A COMPARATIVE STUDY OF TYPICAL TRANSLATION ERRORS IN CULTURE-SPECIFIC TERMS IN CULTURAL ARTICLES FROM NHAN DAN ONLINE NEWSPAPER: GOOGLE TRANSLATE VS. HUMAN TRANSLATION BY THIRD-YEAR ENGLISH MAJORS AT DONG A UNIVERSITY

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Abstract:

This study conducts a comparative analysis of translation errors in culture-specific terms between Google Translate and third-year English majors at Dong A University when translating cultural articles from Vietnamese to English. Highlighting the importance of cultural nuances in translation, the research identifies typical errors made by both machine translation and human translators. Utilizing a sample from students and 14 selected cultural articles, the study categorizes translation errors into linguistic, comprehension, and translation-specific errors, with a particular focus on the challenges posed by culture-specific terminology. Results indicate that while Google Translate exhibits a lower overall error rate, it struggles significantly with capturing cultural nuances, resulting in high rates of inaccurate lexical renditions. Conversely, students demonstrate a broader understanding of cultural context but encounter frequent challenges across various linguistic aspects. These findings underscore the complementary roles of machine and human translation, suggesting that a combined approach may enhance the accuracy and fidelity of translations involving culturally rich content.

Keywords: *Culture-Specific Terms, Translation Error Analysis, Machine Translation vs. Human Translation, Google Translate Evaluation, Cultural Nuances in Translation*

Introduction

Aims and objectives

This study aims to systematically identify, analyze, and compare translation errors in culture-specific terms produced by Google Translate and third-year English majors at Dong A University during Vietnamese-English translation of culturally nuanced articles. It focuses on evaluating differences in translation quality between machine (Google Translate - GT) and human (student - ST) approaches. In order to accomplish the aims, the research includes the following objectives includes (1) categorizing translation errors in culture-specific terms generated by Google Translate and Students and (2) comparing

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and contrasting error patterns between translations of GT and ST to identify similarities and differences.

Significant of the study

This study advances translation error research through human vs. machine translation analysis of culture-specific terms, addressing a gap in Vietnamese-English studies. Pedagogically, it guides translators on leveraging Google Translate's strengths and limitations for culturally complex content. Culturally, it underscores the necessity of sensitivity for accurate cross-linguistic communication. Technologically, it evaluates machine translation's current capacity for nuanced cultural content, informing future AI improvements. Regionally, it pioneers insights into Vietnamese translation education and practice.

Informants and research methodology

Informants

The study engaged 96 third-year English majors from Dong A University, trained in translation principles and selected via purposive sampling, who translated texts without awareness of the cultural-term focus to prevent bias. Google Translate served as a benchmark, contrasting its technical efficiency with cultural inadequacies, highlighting contexts where human expertise ensures nuanced accuracy.

Research Methodology

This study employs Suryabrata's (2003) descriptive qualitative approach to analyze natural translation processes and errors without variable manipulation. Culture-specific terms are classified using Newmark's taxonomy (ecological, material, social, organizational). Errors from students and Google Translate are categorized via Pospescu's (2012) framework into linguistic, comprehension, and translation errors. Methodological triangulation compares error patterns, frequencies, and qualities, supported by translation tasks, analytical rubrics, and qualitative examples to identify challenges in culturally nuanced Vietnamese-English translation.

SURVEY

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This survey is part of the research project titled *"A Comparative Study of Typical Translation Errors in Culture-Specific Terms in Cultural Articles from Nhan Dan Online Newspaper: Google Translate vs. Human Translation by Third-Year English Majors at Dong A University"*. The purpose of this survey is to gather insights into how culture-specific terms are translated and to evaluate the differences between machine translation (Google Translate) and human translation (student translation). Your participation will contribute valuable data to this research.
Please carefully read each question and provide your answers honestly based on your understanding and experience.
Thank you for your time and cooperation!

Number of members in your group: .....

