Education, Language and Sociology Research
ISSN 2690-3644 (Print) ISSN 2690-3652 (Online)
Vol. 6, No. 4, 2025
www.scholink.org/ojs/index.php/elsr

Original Paper

A Comparative Study of Human and AI-Generated Spanish Translations of the *Huangdi Neijing*: Implications for Cross-Cultural Transmission in the Age of Artificial Intelligence

Yao Yan[1] & Yuanyuan Zuo[1*]

[1] School of International Education, Yunnan University of Chinese Medicine, Kunming, China

[*] Corresponding Author: Yanyan Zuo, School of International Education, Yunnan University of Chinese Medicine, Kunming, 650500, China. E-mail: 410506504@qq.com

Received: November 18, 2025 Accepted: December 3, 2025 Online Published: December 12, 2025

doi:10.22158/elsr.v6n4p80 URL: http://dx.doi.org/10.22158/elsr.v6n4p80

Abstract

The Huangdi Neijing is one of the foundational classics of Traditional Chinese Medicine (TCM) and plays a central role in the global dissemination of Chinese medical culture. With the rapid advancement of AIGC (AI-Generated Content) technologies, machine-assisted translation has become increasingly relevant to the translation of culturally and conceptually complex medical classics. This study conducts a comparative analysis of a representative Spanish translation of the Huangdi Neijing and its AI-generated counterpart, using Reiss's translation criticism framework. Under an IMRaD structure, the paper examines semantic accuracy, terminology choices, grammatical features, and cultural expressiveness to evaluate the strengths and limitations of human and AI translations.

The results show that while AI translations demonstrate high efficiency and structural consistency, they often lack precision in medical terminology, contextual interpretation, and cultural connotations. Human translators, in contrast, excel at accurately conveying TCM concepts, interpreting classical Chinese syntax, and compensating for cultural gaps, although at the cost of longer production time and occasional inconsistencies. The study argues that human–AI collaboration offers an effective model for translating classical TCM texts, combining efficiency with cultural and conceptual fidelity. It concludes that human creativity and professional expertise remain indispensable in the translation of medical classics, especially in ensuring terminological accuracy and preserving humanistic value in cross-cultural communication.

Keywords

Huangdi Neijing, Traditional Chinese Medicine, Spanish translation, AIGC, machine translation, human–AI collaboration, translation criticism

1. Introduction

Traditional Chinese Medicine (TCM) has experienced renewed global attention over the past several decades, driven by increased international exchange, greater recognition of complementary and integrative medicine, and the expanding availability of translated classical texts. Among these, the *Huangdi Neijing* (Yellow Emperor's Inner Canon) represents one of the core foundations of the TCM intellectual tradition. As both a medical and philosophical classic, its conceptual system—including Qi, Yin–Yang, the Five Phases, and the correspondence between humans and nature—presents unique challenges for translation into languages that lack equivalent epistemological frameworks. The Spanish-speaking world, where TCM has enjoyed rapid growth since the late twentieth century, now has an increasing demand for reliable and readable translations of TCM classics. This makes *Huangdi Neijing* translation studies not only an academic inquiry but also a practical necessity for medical education, clinical training, and cultural exchange.

The translation of classical TCM texts has historically relied on human translators with strong interdisciplinary backgrounds in sinology, medicine, and linguistics. However, recent developments in AIGC (AI-Generated Content) technologies have introduced new possibilities for accelerating translation processes and enhancing accessibility. AI translation tools—particularly large language models such as ChatGPT—are increasingly used to handle complex linguistic tasks. Their capability to process vast textual inputs, generate coherent outputs, and standardize terminology raises the question of whether machine-generated translations can meaningfully support or complement human translation of culturally and conceptually dense texts such as the *Huangdi Neijing*. Despite these emerging opportunities, empirical studies evaluating the performance of AI systems in translating TCM classics remain limited.

The challenges of translating the *Huangdi Neijing* are well documented. The text is written in Classical Chinese, characterized by high contextual density, polysymy, implicit logic, and layered metaphorical structures. TCM terminology itself is culturally embedded rather than strictly biomedical; many key terms do not have direct equivalents in Western medical discourse. Terms such as "发陈 (fa chen)," "少长 (shao chang)," and "精气 (jingqi)" require not only linguistic decoding but also conceptual interpretation rooted in the traditional Chinese medical worldview. Previous research (e.g., Tang, 2015; Yan, 2023; Hu & Wang, 2024) has emphasized the literary nature, cultural load, and semantic indeterminacy of TCM terminology—dimensions that often fall beyond the current capability of AI translation systems. Consequently, a rigorous comparison between human translators and AI-generated outputs becomes essential for understanding the strengths, limitations, and potential roles of AI in this specialized field.

