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Probing Coreference Models of Romance Languages using Multiword Expressions

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The Coreference Task

Who is the entity mentioned by some expression?

Challenges

• Pro-drop pronouns in Romance

<u>O usuários antigos</u> eram <u>os</u> que mais reclamavam.

<u>Old users were the ones who complained the most.</u>

Glossary: Os usuários mais antigos/Old Users, eram/were, os/the, que/who, mais/the most, reclamavam/complained

Research Questions

RQ1: Could state-of-the-art English coreference models, when used zero-shot in Romance languages, consistently insights for improving coreference models in these produce <u>similar errors</u>?

RQ2: Do few-shot <u>coreference models trained in</u>

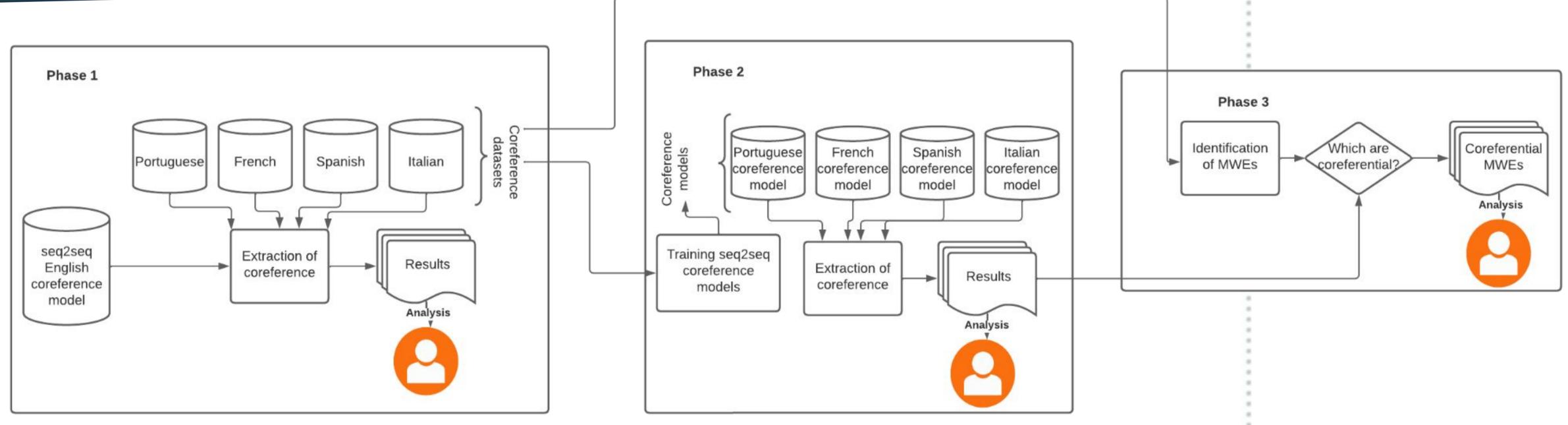
<u>Romance languages</u> and tested in the same languages exhibit <u>similar errors</u>?

- languages (except French)
- Address coreferential multiword expressions

RQ3:If consistent errors occur across Romance languages in both zero-shot and few-shot coreference models, <u>can these errors be categorized to offer</u> languages? **RQ4:** To what extent can Multi-Word Expressions (MWEs) influence the prediction errors of coreference models, and can this influence be quantified in

Romance Languages?

Planned Methodology



The architecture for the coreference model will be based on the work "Seq2seq is all you need for coreference resolution.", Wenzheng Zhang, Sam Wiseman, and Karl Stratos. EMNLP 2023

1. Shedding light on the current state-of-art coreference models for romance languages; 2. Mapping the influence of MWE in the coreference models for romance languages; 3. Improvements in the coreference models for romance languages.