Vietnamese culture-specific terms	English translation
Category: Ecology	
Hoa thủy tiên	
Đình làng	
Tía tô	
Lá lốt	
Rau răm	
Hành lá	
Khổ qua	
Diếp cá	
Lá sung	
Cải	
Riềng	
Đồng bằng sông Hồng	

Findings and discussions

Typical translation errors in students' translations of culture-specific terms

The analysis of student translations, based on Popescu's (2012) *Classification of Translation Errors*, highlights several common issues that impact the clarity, accuracy, and cultural relevance of the translations. For example, "Lễ Phật đản" was incorrectly translated as "Buddhism festival" instead of "Buddha's birthday," and "rau răm" was misrendered as "Ram vegetable" instead of "laksa leaves." Morphologically, "hoa thủy tiên" was translated in the singular form, omitting the plural, and "ăn trầu" was rendered as "eat betel" rather than the correct gerund form "eating betel." Omission errors also appeared, such as in "Duong Lam ancient relic management," where key structural elements were left out. Conversely, addition errors, like "Vietnam national village for ethnic Culture and Tourism," introduced unnecessary information not present in the original. Furthermore, distorted meanings emerged, such as translating "Rằm tháng Bảy" as "Ghost Festival," which oversimplified and misrepresented the cultural context. These errors significantly affect the accuracy and cultural transmission of the translations.

Table 1. Typical translation errors in students' translations of culture-specific terms

Vietnamese culture-specific terms	Translated by students	Suggested translation by Nhandan online newspaper
Hoa thuỷ tiên	Narcissus flower	Narcissus flowers
Đồng bằng sông Hồng	Red River Delta	The Red River Delta
Xông đất	First foot	First footing
Đồng bằng sông Cửu Long	- Mekong River - Mekong Delta	The Mekong River Delta
Ăn trầu	Eat betel	Eating betel

Vietnamese culture-specific terms	Translated by students	Suggested translation by Nhandan online newspaper
Tết cổ truyền	Tet traditional	The Traditional Tet Holiday
Nông nghiệp lúa nước	agriculture water rice	Wet rice agriculture
Trung tâm Văn hóa và Xúc tiến du lịch Bắc Kạn	Bac Kan center for culture and tourism promotion	Bac Kan Culture and Tourism Promotion Centre
Trống hội	Bronze drum	Drumming
Lễ mừng cơm mới	Harvest Festival	The new rice festival
Lễ hội cầu may	- Prayer for Good - Fortune festival	the Good Luck Festival
Chè	Drink with sweet	Tea
Ô ăn quan	- Crossword puzzle - Madara game	Mandarin Square Capturing
Rằm tháng giêng	- The fifteenth of the first Lunar year - First day of January	The Full Moon of the First Lunar Year
Bịt mắt đập niêu	- Blind folded pot breaking - Blindman break pot	Blindfolded clay pot breaking
Ném pao	Pao throwing	Throwing “pao”
Ném còn	Con throwing game	Throwing “con”
Rằm tháng Bảy	Ghost festival	The Full Moon of the Seventh Lunar Month
Cải	- To change - To reform	Mustard green
Thịt đông	- Aspic pork - Jellied meat - Cold meat	Frozen meat
Hoa thủy tiên	Daffodils	Narcissus flowers
Phòng Văn hóa và Thông tin thị xã	- Town department of culture and information - Cultural room and Town’s information - Department of culture and information of the town	The Department of Culture and Information of the town
Làng Văn hóa - Du lịch các dân tộc Việt Nam	Vietnam national village for ethnic Culture and Tourism	The Vietnamese Ethnic Culture and Tourism Village

Vietnamese culture-specific terms	Translated by students	Suggested translation by Nhandan online newspaper
Ban Quản lý di tích Làng cổ Đường Lâm	Duong Lam ancient relic management	The Management Board of Duong Lam Ancient Village Relics
Sở Văn hóa, Thể thao và Du lịch	Cultural department sport and travel	the Department of Culture, Sports, and Tourism
Mâm ngũ quả	five fruit	Fruit trays
Lễ Phật đản	Buddhism festival	Buddha's birthday
Hành lá	carillon	Spring onion
Rau răm	Ram vegetable	The laksa leaves

