MT Error Annotation

The goal of this task is to annotate translation errors in sentences produced by machine translation systems. We don't ask you to annotate the entire sentence but you should annotate each word separately. There are three exceptions:

- (i) If the translation has no errors, just press the button "No errors";
- (ii) If the translation is totally gibberish, you can skip it by pressing the button "Too many errors". You can also add a comment by pressing the "Add comment" button. The guidelines on how to use the annotation tool are given below;
- (iii) If the translation does not make sense mainly due to the source sentence itself not being unintelligible, you can choose "unintelligible source sentence".

If a word is correct, you should not annotate it. If it represents an error, you should decide how serious the error is. We consider three levels of severity: minor, major and critical. If the error is **major or critical**, you should specify the type of error. We give the criteria for deciding on the levels of severity and error categories below.

If multiple words are part of the same error you can select a span of words and annotate them together. Conversely, multiple errors can be annotated for the same word if needed.

Original sentences and translations have been tokenized, which means there is a space before each punctuation mark, please do not annotate these spaces as an error, unless there is a missing word (see below).

Severity levels

- Critical issues: any of the above major issues could be critical if they result in negative outcomes. They may carry health, safety, legal or financial implications, or could be seen as offensive (e.g. contain profanity which is not in the source). For example: imagine, when providing warranty information to a customer, that the (US) English original says the expiration date is 11/12/20 (November 12, 2020). If the translation into Spanish says 11/12/20 (December, 11, 2020), the customer may lose their legal warranty rights because they think they have more time to make a claim than they actually do.
 - Reverse negation (introduction or omission of negation)
 - Introduction of profanity
 - Introduction of hate/abuse

- Reverse sentiment/polarity (what are the words that are causing the sentence to change its sentiment)
- o Change of named entity: get person/organization/etc wrong
- Change in units (measurements, etc.): e.g. km to miles
- Change in time/date, numbers (e.g. financial implication)
- Reverse gender
- Name/company translation: e.g. "Apple" (company) to "Õun", John Black to John Must
- Major issues affect the meaning, purpose or understandability of the content. An example of a major issue would be a grammatical error that makes a sentence difficult to understand, but where the overall goal of the source text is kept in the translation. Think of a chat conversation where the closing sentence is, "Let me know if there's anything else I can you with, any time!"
 - Grammatical or accuracy errors that change the meaning of the source but do not have any of the implications below (critical), such as
 - Untranslated words
 - Mistranslation
 - Missing words
 - Added words
 - Incorrect word order
 - Agreement
- **Minor issues** don't have an impact on the purpose or understandability of the content, but they may make it less appealing. For example, in Spanish, the recommended way of translating a percentage like 20% is 20 %, with a space between the digit and the symbol. If a translation doesn't respect this, it can still be a fit-for-purpose and understandable translation.
 - Stylistic error
 - Polite vs friendly form of verbs (e.g. "anna/andke")
 - Polite vs impolite (e.g. missing 'thank you')
 - o Cases
 - Capitalisation
 - Typographical error
 - Any grammatical error that does not affect meaning (e.g. word order error, missing determiner, morphology)

Examples of Error Severity

Source: Please give me a roll without peanuts, I'm allergic to peanuts!"

Translation: Palun anna mulle rull **maapähklitega**. Mul on maapähklitalumatus!



All words apart from "maapähklitega" have been translated correctly (perfect translation or minor issues), so we don't annotate them and we classify "maapähklitega" as a mistranslation and a critical issue. It should be classified as a "critical" issue because the person is allergic to peanuts and she/he could die if she/he eats a roll with peanuts.

Source: A cup of black tea without sugar, please

Translation: Palun üks tass rohelist teed.



Here, we classify "rohelist" as a mistranslation and a major issue;

"Without sugar" has not been translated, so the space after the word "teed" is marked as "untranslated words and a major issue".

