

# Echoes of Antiquity: Towards Understanding History through Human and LLM-Based Classical Text Translations

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## Abstract

This paper presents a systematic, data-driven comparison of human and large language model (LLM) translations of Ancient Greek texts, focusing on historiography and epic poetry. We assemble a parallel corpus of Greek source texts and multiple English translations, including both established human translations and new outputs from state-of-the-art LLMs such as GPT-4o, Gemini 1.5 Pro, and Claude 3.5 Sonnet. Using a unified computational workflow, we evaluate translations via lexical diversity, part-of-speech distributions, collocation profiles, and automatic translation quality metrics (BLEU, ROUGE, METEOR, chrF++). Our results reveal clear genre differences and demonstrate that, while LLMs can approach the fidelity of certain human translators and often reproduce dominant translation patterns, human versions retain greater interpretive diversity and linguistic nuance, especially in poetry. Collocation analyses further show that LLM outputs tend to converge on frequent patterns found in their training data, whereas human translators exhibit both shared conventions and unique, creative solutions. This work-in-progress study highlights both the potential and the present limitations of LLM-driven translation for classical scholarship, providing publicly available materials and quantitative benchmarks for future research in digital classics and translation studies.

**Keywords:** translation studies, Ancient Greek, large language models, digital humanities, digital history

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