Linguistik, Terjemahan, Sastra (LINGTERSA)
Journal homepage: https://talenta.usu.ac.id/lingtersa

A Comparison of Google Translate and Human Translation Results in Students Thesis Abstracts: Accuracy and Readability

Amon Bernabas Tenis*[1], Adi Sutrisno[2], Sajarwa Roman[3]
[123]*Universitas Gadjah Mada, Yogyakarta, 55281, Indonesia*
*Corresponding Author: amonbernabastenis1996@mail.ugm.ac.id

ARTICLE INFO

Article history:
Received 15 August 2025
Revised 21 Nov 2025
Accepted 12 Feb 2026

E-ISSN: 2964-1713
P-ISSN: 2775-5622

http://doi.org/10.26594/register.v6i1.idarticle

ABSTRACT

Amidst the growing use of machine translation in academic settings, this study investigates the comparative quality of thesis abstract translations produced by Google Translate and professional human translators. Framed within the context of Translation Studies and linguistic evaluation, it aims to examine how each approach performs in terms of accuracy, fluency, and readability. This research employed descriptive qualitative methods to compare the translation results between Google Translate and human translation. By focusing on lexical precision, syntactic coherence, and contextual appropriateness, the study reveals that while Google Translate, powered by Neural Machine Translation (NMT), exhibits significant improvement in structural accuracy and terminological consistency, it frequently struggles to handle idiomaticity, pragmatic shifts, and nuanced academic discourse. Human translations, by contrast, consistently demonstrate superior contextual sensitivity, naturalness, and discursive flow. These findings highlight the current limitations of machine translation tools, such as Google Translate, in capturing the complexities of academic language and reaffirm the continued importance of human mediation in achieving high-quality scholarly communication.

Keyword: Comparison, Google Translate, Human Translation, Thesis Abstract, Accuracy, Readability, Linguistics

ABSTRAK

Di tengah meningkatnya penggunaan terjemahan mesin dalam lingkungan akademik, penelitian ini menyelidiki kualitas komparatif terjemahan abstrak tesis yang dihasilkan oleh Google Translate dan penerjemah manusia profesional. Berlandaskan pada konteks Studi Penerjemahan dan evaluasi linguistik, penelitian ini bertujuan mengkaji bagaimana masing-masing pendekatan bekerja dalam hal akurasi, kefasihan, dan keterbacaan. Penelitian ini menggunakan metode deskriptif kualitatif untuk membandingkan hasil terjemahan antara Google Translate dan terjemahan manusia. Dengan memfokuskan pada ketepatan leksikal, koherensi sintaksis, dan kesesuaian kontekstual, penelitian ini mengungkap bahwa meskipun Google Translate, yang didukung oleh Neural Machine Translation (NMT), menunjukkan peningkatan signifikan dalam akurasi struktural dan konsistensi terminologis, alat ini sering kesulitan menangani idiomatisitas, pergeseran pragmatik, dan wacana akademik yang bernuansa. Sebaliknya, terjemahan manusia secara konsisten menunjukkan kepekaan kontekstual yang lebih unggul, kealamian, dan aliran wacana yang lancar. Temuan ini menyoroti keterbatasan terkini alat terjemahan mesin, seperti Google Translate, dalam menangkap kompleksitas bahasa akademik dan menegaskan kembali pentingnya peran mediasi manusia dalam mencapai komunikasi ilmiah berkualitas tinggi.

Kata kunci: *Perbandingan, Google Translate, Terjemahan Manusia, Abstrak Tesis, Akurasi, Keterbacaan, Linguistik*

1. Introduction

Machine translation has progressively infiltrated nearly all domains of modern communication, with its presence in academia becoming particularly pronounced in recent years. Among the available tools, Google Translate has emerged as the most ubiquitous machine translation platform, serving as a practical solution for students and academics who need to translate various academic documents, including critically important thesis abstracts. This widespread adoption has occurred alongside significant technological advancements, particularly the shift from statistical machine translation to Neural Machine Translation (NMT) systems, which have demonstrably improved translation quality across multiple language pairs (Bahdanau et al., 2016; Wu et al., 2016). However, as machine translation becomes increasingly integrated into academic workflows, a fundamental question remains regarding whether translations produced by Google Translate can achieve comparable levels of accuracy and readability to those rendered by human translators. This question carries particular weight in academic contexts where precise communication of research content is essential, and where even minor translation errors could potentially distort meaning and compromise comprehension (Baker & Saldanha, 2019).

The central challenge facing machine translation systems, such as Google Translate, lies in simultaneously achieving both accuracy and readability in their outputs. Numerous empirical studies have demonstrated that despite continuous improvements, the quality of Google Translate's translations still fails to match human translation standards, particularly when processing complex syntactic structures or nuanced semantic meanings (Koehn, 2020; Castilho et al., 2018; Zhang & Toral, 2019). Research by House (2015) specifically highlights Google Translate's persistent difficulties with technical terminology and idiomatic expressions, often resulting in meaning distortions that could prove problematic in academic settings. Interestingly, performance varies considerably across languages, with Google Translate achieving relatively better results for language pairs with extensive digital corpora and relatively straightforward grammatical systems, such as English and Spanish (Turovsky, 2019; Toral & Sánchez-Cartagena, 2017). In contrast, languages with more complex morphological and syntactic structures, including Indonesian, continue to present substantial challenges for automated translation systems (Setiawan et al., 2018), suggesting the need for language-specific investigations of translation quality.

