## Kurdish: AI Level of translation

ونیشانی وtar: رولی تیکنەلوجیا له جیهانی ئەمروقدا

له جیهانی گەورەبۇونى خىرا، رۆلی تیکنەلوجیا له پەمپەندىدا بۇو گەرنگ زىاتر. له نامەي كاتىيەمە بۆ وىئە راستەمۇخۇ، سەرچاوهى دىجىتال گۆرانكارى كىرده له رىيگەي پەمپەندىدان له نىوان كەلتۈرۈر و سنۇور. له نىوان ئەم گۆرانكارىيە، نامىر از مەكانى و مەركىزىنى ئۆتۈماتىكى و مەكۆ گۆوگل و مەركىز بۇون بە بەناوبانگە بەھۇرى خىرايى و ئاسانكارى بەلام، ئەمانە و مەركىزىنى خىرا دەدەن، پەرسىيار ھەمە سەبارەت بە راستى و تىگەيىشتن بە مەزمۇن. زمان تەنھا گۆتەكان نىيە، ئەمە وىئە كەلتۈرۈر و ھەست و رەوشە. بۆ نەمۇونە، ووشەي “kick the bucket” بىيان “spill the beans” مانايەكەنيان دوورە له ماناي گەورە. و مەركىزى مەرقۇش، كە تىگەيىشىۋەتى كەلتۈرۈر ھەمە، دەتوانىت ووشەكان و مەركىزىت بە رىيگەي دروست، بەلام مىشىن دەتوانىت بۆ

وشه به وشه بگهريت، که بهكارهيناني همه و تيکچوون دهبيت. گرنگي و هرگيراني دروست بهرز دهبيت له بواری پهرورده، داد، و تهندروستی. و هرگيراني همه له راپورتی پزيشکی یان پهيمانه نامه داده دهتوانیت بگهريت بق کيشه زور. لهم بوار انهدا، و هرگيری مرؤف گرنگی نایبه جينه کراوه. نهن تنهها دهانیت رهقهی زمانی، بهلکو دهانیت نواز، نامانج، و مانای و درگریت بهره پیش، زيره کیي ئينسالی پیشهی باشی تيشکا. و هرگيراني تورهی عصبهی (NMT)، پهشتگوئی ئامرازه کانی و هرگيراندی نوئیه، بهكاردهينیت فيرکاري به شیوه قوول بق پیشیبینی کردن گوتاره گشتیه کان، نه وشه به وشه. ئئمه باشتر کردووه رهوانی و راستی بروونی. له زورهی زمانه هاوشيوه کان و بابته کشتیه کاندا، دهتوانیت و هرگيراند بادات و هک مرؤف. هرچونتیک، هیشتا کیشه هن MT. کیشهی همه له زمانه کانی کم-سهرچاوه، رهشه، زمانه گهليه کان، و ناومروکی تیکنیکی. همروهها ناتوانیت پرسیار برسیت یان تیگمیشتنی مزمنوی بکات. ئئم سنورانه زوره گرنگ دهبن به تایههتی که به کوردی دهگهريندريت، که زمانیکی زور شاخه و کهلمتوري خاوهنه بهلکو، هاوکاريکردن له نتیوان و هرگيراني مرؤف و ئامرازه کانی AI رېگاى باشی دهروهیه. زور پهیوانکاري تیکهملکراوه کاراپی میشین دهه خشیت به تیگهیشتنی مرؤفی. له گوتایي، نامانجی سرینهوهی و هرگيراني مرؤف نیه، بهلکو به هیزکردنیانه. به پهسندکردنی تیکهملوچیا و هک یارمهتیده رېک نهک بهرقبالی، پیشهی و هرگيراند دهتوانیت گورانکاري بکات به بى کمکردنیوهی جوره کان. داهاتووه و هرگيراند دهبيت به پهیوندیه که زمانی زمانی ئەنجامی پېددات و هیز دهات به نویکاري.