Typical translation errors in translating culture-specific terms in translations of Google Translation

The analysis revealed that Google Translate struggles with culture-specific terms, often resulting in errors that affect both accuracy and cultural authenticity. Based on Pospescu's (2012) Classification of Translation Errors, these mistakes include issues like inaccurate translations of cultural terms, morphological errors (e.g., translating "hoa thủy tiên" without the plural form), omissions (e.g., simplifying "tung còn" to just "throw"), and additions (e.g., misrepresenting "Làng Văn hóa - Du lịch các dân tộc Việt Nam" as "Vietnam national village for ethnic Culture and Tourism"). For example, "Đàn tính," a traditional Tày instrument, was mistranslated as "Sexual orientation," and "Hát then," a ritual folk singing, was incorrectly rendered as "well then." Similarly, "Rằm Tháng Bảy" was overly simplified to "Full moon in July," stripping it of its cultural and religious significance. These examples demonstrate how machine translations fail to capture the cultural nuances of the original text.

Table 2. Typical translation errors in google translations' of culture-specific terms

Vietnamese culture-specific terms	Translated by Google Translation	Suggested translation by Nhandan online newspaper
Làng Văn hóa - Du lịch các dân tộc Việt Nam	Vietnam Ethnic Culture and Tourism Village	the Vietnamese Ethnic Culture and Tourism Village
Thờ cúng tổ tiên	Ancestor worship	Worshipping ancestors
Đại sứ quán Việt Nam	Embassy of Vietnam	Representatives of Vietnamese Embassy
ăn trầu	chew betel	Eating betel
Tết cổ truyền	traditional new year	the traditional Tet holiday

Vietnamese culture-specific terms	Translated by Google Translation	Suggested translation by Nhandan online newspaper
Ô ăn quan	checkers	mandarin square capturing
Hát xẩm	Xam singing	Blind Wanderer's music
Hát chèo	Cheo singing	Traditional opera
Lễ hội cầu may	festival of good luck	the Good Luck Festival
Lại mặt	face again	post-wedding visit
Đập phủ phủ	dam cover	beating the ball
Nhà trệt	ground floor house	the houses with no upstairs
Trang phục truyền thống của dân tộc Tày	Traditional costumes of the Tay ethnic group	traditional Tay attire
tung còn	throw	Throwing "con"
Rằm tháng Bảy	Full moon in July	The Full Moon of the Seventh Lunar Month
Cơm tẻ	rice	ordinary rice
Đàn tính	Sexual orientation	the tinh flute
Hát then	well then	Then singing
Hát sli, hát lượn	Well, let's go, let's dance.	The Sli and Luon songs

The similarities and differences in the translation errors between Google Translate's and third-year students' translations.

Similarities

Frequency

Both Google Translate and third-year students share similarities in the frequency of certain error types. Both translators show the presence of errors across all three major categories (linguistic errors, comprehension errors, and translation-specific errors), indicating that neither system achieves perfection in any single category. Additionally, both demonstrate a similar relative frequency for some specific subcategories such as distorted meaning (7.1% for students versus 5.3% for Google Translate) and omissions (10,4% for students versus 8.4% for Google Translate), suggesting common challenges in these translation aspects regardless of translator type.

Nature

The nature of errors reveals several similarities between machine and human translators. Both Google Translate and third-year students struggle with lexical misunderstanding (13.61% for students and 10,5% for Google Translate), demonstrating

that accurately interpreting vocabulary remains challenging regardless of translator type. Both also encounter difficulties with distored meaning (17.95% for students and 2.1% for Google Translate), though to different degrees. Furthermore, both translators face challenges with collocational and syntactic errors, suggesting similar difficulties in preserving complete content and accurate semantic representation of the source text. These shared error types indicate fundamental translation challenges that persist across both human and machine translation processes.