Existing studies have investigated machine translation quality from diverse perspectives. Castilho et al. (2018), Zhang and Toral (2019), and Koehn (2020) reveal that Google Translate's accuracy largely depends on the volume and quality of training data for specific language pairs. Vanmassenhove et al. (2019) further observe that although NMT models produce more natural output than phrase-based systems, they often omit semantic details and distort information, especially with culture-specific references or technical terms. Alhammadi et al. (2023) highlight frequent mistranslations of domain-specific medical terminology, while Aslerasouli and Abbasian (2015) find that Google Translate performs adequately with basic syntax but lacks coherence in extended academic texts. Baihaqi and Mulyana (2021), in examining legal documents, note that accuracy varies with complexity, echoing Defina et al. (2019), who report that poor handling of specialized terms in thesis abstracts leads to misinterpretation.

Other works by Dzakiyyah et al. (2020), Halimah (2018), and House (2015) stress the absence of cultural sensitivity in NMT systems, a theme echoed by Lawa et al. (2022), Lommel et al. (2014), Setiawan et al. (2018), Marzouk and Hansen-Schirra (2021), Läubli et al. (2018), Shterionov et al. (2019), and Garcia et al. (2020). These scholars emphasize that integrating user feedback can reduce ambiguity-related errors and structural issues. Overall, while NMT has improved, translating specialized, complex, and culturally nuanced content remains a challenge, underscoring the continued need for human revision in academic and professional settings. However, little research has directly compared Google Translate and human output specifically in thesis abstracts, a uniquely demanding academic genre. Abstracts must succinctly capture the research's aims, methods, findings, and implications within strict word limits (Baker & Saldanha, 2019; Munday, 2016). As Williams and Chesterman (2014) argue, even small errors in abstract translation can significantly affect readers' interpretations, potentially undermining the study's perceived credibility.

To address this gap, the present study compares Indonesian thesis abstracts translated by Google Translate and by human translators, assessing both accuracy (lexical and syntactic) and readability (cohesion and register). The findings aim to illuminate the current capabilities and limitations of machine translation in academic contexts, guiding scholars who rely on these tools and contributing to broader discussions on AI's role in academic communication. Specifically, this study asks: To what extent does the quality of thesis abstract translations by Google Translate differ from that of human translators in terms of accuracy and readability?

Can Google Translate reliably capture the complexities of academic language, or do significant disparities remain?

This study employs House's (2015) Translation Quality Assessment (TQA) model as its primary analytical framework, selected for its comprehensive functional-pragmatic approach to evaluating translation quality. House's model establishes a systematic methodology for comparing source and target texts through detailed linguistic analysis, making it particularly suitable for assessing machine translation outputs against human benchmarks. The model introduces a crucial distinction between two fundamental translation types: overt translation, which preserves the source text's cultural framework and is typical of academic and literary texts, and covert translation, which adapts content to the target culture's norms, more common in commercial or everyday communication.

House's analytical framework examines four key linguistic dimensions: (1) lexical accuracy, assessing terminology selection and semantic precision; (2) syntactic fidelity, evaluating sentence structure and grammatical correctness; (3) textual coherence, analyzing logical flow and connective devices; and (4) register appropriateness, judging the suitability of language style for academic discourse. These components collectively provide a robust mechanism for identifying how effectively translations preserve both the denotative meaning and connotative nuances of the original text.

The TQA model proves especially relevant for this study's examination of thesis abstracts for several reasons. First, academic abstracts represent a specialized genre requiring precise maintenance of both content and rhetorical structure. Second, the model's emphasis on register appropriateness directly addresses the formal conventions of scholarly communication. Third, its functional-pragmatic orientation allows for nuanced evaluation of how machine translation handles the dual demands of technical accuracy and communicative effectiveness inherent in academic texts. By applying this framework, the study can systematically identify where and how Google Translate's outputs diverge from human translation standards in preserving the academic integrity and communicative purpose of thesis abstracts.

This study employs a qualitative approach to compare the translation quality of Google Translate and human translations of academic abstracts, utilizing House's (2015) Translation Quality Assessment model as its analytical framework. The dataset consists of 10 randomly selected thesis abstracts from Master's students in Linguistics at Gadjah Mada University (2023), representing various subfields to ensure diversity in syntactic structures and lexical complexity. These abstracts were chosen specifically because they serve as condensed yet comprehensive representations of research, where accurate translation is crucial to maintain scholarly integrity (Baker & Saldanha, 2019). Each abstract underwent two translation processes: professional human translation by bilingual linguistics students (serving as the quality benchmark) and machine translation via Google Translate. The analysis focuses on four key dimensions from House's model: lexical accuracy, syntactic fidelity, textual coherence, and register appropriateness, evaluated through both systematic linguistic analysis and expert assessments. The methodology incorporates multiple validation measures, including pilot testing, blind rating procedures, and member checking to ensure robust findings. This comprehensive approach allows for a detailed comparison of how machine translation performs relative to human translation across various linguistic and communicative aspects of academic abstracts, while maintaining consistency with the theoretical framework established earlier. The study's design particularly addresses Munday's (2016) observation about the unique challenges posed by abstracts' concise yet complex nature, providing systematic insights into Google Translate's capacity to handle specialized academic texts.

