Language Diversity and Knowledge Consistency

philosopher and logician

Frege's theory of reference states that the truth-value of a sentence is a function of the references of the expressions which compose the sentences, along with the way in which they are combined.

multilingual LM
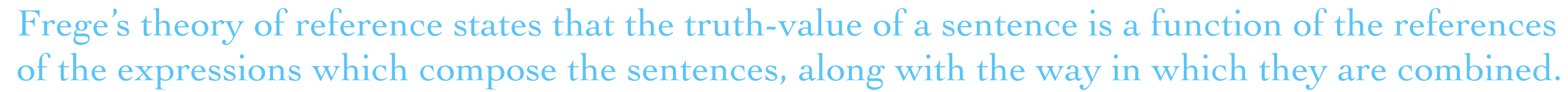
authors of this paper 🤔

🟨🟪🟥 refer to the same object in the real world
🤝 cross-lingual knowledge consistency, i.e., sharing all references
✋ cross-lingual knowledge conflict

A salient aspect of humanity is that, while people may speak different languages, they can share common references and knowledge. We are thus interested in analyzing, evaluating, and interpreting cross-lingual consistency for factual knowledge.

In this work, we measure consistency evolution by quantifying the distribution difference between two code-mixed, coreferential statements for each layer's output.