

Getting Across in Medical Communication: A Corpus-based Approach to Analyse and Improve Comprehensibility of Machine Translation

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Appendices

Table 1. Multi-level variables for the linguistic comparison

| Levels | Variables |
|-----------------------|--|
| Lexical | Type/token ratio (TTR) Word length (WLS) Lexical frequency profile (LFP) |
| Sentence | Sentence length (SLS) Frequency of Complex sentences (CSC) Frequency of Conjunction (CONJ) |
| Grammar Functional | Frequency of Preposition (PREP) Frequency of Modal words (MD) Frequency of Determiners (DTM) |

Table 2. Examples of French source texts.

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| <i>en cas d'hospitalisation, la couverture d'assurance est-elle en chambre commune?</i> |
| <i>avez-vous été vacciné contre la rougeole?</i> |
| <i>pouvez-vous énumérer ou écrire les noms de médicaments auxquels vous êtes allergiques?</i> |

Table 3. Comparison of MT and BNC64

| Variables | MT | BNC64 |
|------------------|-----------|--------------|
| TTR | 0.1831 | 0.0143 |
| WLS | 3.2662 | 1.9567 |
| SLS | 11.1893 | 20.8870 |
| CSC | 0.0031 | 0.0032 |
| CONJ | 0.0031 | 0.02891 |
| PREP | 0.0579 | 0.0652 |
| MD | 0.0282 | 0.0105 |
| DTM | 0.0720 | 0.0673 |

Table 4 Lexical Frequency Profile

| Word List | MT/% | BNC64/% |
|------------------|-------------|----------------|
| One | 70.58 | 88.22 |
| Two | 3.60 | 2.81 |
| Three | 0.31 | 1.19 |
| Not in the list | 25.51 | 7.78 |

Table 5 Examples for layman expressions

| Medical terms | Lay terms |
|----------------------|--------------------------------|
| cardiac | heart; involving the heart |
| dermatologic | of the skin |
| hepatitis | inflammation of the liver |
| hypertension | high blood pressure |
| oncology | the study of tumours or cancer |
| pulmonary | lung |
| respiratory | breathing |