2. Findings

To gain a deeper understanding of the quality and effectiveness of both translation outputs, a detailed comparative analysis was conducted across several linguistic and academic dimensions. This analysis focuses on how each version—Google Translate and human translation—performs in terms of clarity, cohesion, register, and theoretical integration. The following discussions highlight key patterns and distinctions, offering insight into the extent to which each translation aligns with academic standards and disciplinary expectations. The following is an analysis of the selected abstract.

Linguistik, Terjemahan, Sastra (LINGTERSA) Vol.07, No.01 (2025) 036–048

Table 1. Analysis of the first abstract

Linguistic Aspect	Google Translate (GT)	Human Translation (HT)
Lexical Choices	*"The pragmatic equivalence of swear words can be affected by the choice of translation strategy."*	*"The choice of translation strategy influences the pragmatic equivalence of swear words."*
Syntax	*"The data collection method is conducted by... followed by..." (38 words)*	*"Data collection began by... followed by..." (21 words)*
Cohesion & Coherence	*"Affects the expressive meaning of the pragmatic equivalence of cursing utterances."*	*"Influences the expressive meaning of curse words."*
Register	*"Cursing utterances"*	*"Swear words"*
Overt/Covert Strategy	*"Can be maintained, weakened, and disappeared."*	*"Can be preserved, diminished, or lost."*
Statistical Expression	*"With a percentage of 47.86%"*	*"Accounting for 47.86% of all cases."*

In Table 1, the comparison reveals that human translation outperforms Google Translate in maintaining pragmatic equivalence, especially in rendering swear words. Human translators tend to choose more natural, context-appropriate expressions and adjust syntax to suit the target language, resulting in clearer and more cohesive translations. In contrast, GT often retains rigid source structures and employs awkward or overly literal phrasing, which can obscure meaning and reduce communicative impact. These findings suggest that effective translation, particularly of emotionally charged language, requires not only linguistic accuracy but also pragmatic sensitivity, which remains a challenge for machine translation.

Table 2. Analysis of the second abstract

Topic	Google Translate (GT)	Human Translation (HT)
Lexical Choices	*"This research aims to demonstrate how visual and textual elements... play a role in challenging"*	*"This study examines how visual and textual elements... challenge"*
Syntactic Structures	*28-word sentence: "Using... to describe... to identify..." (complex and lengthy)*	*22-word sentence: "Drawing on... to explore..." (streamlined and logical)*
Textual Coherence	*"while their identities are negotiated through..." (less natural phrasing)*	*"with identity negotiation occurring through..." (smoother phrasing)*
Register	*"Allows for an in-depth analysis"; "that are based on heteronormative norms"*	*"Provides an in-depth analysis"; "shaped by heteronormative norms"*
Overt/Covert Strategy	*Preserves source-language structure: "This research aims to demonstrate..."*	*Adapts to English conventions: "This study examines..."*
Terminological Use	*"Interactions between text and images"*	*"Visual and textual elements"*

Table 2 shows that the human translation consistently demonstrates a higher degree of academic precision and fluency compared to Google Translate. It employs more concise structures and utilizes verbs and nouns that are appropriate within academic discourse. This version maintains a formal tone through efficient sentence construction, while also incorporating clearer logical connectors and natural academic collocations that enhance the overall coherence. In contrast, GT often resorts to generic phrasing and lacks the specificity required in scholarly writing. Furthermore, the human translation does not merely replicate the source text's

structure but adapts it following the conventions of academic English. It also reflects a strong familiarity with field-specific terminology, particularly within the domains of children's literature and visual-textual analysis. This indicates that the human translator brings not only linguistic competence but also subject-matter awareness, which is essential for maintaining the integrity and communicative purpose of the original academic content.

Table 3. Analysis of the third abstract

Topic	Google Translate (GT)	Human Translation (HT)
Lexical Choices	*"The material object of this research is..."*	*"The primary text analyzed in this research is..."*
Syntactic Structures	*"The relative pronoun preceded by ce serves as..."*	*"Relative pronouns preceded by ce function as..."*
Textual Coherence	*"and never located at the end of the sentence"*	*"never at the end"*
Register	*"Can be adapted to the context of the discourse"*	*"Depends on the discourse context"*
Overt/Covert Strategy	*"The dominant translation to Indonesian of ce qui / ce que..."*	*"In this study, ce qui, ce que... are most frequently translated..."*
Terminological Use	*"the context of the discourse"; "translation to Indonesian"*	*"discourse context"; "translated into Indonesian"*

In Table 3, the human translation exhibits a stronger command of discipline-specific and academically natural phrasing, which enhances both clarity and relevance within the context of translation studies. While Google Translate generally maintains grammatical accuracy, its output often feels awkward and less concise. In contrast, the human version avoids redundancy by using more economical and focused expressions, contributing to a smoother and more coherent reading experience. Additionally, GT tends to apply a vague academic tone that lacks specificity, whereas the human translation adopts a register that aligns more closely with the conventions and expectations of the field. Structural adaptation is another key distinction: GT tends to mirror the source-language structure rigidly, while the human version restructures the text to fit the natural academic flow of the target language. Overall, the human translation reveals a deeper familiarity with standard terminology and discourse norms in translation studies, reinforcing its superiority in delivering a contextually accurate and academically appropriate version.

