

# A Cross-Linguistic and Computational Extension of the Pathos Model: A Comparative Study of Human and LLM-based Annotation in Political Debates

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## 1 Abstract

### 1.1 Introduction

The study of persuasion is fundamental to understanding human communication, particularly within the high-stakes arena of political discourse. This thesis is grounded in the foundational work of Konat, Gajewska, and Rossa (2024), "Pathos in Natural Language Argumentation", which establishes an empirically grounded model for analyzing emotional appeals. They conceptualize pathos as an interactional persuasive process. Building directly on this framework, this research addresses a notable gap in the current state of the art: the lack of systematic, cross-linguistic research on pathetic appeals. While the majority of work in argumentation theory and computational rhetoric remains predominantly Anglocentric, this project proposes a novel expansion of the Konat et al. model. By examining how emotional appeals are constructed across distinct cultural contexts, this thesis aims to move beyond a monolithic understanding of emotional rhetoric and explore its specific manifestations in the political landscapes of Poland, Germany, and the United States.

### 1.2 Methodology

This study adopts the core methodology established by Konat et al. (2024) to operationalize the analysis of persuasive attempts. The identification of pathotic appeals will rely on two complementary strategies: the detection of structured pathotic Argument Schemes, as classified by Walton et al. (2008), and the analysis of emotion-eliciting language using psychological lexicons. These methods will be applied to a newly compiled multilingual corpus representing the distinct political contexts of Poland, Germany, and the United States. Furthermore, the research incorporates a computational dimension by evaluating the capability

of Large Language Models (LLMs) to perform complex pragmatic annotation. The methodology involves fine-tuning and augmented prompting of state-of-the-art Transformer architectures (e.g., GPT-4, LLama). The performance of these models will be assessed against a human-annotated gold standard to determine their efficacy in tasks requiring cultural knowledge and pragmatic inference.

### **1.3 Expected results**

This research is expected to yield the first direct comparative analysis of how pathotic appeals are deployed across Polish, German, and American political discourse, revealing culturally specific manifestations of emotional rhetoric that challenge current Anglocentric norms. Additionally, the project will provide an empirical assessment of the capabilities and limitations of modern Large Language Models in the domain of computational rhetoric. By testing the boundaries of AI through fine-tuning and comparison with human annotation, the thesis will clarify whether current context-aware architectures can effectively replicate the pragmatic inference required to identify rhetorical strategies in complex, high-stakes political communication.