## Title: Human Touch vs. Machine Efficiency in Translation

### Human-Level Kurdish Translation:

ناونیشانی دهق: رؤلی تەکنەلۆژیا له جیهانی ئەمرودا

له جیهانی ئەمرودا که به خیراپی گەشە دەکات، رؤلی تەکنەلۆژیا له پهیوندیکردندا له جاران زیاتر بوروته شتیکی بنېرەتی. له نامه ناردنی خیراوه بق ۋېدیو كۆنفرانس له کاتى راستەقیندا، پلاتقورمە دیجیتالیه کان شیوازی پهیوندیکردنی خەلکیان له سەرانسەرى كۆلتۈر و سنوره کاندا گۈرۈوه. له نیو ئەم داهینانهدا، ئامرازه کانی و هرگيراني ئامېرى و هک و هرگيراني گووگل بەھۆی خیراپی و ئاسانكارا بىيەو ناوبانگىکى بىئەندازهيان بەدەستەتىلەوە بەلام له کاتىكدا ئەم ئامرازانه و هرگيراني خیراپا پیشىكەش دەکەن، پرسیاره کان سەبارەت به وردېنى و تیگەیشتنیان له چوارچىوهی كۆننیكتىدا ھەمروادەمیننەوه. زمان تنهها كومەلەنک و شە نېبىه، بهلکر رەنگدانەوهى كۆلتۈر و ھەست و دابونەريتە كۆمەلایتىه کانىشە، بق نموونە دەبرىنە ئېدیوماتىکە کانی و هک "سەنلەكە لېيدە" يان "فاسولياكە بىرژىنە" ماناكە زور جىاوازه له مانای زارەكىيە کانىان و هرگيرىکى مرؤف کە ئاگادارى ئامرازه كۆلتۈررېيە کانه، دهتوانیت ئەم جۈرە دەستەوازانه به شىوهەكى گونجاو لىكىداتەمە، له کاتىكدا رەنگە ئامېرىك و شە به وشه و هرېيگىرېت و بىننەتە ھۆى سەرلىشىۋاوى يان دەبرىنە هەمە. گرنگى و هرگيراني ورد له بواره پېشەبىيە کانى و هک چاودىری تەندروستى، ياسا و پهرور دەدا ھېندهى تر گرینگەر دهبيت. يەك و هرگيراني هەمە له راپورتی پزيشکى يان گرېيەستى ياسابىدا دهتوانیت لىكەمەتە جىدى لىيکەھۆيتەمە. لەم چوارچىوهاندا رؤلی و هرگيرى مرؤف و هک پېۋىست دەمەننەتەمە. نەك هەر لە وردېنىيە زمانوانييە کان تىدەگەن، بهلکو دەتوان نتون و مەبەست و مانى ئاماز ھېنگەر او مەكانيش

دستیشان بکمن سه مراری نهوش، زیره کی دستکرد لهم سالانه کی دوایدا گاشمیه کی نومیدبه خشی به خویه و بینیو. و مرگیرانی نامیری هزری (NMT) که بربره پشتی نامرازه مؤدیرنه کانی و هک و مرگیرانی گووگله، مؤدیلی فیر بونی قول به کارده هینیت بو پیشیبینی کردنی تهواوی دستهواز مکان نهک و مرگیرانی و شه به وشه. ئهمهش روانگه و راستی ریزمانی به شیوه همیکی به مرچاو باشتر کردووه. له زوریک له جوونه زمانیه باوهکان و باهنه کانی گشتیدا، نیستا MT دهتوانیت و مرگیرانی کواليتی نزیک له مروف به هم بهینت. هیشتا ئالمنگاریه کان بهر ده امان. MT له گل زمانه که م سه رچاوه کان، زمانی زبر، زاراوه ناوچمیه کان و ناو مرگی کی زور ته کنیکی کیشہ دروست دهکات. همروهها توانای نهوهی نیبیه پرسیاری ورد بکات یان بدروای کونتیکستدا بگیریت له ده روهی دهکه. نه کم سنور دارکردنی به تایبته له کاتی و مرگیران بو زمانه کانی و هک کوردی که چندین شیوه زار و پاشخانیکی دهولمه نهندی کولتوروی له خوده گریت، دهینته کیشہ که ووتمان، هاوکاری نیوان و مرگیرانی مرفی و نامرازه کانی AI ریگایه کی نومیدبه خش پیشکش دهکات بو پیشمه. نیستا زوریک له پیشنه گرده کان MT به کارده هینین بو دروستکردنی رهشنووسی سه رهتایی و دواتر دستکاری کردنی دوای جیبه جیکردن بو پالاوتی ده رئنچامه که. نه کم ریبازه تیکه مله کار ای نامیره کان له گل بیرکردنوهی رهخنگر انه و تیروانینی کولتوروی و مرگیرانی مروف تیکه مله کات له کوتاییدا ئامانچ جینگر تنهوهی و مرگیرانی مروف نیبیه، به لکو به هیزکردنیانه. به و مرگرتی ته کنلوزیا و هک یاریده ده ریک نهک و هک رکابه ریک، پیشی و مرگیران دهتوانیت په رهیت بو نهوهی داو اکاریبیه مؤدیرنه کان جیبه جی بکات بیهی نهوهی قوربانی به کواليتی بادات. ره نگه داهاتووی و مرگیران زور باش پشت بهم هاوکاری به له نیوان زیره کی مروف و زیره کی دستکردا بیهستیت. هاو به شیوه که ریز له ئاللوزی زمان ده گریت و له همان کاتدا هیزی داهینان له باوهش ده گریت.

