

TNA ACTIVITY REPORT

HARMONISING ARTISTRY: EXPLORING THE COLLABORATION BETWEEN AI AND HUMAN EXPERTISE IN TRANSLATING GALICIAN-PORTUGUESE TROUBADOUR POETRY (PHASE ONE)

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Overview

The first phase of this project aims to explore the challenges and opportunities of AI translation in the literary field, focusing on medieval Galician-Portuguese troubadour poetry. The objectives of the project are, on the one hand, to collect the necessary data to adapt the existing AI translation systems with appropriate prompts, which will be elaborated by IT experts during the second phase, and, on the other hand, to establish a comprehensive framework that encompasses theoretical and practical aspects of the translation of medieval romance lyric texts.

Medieval poetry is a fascinating challenge for translation studies. Galician-Portuguese troubadour songs provide an excellent testing ground, not only because of their chronological distance from modern phonology, morphology and syntax, but also because of their semantic density, the importance of intertextual and interdiscursive references, and their peculiar formal aspect, which is closely related to the melody. In this context, the collaboration and exchange between AI and human translators promises to unlock new dimensions in understanding, comparing, and improving the translation process, in a fascinating exploration at the intersection of technology and human ingenuity.

This groundbreaking endeavour within Romance studies will introduce AI translation tools, marking the inaugural exploration of differences between human and machine translations. Initial testing, conducted at the Moore Institute (University of Galway), will pave the way for an anthology of Galician-Portuguese texts translated into English. This anthology will feature translations by both AI and human translators, complemented by essays delving into the



complexities of machine versus human translation in tackling the nuances of Old Galician-Portuguese.

Methodology and Implementation

The first step of this first phase was to define the AI tools to be tested and the corresponding training methods, with the aim of exploring the main factors and problems underlying both AI and human translation, in order to collect initial data for the second phase of the project. Large Language Model (LLM) systems such as ChatGPT, Copy.ai and Google Gemini proved to be the most flexible and efficient in detecting the difference between modern and medieval Galician and Portuguese, although Gemini, after a promising first attempt, failed to provide complete translations of the poems selected for initial testing: for this reason I decided to remove it from the plateau of three systems initially considered.

After an initial online contact with Crosswinds Group members Dr Lorna Shaughnessy and Dr Martín Veiga (who are also poets and translators), I offered two possible options for the first translation test. Of the two, Dr Shaughnessy chose a *cantiga de amigo* (women's song) because of its peculiarity within the whole troubadour tradition in terms of metrical, rhythmic and lexical factors. Although she is a renowned poet and translator from modern Spanish and Galician, Dr Shaughnessy is not a specialist in medieval Galician language and literature, and this allowed her work to be less biased by previous knowledge or experience in translating or studying this literary tradition. The experiment was conducted as follows: on the one hand, Dr Shaughnessy would provide a translation into English without knowing any previous attempts by other translators and without any explicit constraints on how her rendition should adapt to the source poem in terms of meaning or form. On the other hand, the same poem was given to Copy.ai and ChatGPT, who were given simple and basic prompts to guide them in terms of meaning, metre, rhythm, vocabulary and register, with the aim of aligning their knowledge with that of a human translator at this stage.

The three translations were then compared according to the same categories listed above (meaning, meter, rhythm, vocabulary and register) and represented the first batch of data to identify the main factors to be further analysed and compared in the second phase. The results were displayed in a 30-minutes presentation at the Moore Institute explaining the whole process and the possible initial results. The presentation took place on Wednesday 3rd July.

Further steps

After this first test phase, a second phase—which will require proper funding to be successfully implemented—will take into account the data collected in the first to establish the framework for the creation of an online Open Access anthology of medieval Galician-Portuguese songs, translated both by humans and by AI, equipped with preliminary studies carried out by a multidisciplinary team consisting of computer scientists in the field of Digital Humanities, professional translators, poets and medieval philologists. The ultimate goal is to provide the background for the creation of a more structured and broader network focused on the translation of medieval texts into English.