Table 4. Analysis of the fourth abstract

Topic	Google Translate (GT)	Human Translation (HT)
Lexical Choices	*"The content of the translation is about China, which is developing..."*	*"This translation discusses China's rise..."*
Syntactic Structures	*"China began the construction"*	*"China has initiated the construction."*
Lexical Choices	*"The content of the translation is about China, which is developing..."*	*"This translation discusses China's rise..."*
Textual Coherence	*"The author of this article, Minemura Kenji, a Japanese journalist, infiltrated..."*	*"Japanese journalist Minemura Kenji investigated..."*
Textual Coherence	*"The author of this article, Minemura Kenji, a Japanese journalist, infiltrated..."*	*"Japanese journalist Minemura Kenji investigated..."*
Register	*"This was already an open secret"*	*"This fact was widely known"*
Overt/Covert Strategy	*"akin to nuclear weapons"*	*"comparable to nuclear deterrence"*
Terminological Use	*"nuclear weapons"; "construction"*	*"nuclear deterrence"; "initiated the construction"*

Table 4 shows how human translation consistently demonstrates a more concise and academically precise style compared to Google Translate, which tends to be verbose and overly descriptive. One notable strength of the human version is its use of the present perfect tense to indicate continuity, an aspect that aligns well with academic conventions. In contrast, GT frequently employs cluttered sentence structures that disrupt fluency, whereas the human translation flows more naturally and reflects professional organization. Furthermore, GT occasionally introduces colloquial expressions that are inappropriate for academic contexts, while the human version maintains a consistent formal tone. A significant difference is also observed in the handling of analogies: GT often translates these literally, resulting in awkward or unclear phrasing. Meanwhile, the human translation replaces literal analogies with discipline-specific terminology, demonstrating a deeper contextual understanding and stronger alignment with the discourse norms of the academic field.

Table 5. Analysis of the fifth abstract

Topic	Google Translate (GT)	Human Translation (HT)
Lexical Choices	"analyzes the process of subject formation and the role of desire"	"examines Garda's identity formation process"
Syntactic Structures	"Each transition is influenced by the role of desire, which can be divided"	"Each phase of transition is shaped by two types of desire"
Textual Coherence	"a door that can move, speak, and think, making the door the narrator"	"a sentient door acts as the novel's narrator"
Register	"narcissistic desire to be represents a passive narcissistic desire"	"narcissistic yearning reflects a passive form of self-expression"
Overt/Covert Strategy	"enters the Real phase through his death"	"reaches the Real phase upon his demise"
Terminological Use	"Real phase"; "role of desire"	"Real phase"; "identity formation"; "self-expression"

In this tabel 5, the human translation reveals a clear advantage in its use of focused, discipline-specific language, in contrast to Google Translate's tendency toward general and verbose phrasing. The human version presents ideas with greater clarity and compactness, using refined academic expressions that enhance the professional tone of the text. This is particularly evident in the handling of metaphorical and abstract concepts, where the human translation conveys meaning with both elegance and brevity. Moreover, while GT often resorts to literal translations that miss deeper interpretative layers, the human version captures the underlying philosophical nuances more effectively. This reflects a stronger alignment with the specialized terminology of psychoanalytic and literary-critical discourse, demonstrating the translator's subject-matter familiarity and their ability to mediate meaning beyond surface-level equivalence.

Linguistik, Terjemahan, Sastra (LINGTERSA) Vol.07, No.01 (2025) 036–048

Table 6. Analysis of the sixth abstract

Topic	Google Translate (GT)	Human Translation (HT)
Lexical Choices	*"The focus of the research aims to discover how changes in the fundamental assumptions"*	*"This study explores how shifts in... core assumptions"*
Syntactic Structures	*"The destruction of the world is the benevolent assumption that makes..."*	*"The collapse of... assumption causes..."*
Textual Coherence	*"caused by direct and indirect experiences of events that threaten"*	*"stems from direct and indirect life-threatening experiences"*
Register	*"similar and intertwined"*	*"symptoms...overlap"*
Overt/Covert Strategy	*"typical PTSD symptoms, such as extreme autonomic arousal"*	*"hallmark PTSD symptoms, including heightened autonomic arousal"*
Terminological Use	*"fundamental assumptions"; "extreme autonomic arousal"*	*"core assumptions"; "heightened autonomic arousal"; "hallmark PTSD symptoms"*

Table 6 shows that the human translation displays a clear command of academic language, marked by concise and precise phrasing, while Google Translate frequently relies on redundant and convoluted structures that diminish clarity. The human version presents causal relationships more effectively, supported by a formal tone that aligns with scholarly standards. Its coherence is strengthened through professional language choices that enhance the overall readability and logical flow of the text. In the context of psychological discourse, the human translation stands out for its use of accurate and domain-specific terminology. It incorporates clinical and diagnostic language appropriately, reflecting both linguistic precision and subject-matter expertise. This contrasts with GT's more generic phrasing, which lacks the specificity required in academic discussions within psychology. Ultimately, the human translation demonstrates a stronger grasp of psychological terminology and registers suitable for scholarly communication.