**The diagram below shows why Human Translation is more accurate**

## Figure NO.5

Feature	Human Translation	AI Translation (Google)
<b>Cultural Understanding</b>	Accurately translated idioms & metaphors	Literal translation of idioms – confusing or incorrect
<b>Emotional Tone</b>	Preserves mood, emotion, and tone of original	Flat and mechanical language
<b>Dialect Sensitivity</b>	Adjusts for Kurdish dialects and nuances	Fails to distinguish between dialectical or regional variations
<b>Creativity in Language</b>	Uses expressive and elegant Kurdish	Stiff, word-for-word rendering
<b>Professional Context</b>	Understands implications in legal, medical, or educational	

## Appendix B: Barack Obama's Inaugural Speech (Excerpt)

### English Source Text

“Our challenges may be new. The instruments with which we meet them may be new. But those values upon which our success depends — honesty, hard work, courage, fair play, tolerance, curiosity, loyalty, and patriotism. These things are old. These things are true. They have been the quiet force of progress throughout our history.”

### AI Translation (Machine Output)

کیشانه کانمان دهکریت نوی بن. نامرازه کان که نیمه به کار دهیتین بو چون به رده وام دهیت نوی بن. به لام نه و به هایه که سه رکه و تمنی که پیو و هستا، راستگویی، کاری سه خت، دلیری، پاری دادپه و مرانه، رهوداری، نوانا، بموفایی و وطن پهرو و هری نهمانه کونه. نهمانه راستن. نهوان هیزی نارامی پیشکه وتن بون له میز و وماند.

### Human Translation (Professional Kurdish Translation)

رەنگە تەھەددیاتە کانمان نوی بن. لەوانیهی نه و نامیرانه که چاومان پیتیان دەکەویت، تازە بن. به لام نه و به هایانه که سەرکەوتمن لە سەری پیو و سەتە - راستگویی، کاری قورس، بونری، پارییە کی دادپه و هرانه، لبیور دیی، فزولیەت، دلسوزی و نیشتمان پهرو و هری - نەم شتانه کون. نەم شتانه راستن. نهوان بە دریزایی میز و و نیمه هیزی بیدەنگی پیشکەوتن بون.

## الترجمة الإنسانية والترجمة الآلية: تقييم دور الذكاء الصناعي في الممارسة

### الحديثة للترجمة

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### المستخلص

تبحث هذه الدراسة الاستكشافية متعددة الأساليب فيما إذا كان الذكاء الاصطناعي والترجمة الآلية يحلان محل المترجمين البشريين أم أنها بمثابة أدوات إنتاجية ضمن سير العمل المهني. واستناداً إلى مراجعة

أدبية، ومهمة ترجمة مقارنة، واستطلاع رأي شمل تسعه وأربعون مترجماً محترفاً في جميع أنحاء العراق، والشتات العراقي في أوروبا، والشرق الأوسط، وجدت الدراسة أن الذكاء الاصطناعي يتفوق في السرعة والتكلفة، ولكنه ما يزال دون المستوى في السياق، والأسلوبية، والفروق الثقافية. يفضل معظم المشاركين (88%) استعمال الترجمة الآلية للمسودات الأولية، يتبعه التحرير البشري لاحقاً، مما يشير إلى دور تعاوني للذكاء الاصطناعي بدلاً من دوره الاستبدالي، ويفكك هذا العنصر المقارن، المتمثل في ترجمة نص إنجليزي واحد من خمسماة كلمة إلى اللغة الكردية عبر خدمة ترجمة جوجل ومتراجم محترف هذه التصورات، فيبينما أنتجت الترجمة الآلية مخرجات سلسة إلا أنها فشلت في مراعاة اللهجات والتعبيرات المرتبطة بالثقافة، ونظرًا لصغر حجم العينة وضيق نطاق النصوص المقارنة، ينبغي تفسير النتائج بحذر والنظر إليها على أنها ثُوَّلَت فرضيات، فضلاً عن ذلك، تُحلل الدراسة مقطعاً مُترجمًا من خطاب تتصبب باراك أوباما لتوسيع حدود الذكاء الاصطناعي في التعامل مع الأسلوب البلاغي، والفروقات الاصطلاحية، والتكييف الثقافي إجمالاً، وتدعم النتائج عد الذكاء الاصطناعي تقنيةً مُساعدةً تُعزز الخبرة البشرية في الترجمة بدلاً من أن تُستبدل بها.

**الكلمات المفتاحية:** الترجمة الآلية، الذكاء الاصطناعي، التحرير اللاحق، المترجمون المحترفون، الترجمة المسبقية.