Report of the results of the study on translators's perceptions of machine translation presented at EAMT 2018

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Introduction

This report highlights the most significant results of a survey belonging to an EAMT study on translators' perceptions of machine translation. The aim of this research is to gain a better understanding of the different aspects involved when translation professionals work with machine translation. The survey was active for two months. A sample of 122 subjects took part in the study.
A) RESPONDENTS PROFILE
Country of origin
Working languages
Fields of work
B) USE AND PERCEPTIONS ON MACHINE TRANSLATION
Degree of conformity with the following statements

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Indifferent</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I mistrust MT</td>
<td>15%</td>
<td>29%</td>
<td>16%</td>
<td>29%</td>
<td>12%</td>
</tr>
<tr>
<td>I’m willing to accept PE jobs</td>
<td>16%</td>
<td>36%</td>
<td>11%</td>
<td>18%</td>
<td>19%</td>
</tr>
<tr>
<td>I believe translators could contribute to MT development</td>
<td>40%</td>
<td>39%</td>
<td>13%</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>MT helps to improve my productivity as a translator</td>
<td>26%</td>
<td>31%</td>
<td>17%</td>
<td>16%</td>
<td>10%</td>
</tr>
</tbody>
</table>
- I think mistrust comes from lack of information. I do know what MT can do, and special what it cannot do. But I wouldn't call this mistrust.

- Machine translation can offer a great help to translate specialized domains with fixed terms and structures. It can be a useful method to speed up the translation of tedious and monotonous documents. Machine translation should be regarded as a tool for translators to use, not as a substitute. Therefore, it would be very convenient that translators contribute to its development.
- Machine translation gives us a first glance of the content. It helps to have a translation automatically, but a poor translation. It is not ideal, I would always prefer to translate outright, but to stay competitive I have no choice but to accept MT postediting jobs.

- Acceptability of postediting jobs strongly depend on the quality of the MT engine. This information of the quality (and the type of engine as well as training corpora) shall be conveyed to the translators.

- Willing to take PE jobs, but I stopped since texts I’m offered are of too poor quality and rates are far too low for the work required. Agencies totally overestimate the quality of their MT’s.
Use of MT systems

- Yes: 37%
- No: 63%
Type of MT system

(78 affirmative responses)
1. Deepl
2. Google Translator API
3. SDL Trados
4. Proprietary of the company (developed inhouse)
5. eTranslation, Memsource, Open NMT, Softcatalà, Systran, Yandex, among others
Method to track productivity when using MT

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time PE Vs. Translation</td>
<td>43%</td>
</tr>
<tr>
<td>Money received</td>
<td>20%</td>
</tr>
<tr>
<td>Number of changes in PE</td>
<td>12%</td>
</tr>
<tr>
<td>Doesn't track productivity</td>
<td>26%</td>
</tr>
<tr>
<td>Other</td>
<td>16%</td>
</tr>
</tbody>
</table>
Importance of productivity measures when deciding whether or not to use MT
Use of automatic quality indicators to evaluate the quality of MT
Type of automatic quality indicator

(12 affirmative responses)
Automatic quality indicators are useful for predicting translation effort.
Translators’ comments

- I understand that these measures are not yet well adapted to NMT so it's hard to tell whether they are useful for this technology.

- Yes but in a professional context, they may not be sufficient. The company that aims to use MT shall keep tracking the productivity gains of MT in real projects and decide if the engine is performing sufficiently.

- BLEU and TER are useful to have a general idea of the overall quality, but sometimes their scores can be misleading especially for NMT.
- A reliable quality measure is desperately needed to work out approximate time needed to do the job and an appropriate pay.

- Better than nothing but worse than human evaluation.

- Such predictions can only be based on prior translations and would only be valuable for very similar new jobs.

- The thing is that they do not "predict". I must have generated the post-edited reference first to then see the BLEU or TER score of the raw MT output. I would like to have a more reliable predictive metric as such.
Most annoying errors delivered by MT

- Difficulty to identify contexts
- Terminology
- Literal translation
- Synonyms
- Collocations
- Nonsense translations
- Ambiguity, polysemic errors
- False Friends
- Missing negations
- In large sentences, nonsense MT output
- Lack of fluency
- Numbers in the wrong place
- Grammar mistakes
- Proper names and toponyms
- Misunderstandings
- Idiomatic expressions
- Subtle, non-evident errors
- Word order
- Genre errors
- Lack of accuracy
- Unknown words
- Repetitions
- Metaphors, etc.
- Omissions
Level of pressure to use MT

12%  16%  50%  16%  7%

By force  Prohibited
Sources of pressure

(97 responses)
How often the translators’ needs about MT are heard

<table>
<thead>
<tr>
<th></th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2 %</td>
</tr>
<tr>
<td>2</td>
<td>18 %</td>
</tr>
<tr>
<td>3</td>
<td>41 %</td>
</tr>
<tr>
<td>4</td>
<td>24 %</td>
</tr>
<tr>
<td>5</td>
<td>16 %</td>
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<td>24 %</td>
</tr>
<tr>
<td>5</td>
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Possible ways to contribute to the MT community

- Providing feedback
- Beta testing new MT systems
- Conducting research with developers
- Posting projects and glossaries
- Evaluating output quality
- Adding functions that can improve post-editor's trust towards the output

- Integrating MT and PE in translators training
- Integrating MT and glossary management
- Getting involved in adapting engines
- Training the engines by using free and open software
- Improving interfaces and functions
- Online free-access to automatic quality measures

➤ Offering contributions as another service (extra rate)