

Uroš Škrjanc, Grega Rovšček, Jaka Mesarec

[illegible]

## Paraphrasing, Translation

Basic metric, made for machine translation, measures the similarity between machine and human translated sentences. One of the standard measures. [1]

**METEOR**

Addresses some of the shortcomings of BLEU. [2]

**ParaScore**

The assessment takes into account both the semantic similarity between the words and the lexical variety (as similar a meaning as possible and as different words as possible). [3]

**CLARIN**

Common Language Resources and Technology Infrastructure, Slovenia CLARIN.SI is the Slovenian national consortium of the European research infrastructure network CLARIN. It provides language resources and technologies. We will use it for translation between English and Slovene.

<https://www.clarin.si/repository/xmlui/handle/11356/1736>

[https://github.com/clarinsi/Slovene\\_NMT](https://github.com/clarinsi/Slovene_NMT)

### Existing solutions

Writing assistants: <https://instatext.io/>

Paraphrasing sentences is used for:

- plagiarism checking
- to avoid plagiarism by changing sentences that sound too similar
- text summarization
- simplifying the text - when the text is too complex or technically demanding, part of the text can be changed to make it more understandable
- machine translation
- to optimise the content of a website (SEO - Search Engine Optimisation) so that it is easier for search engines to find it or rank it higher in search results

**Some web applications:**

- Prepostseo  
<https://www.prepostseo.com/paraphrasing-tool> Has the feature to manually add synonyms.
- QuillBot  
<https://quillbot.com/>
- SpinBot  
<https://www.spinbot.com/> Actually redirects to QuillBot
- AI Article Spinner  
<https://aiarticlespinner.co/>
- Small SEO Tools  
<https://smallseotools.com/paraphrasing-tool/> (not free)

**Short comparison**

**Original text:** (<https://www.bbc.com/news/world-europe-64935449>): *Analysts say Bakhmut has little strategic value, but has become a focal point for Russian commanders who have struggled to deliver any positive news to the Kremlin.*

- **Prepostseo - standard:** *Analysts say Bakhmut has little strategic value but has become a flashpoint for Russian commanders struggling to get positive messages across to the Kremlin.*
- **Prepostseo - fluency:** *Analysts say Bakhmut has little strategic value but has become a focal point for Russian commanders who have struggled to relay positive messages to the Kremlin.*
- **QuillBot:** *Despite having minimal strategic worth, according to analysts, Bakhmut has become a focus for Russian commanders who have found it difficult to bring any good news to the Kremlin.*
- **AI Article Spinner standard:** *Analysts say Bakhmut has little strategic value, but he has become a focal point for Russian commanders who have struggled to deliver positive news to the Kremlin.*
- **AI Article Spinner standard:** *Analysts say Bakhmut has little strategic value, but has become a focal point for Russian commanders struggling to convey good news to the Kremlin.*

### References

- [1] Wikimedia Commons. Bleu.
- [2] Wikimedia Commons. Meteor.
- [3] Lingfeng Shen, Lemao Liu, Haiyun Jiang, and Shuming Shi. On the evaluation metrics for paraphrase generation, 2022.
- [4] Jianing Zhou and Suma Bhat. Paraphrase generation: A survey of the state of the art. In *Proceedings of the 2021 Conference on Empirical Methods in Natural Language Processing*, pages 5075–5086, 2021.
- [5] Christian Federmann, Oussama Elachqar, and Chris Quirk. Multilingual whispers: Generating paraphrases with translation. In *Proceedings of the 5th Workshop on Noisy User-generated Text (W-NUT 2019)*, pages 17–26, Hong Kong, China, November 2019. Association for Computational Linguistics.