

Metamorphic Testing of Cross-Language Sentiment Analysis

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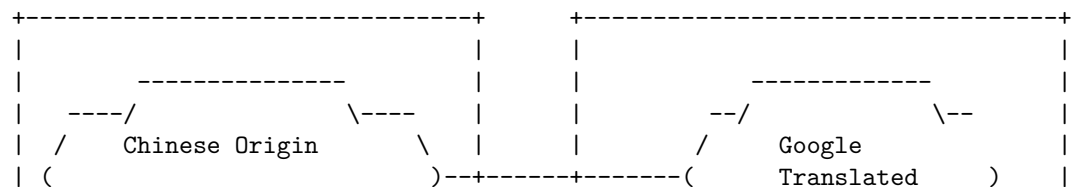
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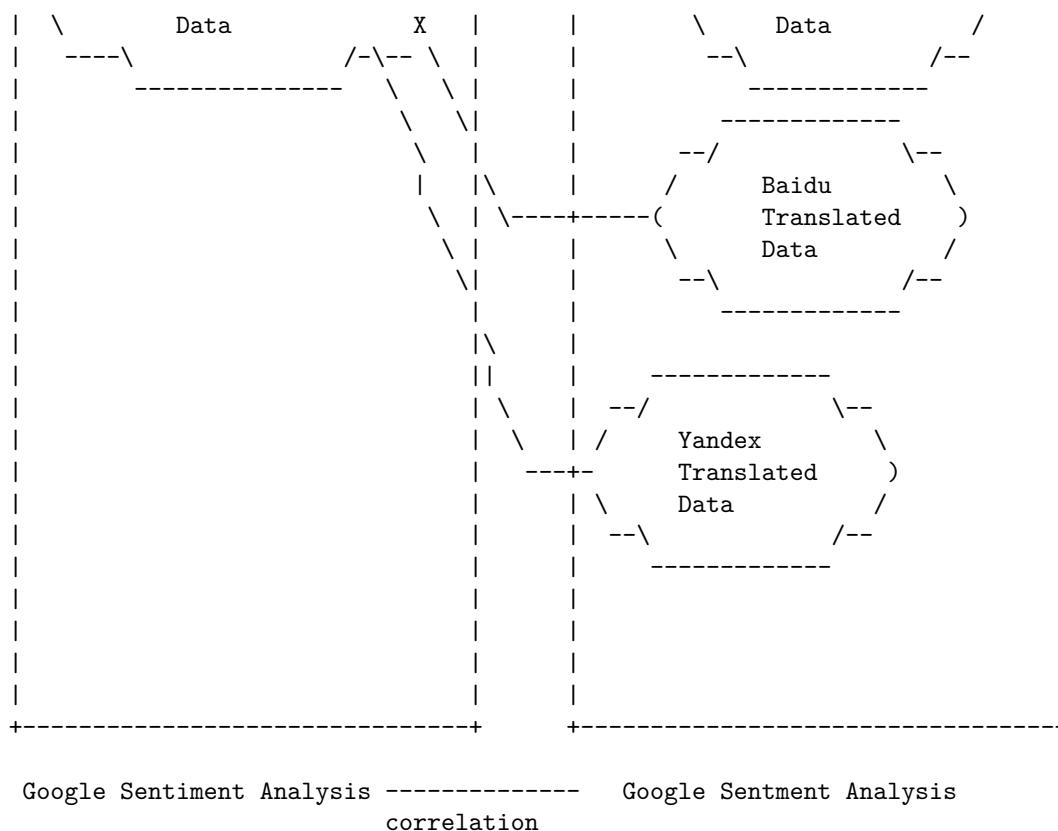
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1 Introduction

The purpose of this research is assessing the quality of translation tool and quality of sentiment analysis tool. Finally, we will achieve a method, finding which translation tool combining with which sentiment analysis tool together, for getting better sentiment analysis result. Currently, most of sentiment analysis tool only support English. We want to find a method for let non-English people using English Sentiment Analysis tool with Machine translation tool, analysis their non-English text.

2 Assessing Machine translation tool quality





2.1 Method

2.2 Result

	Google Score for Google translated data	Google Score for Yandex translated data
Google Score for origin data	0.524**	0.516**

- Google translation tool quality > Yandex translation tool quality > Baidu translation tool quality

3 Assessing Sentiment analysis tool quality

4 Method for better compound mode for sentiment analysis tool and machine translation tool