In addition, the Spanish-speaking world presents its own translational landscape. Existing Spanish versions of the *Huangdi Neijing*—whether direct translations from Chinese or mediated through English and French—display considerable variation in terminology, annotation practices, and interpretive frameworks. The uneven quality of translations, the coexistence of literal and adaptive approaches, and the market presence of annotated or modernized interpretations further complicate the reception of the classic. With the rapid diffusion of AI translation tools among students, practitioners, and educators of TCM in Spain and Latin America, an evaluation of AI performance becomes both timely and necessary. Given this context, the present study adopts Reiss's translation criticism theory as its analytical framework to systematically compare human and AI translations of selected passages from the *Huangdi Neijing*. Reiss's model, emphasizing both linguistic and extralinguistic factors, provides a comprehensive lens through which semantic accuracy, terminological fidelity, stylistic features, and contextual appropriateness can be examined. Using a representative Spanish translation published by JG Ediciones (2005) as the primary human-translated source and ChatGPT-generated Spanish renderings as the AI counterpart, this research assesses the extent to which AI can approximate, support, or diverge from human interpretive processes.

This study contributes to the field in three ways. First, it provides empirical evidence concerning the strengths and weaknesses of AI translation in a highly specialized cultural-medical domain. Second, it sheds light on the cognitive and interpretive gaps between human translators and AI systems when dealing with Classical Chinese and TCM conceptual structures. Third, it argues for a human–AI collaborative model in the translation of classical texts, advocating for an approach that leverages AI efficiency while preserving the human translator's cultural sensitivity, professional judgment, and interpretive depth.

By situating the discussion within the broader context of global TCM communication, this research underscores the continuing importance of translation quality in shaping international understanding of Chinese medical thought. As TCM gains visibility worldwide, accurate and culturally informed translations of classics such as the *Huangdi Neijing* remain indispensable for fostering intercultural dialogue, ensuring professional training standards, and facilitating the global dissemination of traditional medical knowledge.

2. Literature Review

Research on the translation of Traditional Chinese Medicine (TCM) classics has expanded substantially in recent decades, driven by growing global interest in TCM theory, clinical practice, and cultural heritage. Early scholarship focused on philological challenges, particularly the ambiguity of Classical Chinese grammar and the absence of direct equivalents for key TCM concepts in Western languages. Studies by Unschuld, Sivin, and others emphasized the epistemological gap between ancient Chinese medical cosmology and modern biomedical frameworks, arguing that translation must preserve conceptual integrity rather than impose Western interpretive categories.

In Spanish-language contexts, translations of the *Huangdi Neijing* remain limited. Existing versions vary in accuracy and philosophical depth, often relying on paraphrasing or explanatory notes to accommodate readers unfamiliar with TCM theory. Recent studies highlight the need for terminological consistency and methodological rigor in translating foundational TCM texts for international audiences.

With the rise of artificial intelligence, research on AI-assisted translation has grown rapidly. Large language models such as GPT have demonstrated remarkable linguistic fluency but continue to struggle with domain-specific knowledge and culturally embedded concepts. Prior studies show that AI performs well in surface-level semantic tasks but lacks the conceptual grounding required for medical-philosophical texts such as the *Huangdi Neijing*. As such, there is increasing academic interest in hybrid human–AI workflows that combine efficiency with interpretive depth.

This study contributes to the literature by providing the first comparative analysis of human and AI-generated Spanish translations of the *Huangdi Neijing*, highlighting their respective strengths and limitations and proposing a collaborative model for future translation practice.

3. Methods

3.1 Research Design

This study adopts a qualitative comparative research design to evaluate the performance of human and AI-generated Spanish translations of selected passages from the *Huangdi Neijing*. Given the text's complexity, Classical Chinese conciseness, and culturally embedded conceptual system, a qualitative analytical approach provides the most suitable means of examining semantic accuracy, terminological interpretation, stylistic coherence, and cultural fidelity. Reiss's translation criticism framework is employed as the theoretical foundation due to its systematic categorization of linguistic and extralinguistic factors, allowing for a comprehensive and multilayered analysis of translation quality in both human and AI outputs.