Table 7. Analysis of the seventh abstract

Topic	Google Translate (GT)	Human Translation (HT)
Lexical Choices	*"does not necessarily become a canonical storyworld"*	*"does not fully conform to canonical structures"*
Syntactic Structures	*"serves as the material object...while the formal object uses"*	*"functions as the study's material object...employs Herman's postclassical narratology"*
Textual Coherence	*"Since the theme...there are certainly changes"*	*"Given the theme's radical implications, modifications...are inevitable"*
Register	*"projected toward children"*	*"tailored for children"*
Overt/Covert Dist.	*"does not necessarily classify as"*	*"does not fully align with"*

Through Table 7, the human translation shows a stronger command of narratological terminology, ensuring greater precision and relevance within the context of literary analysis. It also demonstrates clearer academic syntax and integrates theoretical frameworks through proper citation practices, reflecting a solid understanding of scholarly conventions. The human version achieves better cohesion and logical progression, contributing to a more coherent and structured academic text. Additionally, the translator successfully adapts metaphorical expressions to suit the discipline-specific register, avoiding literal renderings that may obscure meaning. The overall tone of the human translation conveys academic judgment with greater confidence and clarity, further reinforcing its alignment with the expectations of formal scholarly writing.

Table 8. Analysis of the eighth abstracts

Topic	Google Translate (GT)	Human Translation (HT)
Lexical Choices	*"The material object that is the main source of this analysis is the narrative"*	*"This study centers on the narrative depiction"*
Syntactic Structures	*"aims to explore and analyze...with a focus on"*	*"explores...emphasizing its role"*
Textual Coherence	*"uses...method to understand"*	*"Applying...examines how...challenges"*
Register	*"gain knowledge and solutions"*	*"seeks to foster...address"*
Overt/Covert Dist.	*"uses two theoretical frameworks, namely"*	*"integrates...with"*

In Table 8, the human translation demonstrates superior academic fluency through its concise and fluent phrasing, in contrast to the more redundant and less focused style often found in machine-generated output. By eliminating unnecessary repetition, the human version enhances clarity and readability, ensuring that key ideas are communicated more effectively. Furthermore, the integration of theoretical concepts is handled with greater coherence, reflecting a stronger grasp of both the content and the academic expectations of the discipline. The human translation also consistently employs an appropriate academic register, aligning with scholarly discourse norms. Notably, the translator synthesizes theoretical insights more naturally, indicating a high level of academic competence and familiarity with the subject matter.

Table 9. Analysis of the ninth abstract

Aspect	Google Translate (GT)	Human Translation (HT)
Lexical Choices	*"The shared issue of oppression...establishes an interconnectedness"*	*"The parallel oppression...fosters a deep interconnection"*
Syntactic Structures	*"Naura, Mother, Puthih..."*	*"women like Naura, Puthih..."*
Textual Coherence	*"through environmental education, lobbying, organizing actions"*	*"via environmental advocacy, lobbying, and activism"*
Register	*"play roles both in domestic and public spheres"*	*"contribute...through both domestic and public roles"*
Overt/Covert Dist.	*"employs...using the theoretical framework"*	*"underpins this ecofeminist analysis"*

Table 9 also shows that the human translation effectively delivers clearer conceptual phrasing that aligns with the key principles of ecofeminist theory. Compared to the more literal and fragmented alternatives, the human version refines list structures to improve academic readability and flow. Activities and ideas are seamlessly integrated into coherent academic prose, avoiding disjointed enumeration and enhancing the overall narrative quality. In addition, the human translation adopts a contribution-based framing, which is more suitable for ecofeminist scholarship that emphasizes agency, perspective, and theoretical engagement. By embedding methodological elements within a theoretical context, the translation not only improves clarity but also strengthens the scholarly tone, reflecting a deeper understanding of the discourse conventions within the field.

