



Introduction

- Hypernymy is used in computational linguistics for determining semantic similarity between texts, anaphora resolution, and language translation

- Explore the possibility of the effective use of hypernymic connections to classify words in narratology and in the areas of knowledge

Methods

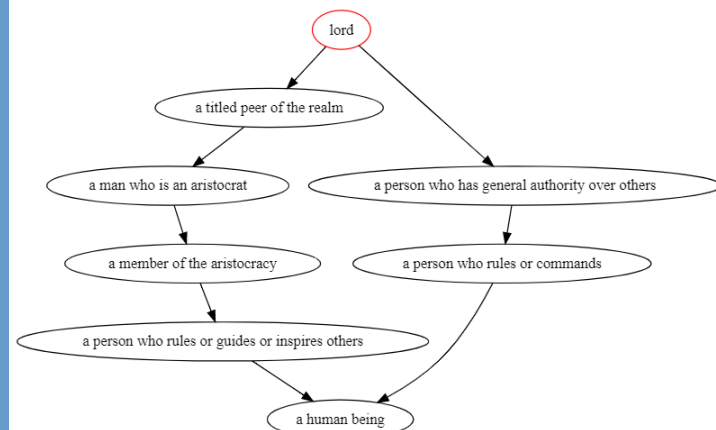
- Thesaurus reviewed: Roget Thesaurus, Wiktionary, WordNet, FrameNet

- 6 word categories selected

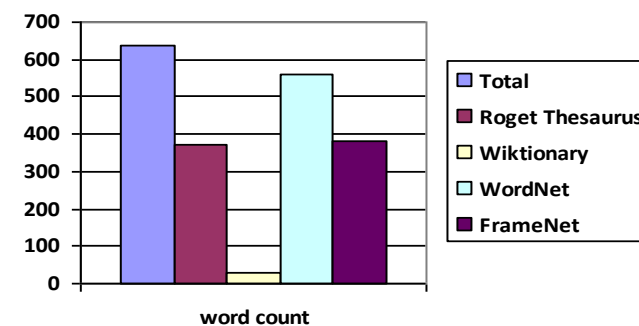
- All word categories passed the test for the presence of a common hypernymy

- All words of the general hypernym are checked for compliance with the category of words

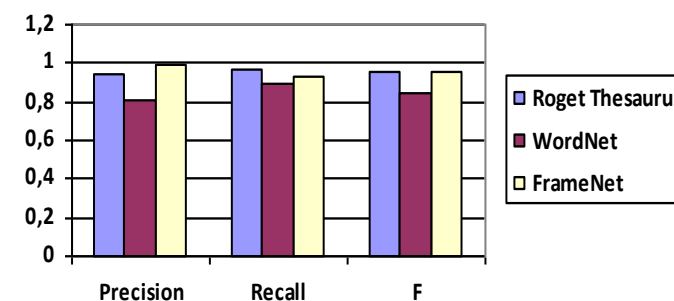
Hypernymy relationship graph



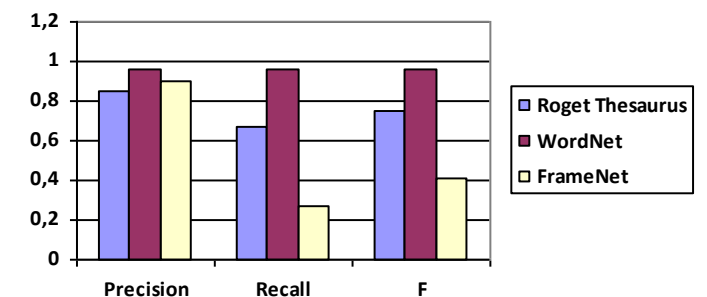
Number of words with hypernyms in dictionaries



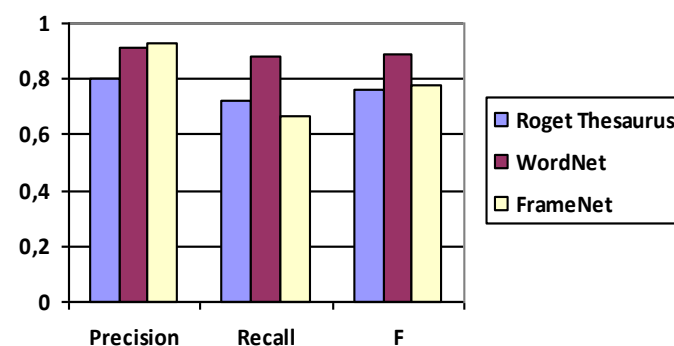
Verbs of speech, missing words are treated as errors



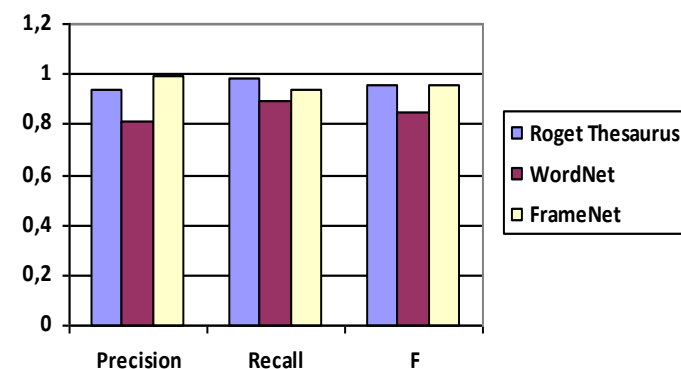
Geometry, missing words are excluded



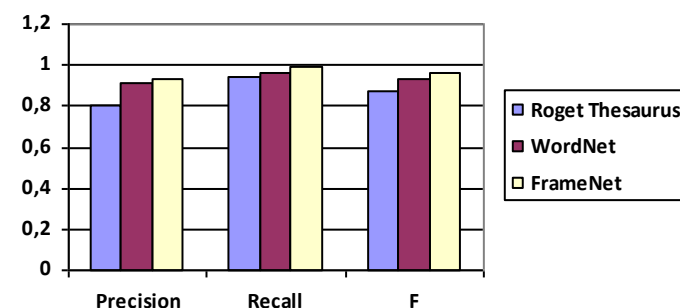
Personal Relations, missing words are treated as errors



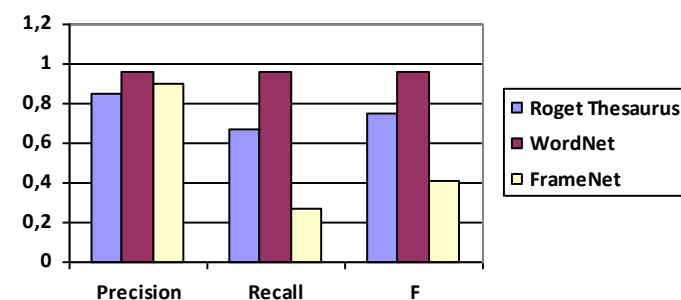
Verbs of speech, missing words are excluded



Personal Relations, missing words are excluded



Geometry, missing words are treated as errors



Conclusions

- WordNet and FrameNet dictionaries have the potential to highlight words of certain categories
- WordNet's hypernymy structure is broad and deep but not systematic and prone to errors.
- FrameNet contains fewer words and shallower hypernymy hierarchy, but is more systematic and gives better precision in its area of expertise.
- Roget's Thesaurus can be used, but it mostly performs worse than the winner in each category

The reported study was funded by RFBR, project number 20-07-00764.