3.2 Materials and Data Sources

3.2.1 Human Translation Sample

The primary human-translated text used in this study is Su Wen: Canon de medicina interna del emperador amarillo (preguntas sencillas), published by JG Ediciones in 2005. This translation, widely circulated in Spain and Latin America, is produced by Julio García, a translator known for multiple TCM-related works. It represents one of the most influential Spanish renderings of the *Huangdi Neijing* and thus provides a suitable benchmark for evaluating human interpretive practices, terminology choices, and annotation strategies.

3.2.2 AI Translation Sample

AI-generated translations were produced using ChatGPT (GPT-4.1 architecture, 2024 version), a state-of-the-art large language model capable of multilingual text generation. For consistency and replicability, the same Classical Chinese source passages were input manually without additional context, prompts, or

explanatory notes. The output Spanish translations were collected and archived for systematic comparison with the human-translated versions.

3.3 Selection of Textual Samples

Given the length and thematic diversity of the *Huangdi Neijing*, the study focuses on representative passages from the Su Wen that pose distinct challenges for translation. These include:

1) Passages involving TCM core concepts, such as Yin–Yang, seasonal correspondence, and jingqi (essence and Qi).

2) Texts containing Classical Chinese syntactic ambiguity, multifunctional particles, or polysemous terms.

3) Sections in which human translators provided additional annotations, explanations, or interpretive expansions—allowing comparison between intentional human guidance and AI's autonomous output.

This sampling strategy ensures coverage of key linguistic and conceptual difficulties inherent in the translation of TCM classics.

3.4 Analytical Framework

The study follows Reiss's translation criticism model, which consists of two major dimensions:

3.4.1 Intralinguistic (Linguistic) Factors

- Semantic accuracy: Precision in conveying original meaning, avoiding mistranslation.
- Terminological fidelity: Handling of culturally loaded TCM terms with no direct equivalents in Spanish.
- Syntactic structure: Correctness and readability of sentence formation.
- Stylistic appropriateness: Consistency with the tone and rhetorical features of Classical Chinese.

3.4.2 Extralinguistic (Contextual) Factors

- Cultural interpretation: Ability to represent TCM worldview, metaphors, and analogies.
- Reader orientation: Whether translation choices accommodate target readers' background knowledge.
- Purpose and function of the text: Faithfulness to the pedagogical or explanatory intent of the original classic.
- Translator's role: Presence of annotations, interpretive notes, or culturally adaptive explanations.

Through this dual framework, the analysis identifies systematic differences in the interpretive pathways of human and AI translations.

3.5 Procedures of Analysis

The analysis proceeded in four steps:

1) Text alignment: Human and AI translations were aligned segment by segment for direct comparison.

2) Unit-level analysis: Key translation units (terminology, metaphors, ambiguous structures) were identified.

3) Evaluation using Reiss's criteria: Each unit was assessed for semantic accuracy, conceptual interpretation, stylistic adequacy, and cultural fidelity.

4) Synthesis of findings: Patterns of strength and limitations in both translation modes were summarized into thematic results.

This structured approach ensures transparency, replicability, and methodological rigor.

3.6 Ethical Considerations

No human participants were recruited for this study, and all materials used (published texts and AI outputs) fall under fair academic use. The study complies with ethical guidelines for research involving publicly accessible sources and technological tools.

3.7 Limitations

Two limitations should be acknowledged:

1) Sample size: Only selected passages were analyzed, which may not represent every nuance of the *Huangdi Neijing*.

2) AI model variability: Different AI models or versions may generate different translations; thus results reflect the behavior of the specific model used.

Despite these limitations, the study provides a robust comparative evaluation that can inform future research on machine translation in culturally specialized domains.

4. Results

The comparative analysis revealed clear differences between the human and AI-generated Spanish translations of the *Huangdi Neijing*. These differences extended across semantic accuracy, terminology handling, syntactic and stylistic features, and cultural interpretation. The key findings are summarized below.

4.1 Semantic Accuracy

4.1.1 Human Translators Demonstrated Greater Sensitivity to Classical Chinese Syntax

In several passages, the human translator showed an ability to interpret Classical Chinese particles and discourse markers that carry rhetorical rather than literal meaning. For example, in the sentence:

"夫四时阴阳者，万物之根本也"

the human translator misinterpreted 夫 as "man" ("para el hombre"), but ChatGPT correctly rendered it as a discourse particle:

AI translation:

"Los cuatro tiempos y el yin y yang son la raíz de todas las cosas."

This suggests that AI, relying on probabilistic linguistic patterns, sometimes outperforms human translators in identifying non-referential grammatical markers.