Linguistik, Terjemahan, Sastra (LINGTERSA) Vol.07, No.01 (2025) 036–048

Table 10. Analysis of the tenth abstract

Aspect	Google Translate (GT)	Human Translation (HT)
Lexical Choices	*"Both are desires of the author who lacks in obtaining the integrity of his identity."*	*"Both works reflect the author's struggle for identity integrity."*
Syntactic Structures	*"The novel Wonderful Life is a manifestation of Kiki Raihan's desires, as is Wonderful Life which is a manifestation..."*	*"Findings suggest that both versions of Wonderful Life manifest the personal desires of Kiki Raihan and Amalia Prabowo."*
Textual Coherence	*"Both questions are answered using Jacques Lacan's psychoanalytic theory."*	*"Jacques Lacan's psychoanalytic theory guides this study's inquiry."*
Register	*"Using Jacques Lacan's psychoanalytic theory, he discusses human desires through language."*	*"Lacan's psychoanalysis explores human desires through linguistic structures."*
Overt/Covert Dist.	*"This study intends to answer two questions."*	*"This research seeks to address two key questions."*

Table 10, as the last table, also shows that the human translation consistently sounds more natural and academically refined, offering a smoother reading experience that aligns with scholarly expectations. It avoids redundancy and communicates ideas more efficiently, enhancing both clarity and precision. A key strength lies in the seamless integration of theoretical grounding with analytical commentary, which reinforces the coherence and depth of the argument. Moreover, the human version employs discipline-appropriate academic diction, contributing to a formal and professional tone throughout the text. This stylistic consistency not only improves readability but also demonstrates the translator's familiarity with the norms of academic discourse. Overall, the human translation maintains a tone that is both natural and suitably academic, distinguishing it from the more mechanical rendering typically found in automated outputs.

3. Discussion

The findings of this comparative study reveal significant limitations in Neural Machine Translation (NMT), particularly in addressing the nuanced demands of academic translation. While Google Translate demonstrates strong technical proficiency in linguistic processing, it consistently falls short of meeting the complex expectations of scholarly communication across several linguistic dimensions.

At the core of these challenges lies NMT's limited contextual and pragmatic understanding. Its tendency toward literal renderings of specialized terminology, such as translating "narcissistic desire to be" instead of the more accurate "passive form of self-expression", reflects its statistical, frequency-based processing model (Vincent & Clarke, 2020). This becomes especially problematic in disciplines like psychoanalysis, gender studies, and literary theory, where terms carry layered theoretical significance beyond their surface meaning (House, 2015). The issue is compounded by frequent register mismatches and awkward formality, highlighting the system's inability to consistently maintain an appropriate academic tone (Venuti, 2017).

Syntactically, Google Translate often produces grammatically correct but stylistically inelegant output. Common issues include passive constructions, inefficient phrasal organization, and poor handling of embedded clauses, shortcomings that undermine the clarity and fluidity expected in academic writing (Munday, 2016; Pym, 2020). This is particularly detrimental in thesis abstracts, where precision and readability are essential (Gile, 2018).

Coherence and cohesion are also compromised. While GT may render accurate sentences in isolation, it struggles to maintain logical flow and argumentative continuity across paragraphs (Hatim & Mason, 2004). This fragmentation disrupts scholarly discourse and impedes the transmission of complex, multi-layered arguments (Baker, 2018; Newmark, 1988).

Register mismatches offer further insight into the system's limitations. Errors such as translating "open secret" instead of "widely known" exemplify GT's superficial grasp of academic discourse conventions (Schäffner, 2009). Such lapses not only diminish clarity but may also harm the credibility of research outputs submitted to international platforms (Venuti, 2018). These inconsistencies point to a broader issue: NMT systems cannot

currently internalize disciplinary writing norms that human translators develop through sustained engagement with academic texts (Bowker & Fisher, 2010).

The analysis of overt and covert translation strategies underscores a fundamental difference between machine and human approaches. GT tends to preserve source-language structure even when inappropriate for the target language, revealing a lack of cultural and rhetorical adaptability (House, 2015). In contrast, human translators demonstrate contextual judgment in choosing when to preserve source elements and when to adapt to target conventions (Nord, 1997; Gambier & Van Doorslaer, 2021).

These insights carry practical implications for various academic stakeholders. For students and researchers, they emphasize the importance of critical engagement with MT tools and the risks of uncritical reliance (Bowker, 2021; Kenny, 2017). For journal editors and reviewers, they highlight the need to evaluate translation quality carefully, especially in submissions from non-native English speakers (Saldanha & O'Brien, 2013). For translation scholars, the findings signal a need for improved post-editing frameworks tailored to academic texts (Tymoczko, 2007).

Theoretically, the findings challenge techno-optimist narratives predicting the obsolescence of human translators in specialized domains (Cronin, 2013). Despite NMT's advancements, academic translation requires conceptual, cultural, and rhetorical sensitivity that current systems do not possess (Pym, 2012; House, 2015). As Venuti (1995) emphasizes, translation is not merely linguistic substitution but a situated act of communication shaped by discourse conventions and pragmatic choices.

Moving forward, these findings suggest directions for both technological refinement and pedagogical support. On the technological side, more targeted training of NMT systems on discipline-specific academic corpora is necessary (Way, 2018). On the pedagogical side, universities could integrate MT literacy into academic writing programs, helping users benefit from the technology while recognizing its limitations (O'Hagan & Zhang, 2019).

In sum, while Google Translate is a valuable tool that has democratized access to translation, it remains inadequate for the demands of academic communication. Its weaknesses—ranging from conceptual inaccuracy to incoherent structure and register mismatches—underscore the continuing relevance of human expertise (Biel, 2014). The future of academic translation likely lies in well-calibrated human-machine collaboration, with human translators providing the critical oversight needed to ensure the integrity of scholarly communication (Carl et al., 2021; Gambier, 2016).

