# Chunk Accuracy: A Simple, Flexible Metric for Translation Quality

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# Overview

Introduction

Error-based approaches

The proposal

# Translation Quality Assessment through metrics

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  - error profile
- Reference-based
  - a single metric, or
  - a set of metrics

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- purpose of reference may differ from system translations
- references cannot cover the space of possible translations

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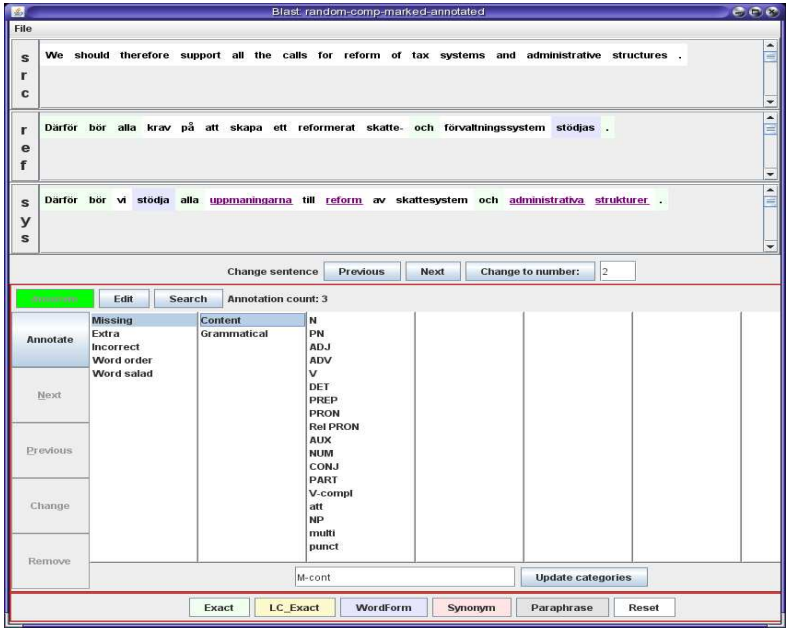

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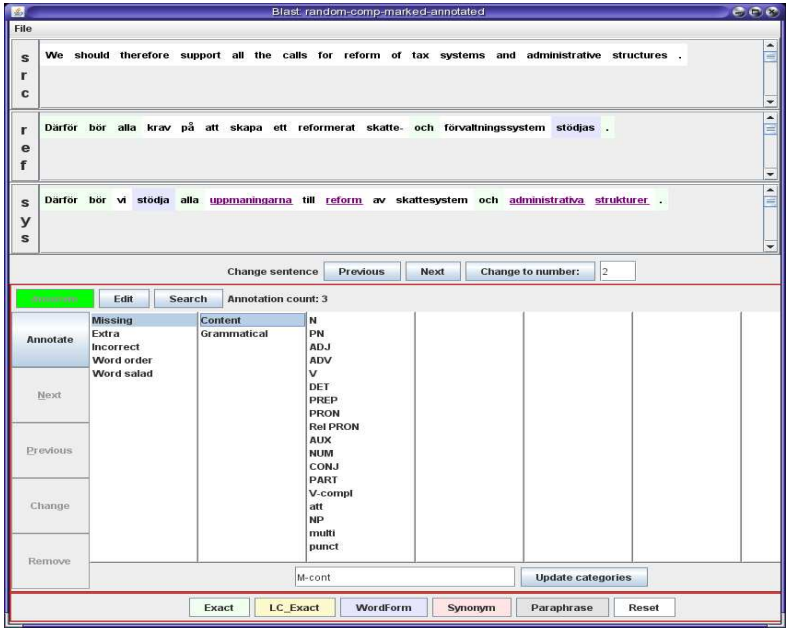


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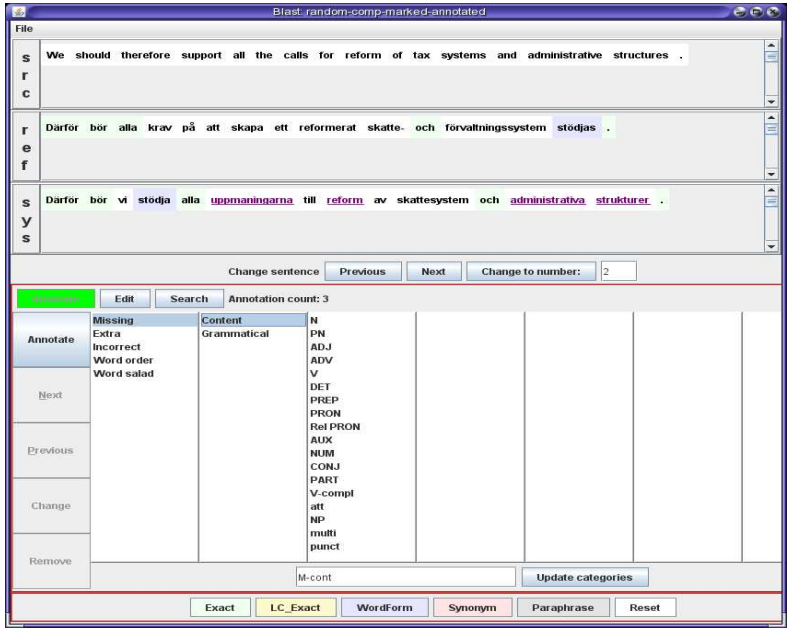