Patterns

Several error patterns are common to both Google Translate and third-year students. Both translators demonstrate that translation-specific errors form a substantial portion of their total errors (43.6% for students and 83.2% for Google Translate), highlighting translation fidelity as a shared challenge area. Both show a pattern of struggling more with translation-specific errors than with comprehension errors, suggesting that understanding the source text is generally less problematic than producing accurate target text for both translator types. Additionally, both demonstrate a similar pattern in the hierarchy of translation-specific errors, with inaccurate lexical renditions being a significant issue (14.5% for students and 67.4% for Google Translate), though with substantially different magnitudes. These common patterns suggest that certain fundamental translation challenges persist regardless of whether the translator is human or machine.

The differences

Frequency

The frequency of translation errors differs substantially between Google Translate and third-year students. Students produced a total of 463 errors compared to Google Translate's 95 errors, indicating that human translators made nearly five times more errors overall. Linguistic errors represent a significant portion (30%) of students' total errors but constitute only 4.2% of Google Translate's errors, demonstrating a considerable difference in language structure handling capabilities. Conversely, translation-specific errors dominate Google Translate's output at 83.2%, while they make up 43.6% of students' errors. Additionally, comprehension errors account for 26.4% of students' errors but only 12.6% of Google Translate's errors, suggesting that students struggle more with understanding the source text than the machine translator does.

Nature

The nature of translation errors reveals distinct differences between the two translator types. Google Translate predominantly struggles with inaccurate lexical renditions, which account for 67.4% of its total errors, while students show a more balanced distribution across various error types. Morphological and collocational errors are minimal in Google Translate (1% each) but represent significant challenges for students (12.3% and 8.2% respectively). Students demonstrate considerable difficulty

with lexical misunderstanding (15.2%) compared to other error categories, while this represents Google Translate's second highest error category (10,5%). Furthermore, additions are much more common in student translations (11.7%) than in Google Translate (2.1%), suggesting that human translators tend to add unnecessary information more frequently than the machine translator.

Patterns

The patterns of translation errors exhibit clear distinctions between Google Translate and third-year students. Google Translate shows a concentrated error pattern, with the vast majority of errors (67.4%) falling into a single category (inaccurate lexical renditions), while student errors are more evenly distributed across multiple categories. Students demonstrate a pattern of struggling across all linguistic aspects (morphological, syntactic, and collocational errors), while Google Translate shows minimal linguistic structure issues. There's an inverse pattern in error distribution: students' errors are more evenly spread across categories, whereas Google Translate's errors are heavily skewed toward translation-specific issues. Finally, Google Translate displays a pattern of strength in maintaining grammatical structures (minimal syntactic errors at 2.1%) but weakness in accurate word choice, while students show more balanced weaknesses across both grammar and vocabulary domains.

Conclusion and Recommendations

This study's comparative analysis of translation errors in culture-specific terms reveals distinct strengths and limitations in both Google Translate and third-year English majors. While Google Translate produced significantly fewer total errors (95 vs. 463), its shortcomings were concentrated in translation-specific inaccuracies (83.2%), particularly inaccurate lexical renditions (67.4%), reflecting its struggle with cultural nuance. Conversely, students exhibited a more balanced distribution of errors across linguistic (27.01%), comprehension (15.04%), and translation-specific (57.69%) categories, underscoring their broader contextual understanding but persistent technical challenges. Both groups faced difficulties preserving semantic accuracy and cultural fidelity, highlighting the inherent complexity of translating culture-bound terms. These findings underscore the complementary nature of machine precision and human cultural insight, advocating for hybrid approaches to optimize translation outcomes.

The findings yield actionable implications for translation pedagogy and practice. Translation curricula should prioritize cultural competence development and targeted training in handling culture-specific vocabulary, alongside error analysis exercises to address recurring issues like lexical inaccuracies. Educators are urged to integrate resources such as specialized glossaries to bridge gaps in cultural terminology, enhancing both human and machine translation efficacy. Furthermore, the study underscores the need to balance technical accuracy with cultural sensitivity, positioning machine translation as a supplementary tool rather than a standalone solution. By fostering

synergy between human expertise and technological efficiency, translators can better navigate the challenges of culturally nuanced content in Vietnamese-English contexts.

References

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