4. Conclusion

This study demonstrates that despite notable progress in Neural Machine Translation (NMT), Google Translate continues to face fundamental limitations when translating thesis abstracts, especially compared to human output. Although its fluency and readability have improved over previous models, the system still encounters difficulties in key areas such as accurate word choice, natural sentence construction, textual coherence, and suitable register. These weaknesses are particularly evident in academic writing, where precision and clarity are essential. While Google Translate can produce grammatically sound sentences, its translations often feel unnatural and fail to convey subtle but important nuances in scholarly language.

A major issue at the lexical level is the misinterpretation of technical and discipline-specific terms. In academic texts, minor shifts in word choice can lead to significant meaning changes. Google Translate also struggles with idiomatic expressions, often rendering them awkward or incorrect. Additionally, it mishandles polysemous words by selecting unsuitable meanings without considering their academic context, resulting in translations that seem superficially correct but are semantically flawed.

Syntactically, the system tends to produce stiff, literal translations that mirror the source language's structure instead of adapting to the target language's natural flow. This often leads to awkward phrasing that impairs readability. Unlike human translators, Google Translate lacks the ability to creatively restructure sentences for coherence and clarity—an essential skill in academic contexts where complex constructions are common.

Beyond vocabulary and syntax, the tool shows significant pragmatic shortcomings. It fails to grasp the cultural and intellectual nuances embedded in academic discourse, which often involves abstract ideas, metaphors, and rhetorical strategies. Since Google Translate operates solely through statistical patterns, it cannot interpret these layers of meaning, leading to surface-level translations that miss conceptual depth. In some cases, this results in misleading or distorted messages, an especially serious concern in academic communication.

These findings suggest that Google Translate should only be used for preliminary drafts, not as a final translation tool for academic purposes. Effective academic translation requires more than grammatical accuracy; it demands sensitivity to linguistic nuance, disciplinary norms, and academic tone. Human translators, especially those with domain expertise, can interpret subtle meanings, adjust stylistic elements, and ensure clarity without compromising the original message. Their skills remain essential in achieving precise and coherent academic translations. Ultimately, this study reinforces the vital role of human translators in preserving the integrity of scholarly texts. Although machine translation offers speed and convenience, relying on it without expert revision risks undermining academic quality. Therefore, scholars should use such tools judiciously and ensure that final outputs are reviewed by professional translators or language experts. Only through this careful process can academic translations meet the rigorous demands of scholarly communication.

5. Acknowledgements

The author would like to express sincere gratitude to Dr. Adi Sutrisno, M.A. and Prof. Dr. Sajarwa Roman, M.Hum. for their invaluable guidance, advice, and support throughout the process of conducting and completing this research. Their insights, constructive feedback, and encouragement have been a constant source of inspiration and motivation for the author in refining this work.

References

Alhammadi, F., Eldarrat, A., Ahmad, B. B., Sanusi, S. Y. B., & Sinor, M. Z. B. (2023). Accuracy of Google Translate in SOHO-5 translation: A comparative study with human translators. *KUEY Journal of Language Studies, 10*(2), 99-112.

Aslerasouli, P., & Abbasian, G. R. (2015). Comparing Google Translate and human translation: A case study in social and natural sciences texts. *Journal of Applied Linguistics and Language Research, 2*(4), 58-73.

Bahdanau, D., Cho, K., & Bengio, Y. (2016). Neural machine translation by jointly learning to align and translate. *arXiv preprint arXiv:1409.0473*.

Baihaqi, A., & Mulyana, A. (2021). Evaluasi terjemahan mesin: Studi kasus Google Translate dan ImTranslator. *Jurnal Linguistik dan Terjemahan, 9*(2), 78-92.

Baker, M., & Saldanha, G. (2019). *Routledge encyclopedia of translation studies* (3rd ed.). Routledge.

Biel, Ł (2014). The textual fit of translated EU law: a corpus-based study of deontic modality. *The Translator*, *20*(3), 332-355.

Bowker, L., & Fisher, D. (2012). Computer-aided translation. In *Handbook of Translation Studies: Volume 1* (pp. 60-65). John Benjamins Publishing Company.

Carl, M. (2021). Computation and representation in cognitive translation studies. *Explorations in empirical translation process research*, 341-355.

Castilho, S., Moorkens, J., Gaspari, F., & Doherty, S. (2018). *Translation quality assessment: From principles to practice*. Springer.

Cronin, M. (2013). *Translation and globalization*. Routledge.

Defina, D., Aisah, S., & Adam, S. H. (2019). Analisis kesalahan dalam terjemahan abstrak berbahasa Inggris ke bahasa Indonesia menggunakan Google Translate. *Proceeding STKIP PGRI Bandar Lampung, 3*(1), 45-56.

Dzakiyyah, A. A. N., Dewi, R., & Natsir, R. Y. (2020). Perbandingan kualitas terjemahan manusia dan Google Translate: Studi kasus mahasiswa Universitas Muhammadiyah Makassar. *Jurnal Pendidikan Bahasa Inggris, 5*(1), 23-35.