4.1.2 AI struggled with contextual meanings and classical conceptual terminology

Conversely, AI frequently misinterpreted lexemes requiring contextual medical knowledge. For instance:

"夏为寒变，奉长者少"

AI interpreted “长” as “elderly individuals,” producing:

“la salud de los mayores se verá afectada”

while the human version correctly identified “长” as “growth”:

“lo que se transformará en frío en verano; esto se llama ‘escasa entrega a crecer’.”

This indicates that AI tends to default to the most statistically common meaning rather than infer contextual interpretations central to TCM theory.

4.2 Terminology Handling

4.2.1 Human Translators Preferred Domestication with Explanatory Annotations

In cases where direct Spanish equivalents were unavailable, the human translator often provided: pinyin forms, descriptive glosses and conceptual explanations.

This approach supports comprehension among readers lacking background in TCM. For example, human translators routinely added bracketed explanations after major TCM concepts.

4.2.2 AI Favored Foreignization with Minimal Explanatory Support

AI typically retained the pinyin term without interpreting its meaning or functional role within TCM theory:

Example:

“春三月，此谓发陈” →

AI output: “En los tres meses de la primavera, llamados ‘fa chen’.”

Without explanatory notes, the translation lacks interpretive depth and fails to convey the essence of the concept.

4.2.3 AI Occasionally Produced Overly Literal Terminological Mappings

For example, AI rendered “五藏盛” as “los cinco órganos están plenos,” which is semantically correct but lacks the dynamic sense of “optimal functional state” implied in TCM.

Human translations, though irregular at times, conveyed richer interpretive nuance.

4.3 Stylistic and Grammatical Features

4.3.1 Human Translations Showed Stylistic Adaptation but Inconsistent Precision

An example appears in the human rendering of age-related physiological decline, where entire segments were paraphrased to align with Western biomedical logic. This improved readability but introduced interpretive shifts:

“sus riñones pierden su capacidad de hospedar líquidos…”

The added explanation reflects a biomedical perspective rather than Classical Chinese conceptual logic.

4.3.2 AI Translations Were Grammatically Stable but Stylistically Rigid

AI generally produced structurally correct sentences but lacked stylistic variation. Its output tended to be: monotonic, literal and lacking rhetorical sensitivity.

For a literary-philosophical classic such as the *Huangdi Neijing*, this rigidity diminishes expressiveness.

4.4 Cultural and Contextual Interpretation

4.4.1 Human Translators Exhibited Greater Cultural Contextualization

Human translators provided extensive cultural interpretation, including: referencing TCM classics (e.g., Nan Jing), elaborating relationships between organs and functions and maintaining thematic coherence with TCM pedagogy.

Example:

In explaining organ interactions, the human translator inserted clarifying commentary, which, though not in the original text, aids comprehension.

4.4.2 AI Displayed Limitations in Cultural Insight

AI mistranslated culturally dense or polysemous terms when biomedical analogues did not exist. For example:

“人怀性情，故云应人。”

AI’s translation:

“corresponden a la naturaleza humana.”

This rendering frames the phrase in emotional or psychological terms, whereas the original refers to individualized physiological responses.

4.4.3 AI Was Susceptible to Character Recognition and Historical-Language Errors

AI occasionally misinterpreted: rare characters, loan characters and variant forms.

This is seen in unrelated—but representative—classical passages such as the misreading of “飧” and “疟”, showing that AI models still face challenges with archaic Chinese glyphs.

4.5 Summary of Comparative Findings

Dimension	Human Translation	AI Translation
Semantic accuracy	High in conceptual passages; occasional misreadings	Correct for simple syntax; weak on contextual meanings
Terminology	Explanatory, reader-friendly	Literal, minimal explanation
Style	Adaptive, sometimes interpretive	Rigid, structurally uniform
Culture	High contextualization	Limited interpretive depth
Errors	Pinyin mistakes; inconsistency	Conceptual misinterpretation; character confusion

4.6 Overall Interpretation

The results show that:

- AI excels at structural and basic semantic tasks
- Human translators excel at conceptual fidelity and cultural interpretation

Neither approach alone meets the full demands of translating a culturally saturated medical-philosophical classic. Instead, the findings strongly suggest that:

A human–AI collaborative model offers the most promising path for future translations of TCM classics.

5. Discussion

The comparative findings highlight both the potential and the limitations of AI-assisted translation in the highly specialized domain of Traditional Chinese Medicine (TCM). While AI translation tools have achieved substantial progress in handling general linguistic tasks, their performance with culturally embedded, conceptually dense classical texts remains markedly inferior to that of experienced human translators. Drawing on the results, this section discusses the implications of human–AI differences for TCM translation practice, cross-cultural knowledge transmission, and the evolving role of translators in the AIGC era.