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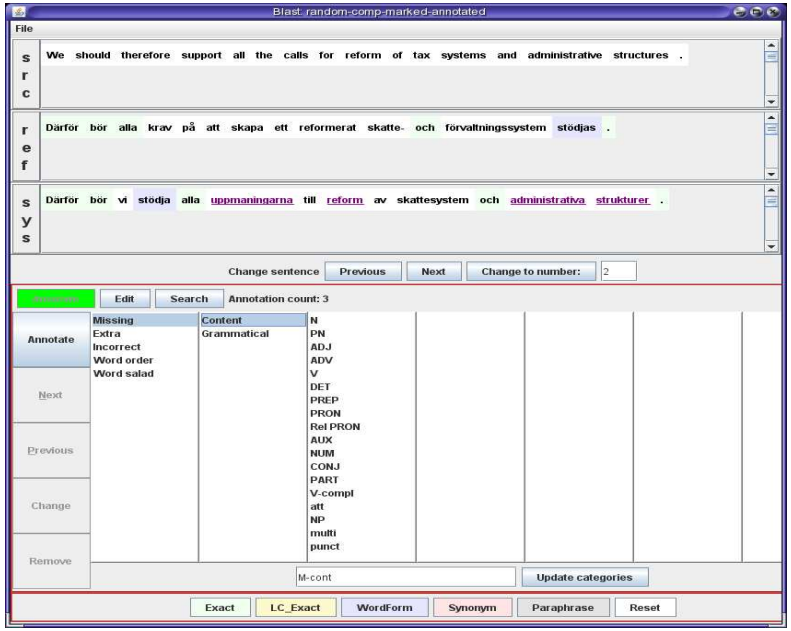


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  (cf. Bayerl & Paul, 2011)

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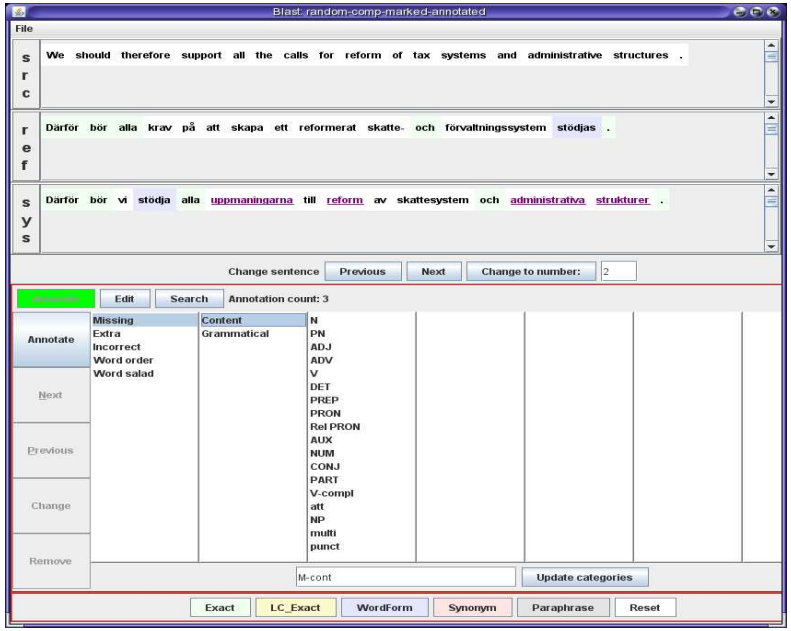


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- short sentences didn't represent the full set well

# Quality aspects

Translation

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SourceText ——— Translation

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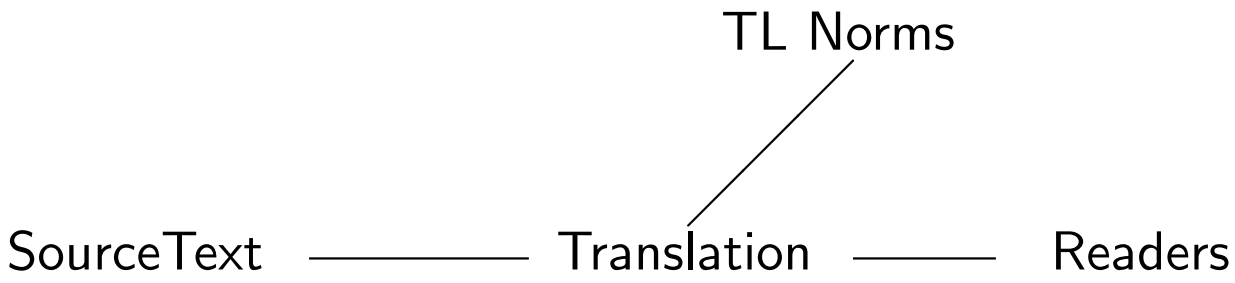