Gambier, Y. (2021). Approaches to a historiography of Translation Studies. *In The Situatedness of Translation Studies: Temporal and Geographical Dynamics of Theorization, edited by Luc van Doorslaer and Ton Naaijkens*, 17-33.

Gile, D. (2018). Research into translation as a specialism: an analysis and recommendations. *The Journal of Specialised Translation*, *30*, 23-39.

Halimah. (2018). Perbandingan hasil terjemahan Google Translate dan manusia pada kalimat imperatif dalam teks prosedur. *Jurnal Bahasa dan Sastra, 7*(2), 67-80.

Hatim, B., & Mason, I. (2005). *The translator as communicator*. Routledge.

House, J. (2015). *Translation Quality Assessment: Past and Present*. Routledge.

Kenny, D. (Ed.). (2017). *Human issues in translation technology*. London and New York: Routledge.

Koehn, P. (2020). *Neural machine translation*. Cambridge University Press.

Läubli, S., Sennrich, R., & Volk, M. (2018). Has machine translation achieved human parity? a case for document-level evaluation. arXiv preprint arXiv:1808.07048.

Lawa, S. T. N., Ate, C. P., & Feka, V. P. (2022). Penggunaan Google Translate sebagai media penerjemah alternatif dalam abstrak jurnal mahasiswa. *Jurnal Hinef, 5*(1), 89-102.

Lommel, A., Burchardt, A., Popović, M., Harris, K., Avramidis, E., & Uszkoreit, H. (2014). Using a new analytic measure for the annotation and analysis of MT errors on real data. In *Proceedings of the 17th Annual conference of the European Association for Machine Translation* (pp. 165-172).

Marzouk, S., & Hansen-Schirra, S. (2019). Evaluation of the impact of controlled language on neural machine translation compared to other MT architectures. *Machine Translation*, *33*(1), 179-203.

Munday, J. (2016). *Introducing translation studies: Theories and applications* (4th ed.). Routledge.

Newmark, W. D. (1998). Forest area, fragmentation, and loss in the Eastern Arc Mountains: implications for the conservation of biological diversity. *Journal of East African Natural History*, *87*(1), 29-36.

Nord, C. (1997). A functional typology of translations. *Benjamins Translation Library*, *26*, 43-66.

O'Hagan, M. (Ed.). (2019). *The Routledge handbook of translation and technology*. Taylor & Francis.

Pym, A. (2012). On translator ethics.

Pym, A. (2020). Translation, risk management and cognition. In *The Routledge handbook of translation and cognition* (pp. 445-458). Routledge.

Saldanha, G., & O'Brien, S. (2014). *Research methodologies in translation studies*. Routledge.

Schaeffer, M., Huepe, D., Hansen-Schirra, S., Hofmann, S., Muñoz, E., Kogan, B., ... & García, A. M. (2020). The translation and interpreting competence questionnaire: an online tool for research on translators and interpreters. *Perspectives*, *28*(1), 90-108.

Schäffner, C. (2009, January). Does translation hinder integration? In *FORUM. Revue internationale d'interprétation et de traduction/International Journal of Interpretation and Translation* (Vol. 7, No. 1, pp. 99-122). John Benjamins.

Setiawan, A., Purwarianti, A., & Adriani, M. (2018). Improving Indonesian-English neural machine translation with morphological and syntactic features. *Proceedings of the 32nd Pacific Asia Conference on Language, Information and Computation*.

Shterionov, D., Carmo, F. D., Moorkens, J., Hossari, M., Wagner, J., Paquin, E., ... & Way, A. (2020). A roadmap to neural automatic post-editing: an empirical approach. *Machine Translation*, *34*, 67-96.

Toral, A., & Sánchez-Cartagena, V. M. (2017). A multifaceted evaluation of neural versus phrase-based machine translation for 9 language directions. *Proceedings of the 15th Conference of the European Chapter of the Association for Computational Linguistics*, 1063-1073.

Turovsky, B. (2019). The evolution of Google Translate. *Google AI Blog*.

Tymoczko, M. (2014). Why literary translation is a good model for translation theory and practice. In *Literary translation: Redrawing the boundaries* (pp. 11-31). London: Palgrave Macmillan UK.

Vanmassenhove, E., Du, J., & Way, A. (2019). Lost in translation: Loss and decay of linguistic richness in neural machine translation. *Proceedings of Machine Translation Summit XVII*, 222-232.

Venuti, L. (Ed.). (2016). *Teaching translation* (pp. 165-172). London: Routledge.

Vincent, B., & Clarke, J. (2020). Nadsat in translation: a clockwork orange and l'orange mécanique. *Meta*, *65*(3), 643-664.

Way, A. (2018). Quality expectations of machine translation. *Translation quality assessment: From principles to practice*, 159-178.

Williams, J., & Chesterman, A. (2014). *The map: a beginner's guide to doing research in translation studies*. Routledge.

Zhang, M., & Toral, A. (2019). The Effect of Translationese in Machine Translation Test Sets. *Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing*, 6073-6078.