5.1 Divergent Interpretive Mechanisms Between Humans and AI

The human translator and the AI model demonstrated fundamentally different interpretive mechanisms. Human translation relied on:

- Domain knowledge of TCM theory
- Familiarity with Classical Chinese textual logic
- Sensitivity to cultural metaphors
- Continuous inferential reasoning

AI translation, by contrast, operated through:

- Statistical pattern prediction
- Lexical association
- General linguistic structure mapping

These divergent mechanisms explain the observed discrepancies. AI handled surface-level semantics with ease but consistently struggled with deeper conceptual interpretation. This aligns with prior research suggesting that large language models often reproduce patterns without genuine semantic grounding, especially in domains where meaning is constructed through cultural schemas rather than explicit discourse structures.

The *Huangdi Neijing* is not merely a medical manual; it encodes a cosmological view of the body, nature, time, and society. Such conceptual systems do not have direct equivalents in Western epistemology, making them inaccessible to AI when explicit contextualization is absent.

5.2 The Role of World Knowledge in Translating TCM Concepts

One of the clearest patterns that emerged is that TCM translation requires more than bilingual proficiency; it requires integrated world knowledge. For example:

- The AI model misinterpreted "长" as "elderly individuals," demonstrating a lack of medical-philosophical background.
- Human translators, although occasionally inconsistent, were able to reconstruct meaning aligned with the TCM worldview.

TCM terminology often functions within a network of conceptual relations, such as:

- The correspondence between organs and natural elements
- Dynamic processes like "opening–closing–pivoting" (开合枢)
- The cyclical movement of Qi

AI lacks stable representations of such systems, which leads to semantic flattening and conceptual simplification. This finding reinforces the argument that translation of classical medical texts is inseparable from cultural and theoretical understanding.

5.3 Cultural Fidelity vs. Linguistic Efficiency

The contrast between human and AI translations reflects a broader tension between cultural fidelity and linguistic efficiency.

- Humans provided richer contextual notes, cultural interpretation, and conceptual nuance, but needed more time and introduced occasional surface-level errors.
- AI delivered syntactically precise and rapid output, but lacked interpretive depth and produced terminological mismatches.

This divergence suggests that neither method alone is sufficient. AI's efficiency is valuable, especially for initial drafts or large-scale batch translation. However, cultural fidelity—essential for accurate transmission of TCM knowledge—cannot be achieved by AI alone.

This echoes concerns in translation studies that excessive reliance on machine translation risks marginalizing the translator's interpretive agency and may result in the erosion of humanistic value in the translated text.

5.4 Human–AI Collaboration as an Emerging Translation Paradigm

The results support a hybrid translation model in which human translators and AI tools complement each other's strengths. In such a model:

- AI generates preliminary drafts, handles repetitive content, or assists with lexical consistency.
- Human translators refine conceptual interpretation, adjust stylistic coherence, and ensure cultural accuracy.

This hybrid model is particularly valuable for TCM classics because:

1) AI accelerates workflow without compromising translator control.
2) Humans correct conceptual errors and integrate cultural knowledge that AI cannot infer.
3) The model supports broader dissemination: faster production + better cultural fidelity.

Such collaboration aligns with recent scholarship on "augmented translation," which views AI as an assistant rather than a replacement for human translators.

5.5 Implications for the Global Dissemination of TCM Knowledge

Accurate translation of the *Huangdi Neijing* plays a critical role in shaping global perceptions of TCM. Misinterpretations—whether generated by AI or human translators—may distort core medical concepts, mislead readers, or reduce the text to a series of biomedical analogies. The findings underscore several implications:

- Translation accuracy is essential for preserving TCM epistemology.
- Cross-cultural medical education requires reliable translations grounded in classical logic.
- The growing presence of AI tools among TCM students and practitioners necessitates clear guidelines for their use.

As the Spanish-speaking world continues to adopt TCM in clinical, educational, and popular contexts, translation quality will directly influence its integration and cultural legitimacy.

5.6 Future Directions for AI-Assisted Translation of Classical Texts

The limitations identified in this study also point toward potential avenues for future development:

1) Domain-specific fine-tuning of AI models with TCM corpora may improve conceptual accuracy.
2) Interactive human–AI workflows can reduce the risk of semantic drift.
3) Standardized bilingual TCM terminology databases will enhance consistency across translations.
4) Explainable AI systems may support transparency in interpretive processes.