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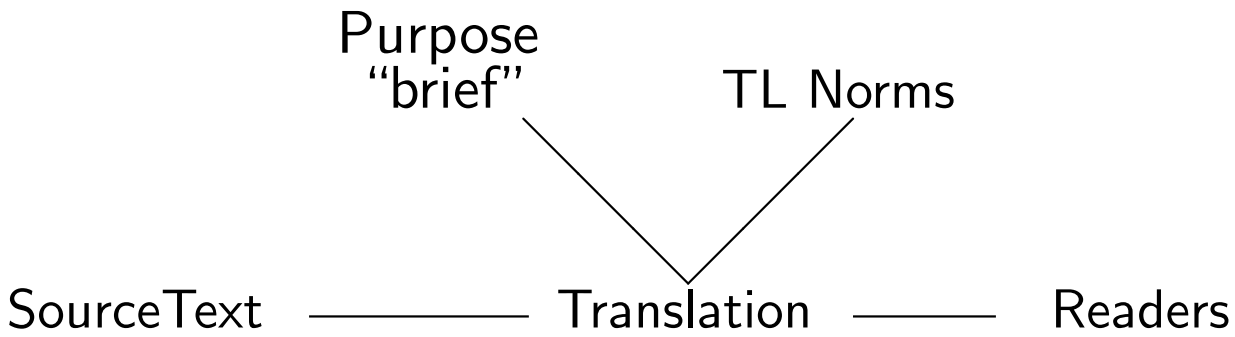

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- global (macro-level) properties are not considered
- it is not obvious how to define informative metrics (cf. Williams, 2001)

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# Main features

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- Make the taxonomy small and relevant
- Each issue type should contribute to the translation profile

# Example

- *These star-forming region, called by scientists unromantisch*

# Example: agreement issues

- **These** *star-forming* **region**, ...

# Example: word order issue

Word order uncertainties

- *..., called by scientists unromantisch*

# Taxonomies

Example: post-editing

- Good
- Editable
- Useless

# Taxonomies

Example: assimilation / reading support

- Comprehensible wihout effort
- Comprehensible with effort
- Incomprehensible

# Metrics

- A profile: the percentage of chunks falling into any given category
- A single metric: a weighted combination of these percentages

# Example



| **Category** | **Weight** | **Result** |
|---|---|---|
| Comprehensible | 1.0 | 0.40 |
| Compr. with effort | 0.5 | 0.25 |
| Incomprehensible | 0 | 0.35 |

Single metric: 0.40 + 0.5*0.25 = 0.525

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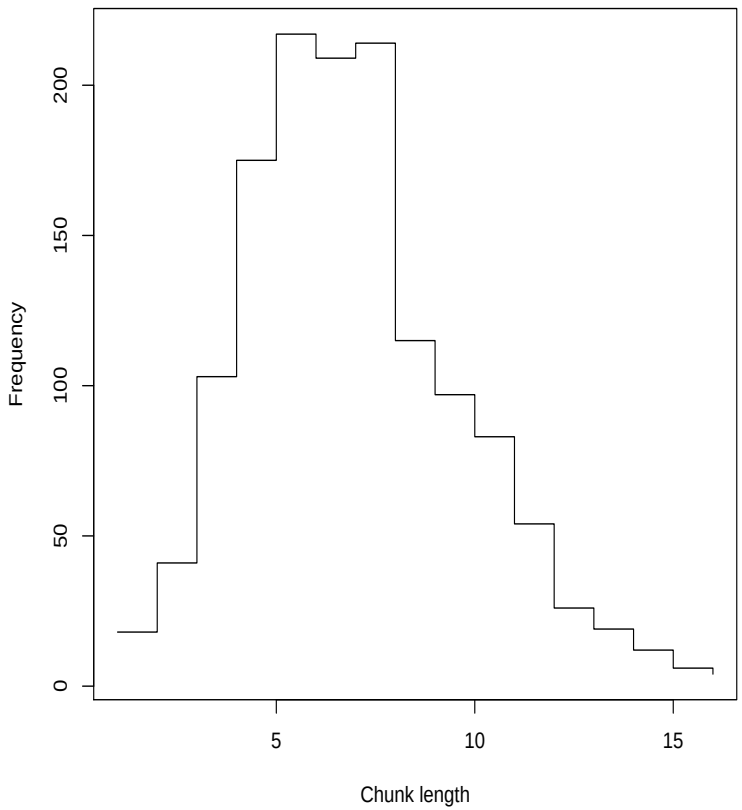
- goal: automatic

# Chunk lengths - manual sample




mean: 6.5 words

# The End

Thank you!