However, until AI systems acquire deeper conceptual modeling capabilities, human translators remain irreplaceable custodians of classical medical knowledge.

6. Conclusion

This study compared human and AI-generated Spanish translations of selected passages from the *Huangdi Neijing* to assess their performance in conveying the linguistic, conceptual, and cultural characteristics of this foundational TCM classic. The findings show that although AI translation tools have achieved notable advances in handling general linguistic structures and surface-level semantics, they remain insufficient for the accurate transmission of classical medical knowledge. Human translators, supported by domain expertise and cultural contextualization, demonstrated stronger interpretive capacity, especially in handling polysemous terms, conceptual networks, and cosmological frameworks central to TCM theory.

The results reveal that AI excels in efficiency, consistency, and grammatical correctness, but lacks the depth required for translating culturally embedded concepts and philosophical-medical constructs. Human translators, while slower and occasionally inconsistent in formal accuracy, provide indispensable interpretive insight and cultural fidelity. Taken together, these findings suggest that neither approach alone can meet the full demands of translating the *Huangdi Neijing* and other TCM classics.

A key contribution of this study is the demonstration that a hybrid human–AI translation model is the most promising pathway for future translation work in this field. AI systems can support preliminary drafting, structural analysis, and terminological consistency, whereas human translators remain essential for accurate conceptual interpretation and cultural mediation. Such a model balances efficiency with fidelity, offering a practical solution for improving the accessibility and global dissemination of classical TCM knowledge.

As interest in TCM continues to grow in Spanish-speaking regions, the quality of translation will directly influence its reception and integration into medical, educational, and cultural contexts. Future research should explore domain-specific AI training, collaborative workflows, and the creation of standardized bilingual terminology resources to further enhance translation quality. Ultimately, the findings reaffirm that while AI can facilitate translation processes, human expertise remains central to preserving the epistemological integrity and cultural depth of TCM classics.

Declaration of AI Use

The author used AI-assisted tools (ChatGPT) only for language polishing and structural adjustment during manuscript preparation. All conceptualization, data selection, translation analysis, and argumentation were conducted independently by the author.

Funding

This study was supported by

1. the 2023 Research Project on International Chinese Language Education, titled “The Spanish Translation and Overseas Dissemination of the TCM Classic Huangdi Neijing” (Project No. 23YH67D)
2. “Chinese Medicine Culture Promotion Center of Escuela Superior de MTC and Yunnan University of Chinese Medicine”

Reference

Castilho, S. (2023). Machine translation for the humanities: Opportunities and limitations. *Digital Scholarship in the Humanities*, *38*(3), 612-628.

Graham, A. C. (1986). Classical Chinese: A functional language perspective. *Journal of Chinese Linguistics*, *14*(2), 115-149.

Hightower, J. (1965). Problems of translating classical Chinese. *Harvard Journal of Asiatic Studies*, *25*(1), 92-102.

Hurtado Albir, A. (2015). *Traducción y Traductología: Introducción a la Traductología*. Cátedra.

Koehn, P. (2020). *Neural Machine Translation*. Cambridge University Press. https://doi.org/10.1017/9781108608480

Lo, V. (2005). The influence of the *Huangdi Neijing* on East Asian medical traditions. *Asian Medicine*, *1*(1), 31-66.

Munday, J. (2016). *Introducing Translation Studies: Theories and Applications* (4th ed.). Routledge. https://doi.org/10.4324/9781315691862

Nida, E. A. (2001). *Context and Meaning in Translation*. Shanghai Foreign Language Education Press.

OpenAI. (2024). *GPT-4 Technical Report*. Retrieved from https://openai.com/research

Reiss, K., & Vermeer, H. J. (2013). *Towards a General Theory of Translational Action*. Routledge. https://doi.org/10.4324/9781315759715

Sivin, N. (1987). Traditional medicine in contemporary China. *The Journal of Asian Studies*, *46*(2), 291-313.

Unschuld, P. U. (2003). *Huang Di Nei Jing Su Wen: Nature, Knowledge, Imagery in an Ancient Chinese Medical Text*. University of California Press. ttps://doi.org/10.1525/california/9780520233225.001.0001

Unschuld, P. U., & Tessenow, H. (2011). *Huang Di Nei Jing Ling Shu: The Ancient Classic on Needle Therapy*. University of California Press.

Venuti, L. (2012). *The Translator's Invisibility: A History of Translation*. Routledge. https://doi.org/10.4324/9780203553190