Error Categories

If you consider that the word has been translated incorrectly and the severity is **major or critical** you need to classify this word as one of the following error categories:

- \circ Untranslated words (I like cats \rightarrow mulle meeldivad <u>cats</u>)
- \circ Missing words (I like cats \rightarrow mulle meeldivad)
- Added words (I like cats → mulle meeldivad kassid <u>ja koerad</u>)
- \circ Mistranslation (I like cats \rightarrow mulle meeldivad <u>koerad</u>)
 - Note that missing/added words category must be used only when lexical contents from the original is missing or added. Otherwise, please use mistranslation (e.g. missing prefix that affects grammatical aspect) or minor (e.g. missing determiner) categories

Example: I've read the book \rightarrow *Lugesin raamatu*

Here the word "lugesin" should be annotated as mistranslation, although the translation can be fixed by adding the function word "läbi"

- \circ Incorrect word order (I like cats \rightarrow mulle <u>kassid meeldivad</u>)
 - In case of word order issues it is not always clear which word should be annotated as error. You should use the following rules to decide:
 - If multiple words are involved, mark the words moving which would restore the correct word order with the minimum number of changes
 - If the number of changes is equal for two words choose the first one

Example 1:



There is an incorrect word order: mark the word "ei" as "incorrect word order (major)". We don't annotate "tea kes" because it requires more shifts: you would need to move "tea" and "kes" and to restore the correct word order.

Example 2:

SOURCE: The cat , the dog and the crocodile are playing together .	
OUTPUT 1: Koer , kass ja krokodill mängivad koos .	reset Incorrect word order (major): - Koer
Add comment	

Words "koer" and "kass" are swapped, so we can move "koer" to the right or "kass" to the left to get the correct sentence. So, the number of shifts is equal and following the rule of thumb, we mark the first word as "incorrect word order".

If you consider that the word has been translated incorrectly and its severity is **minor**, you do not need to classify the type of error, just annotate it as **minor**.

Annotation guidelines in MT-Equal

Once you have received your username and password, log yourself in at this address: https://mt-equal.fredblain.org

To join the annotation task which has been assigned to you, click on the "Tasks" menu in the top left corner of the screen and select the task under "Error Annotation". Once you have joined the task, you will be given a list of annotation items, as illustrated below:

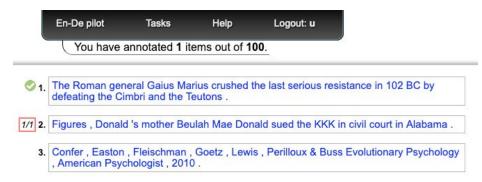


Illustration of the interface with a list of annotations.

Enter an annotation task by clicking on one the annotation items. Items marked with a red square are annotation tasks that have been started but not yet confirmed by the annotator, while the green arrow indicates an item for which the annotation has been confirmed (more details on how to confirm an annotation below).

When you click on an annotation item, you are presented with a source sentence along with its **context** (a link to the Wikipedia article the sentence has been extracted from) and its machine translated (OUTPUT) to be analyzed. Two buttons allow you to mark the translation output as containing "no errors" or "too many errors" or to indicate that the source sentence itself is not intelligible.

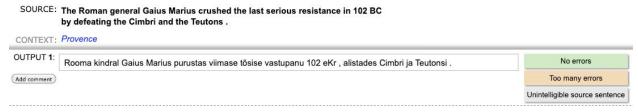


Illustration of the default interface of an annotation task.

In order to annotate the errors, if any, you have to select with the mouse the word(s) and/or space(s) to be annotated. The selected word(s) and/or space(s) are highlighted and, by right-clicking, the error typology menu is displayed and the suitable error type can be chosen. It is possible to annotate single words (including punctuation), spaces (e.g. to indicate the correct place for missing words in the candidate translation), and sequences of words. The annotated errors are listed at the right of the corresponding sentences, subdivided by error type. If you hover the mouse over a given error instance, the corresponding word(s) appear under-lined in the text. It is possible to delete single error instances (by clicking on the red cross icon) or all the errors of a given type (by clicking on the "reset" button).

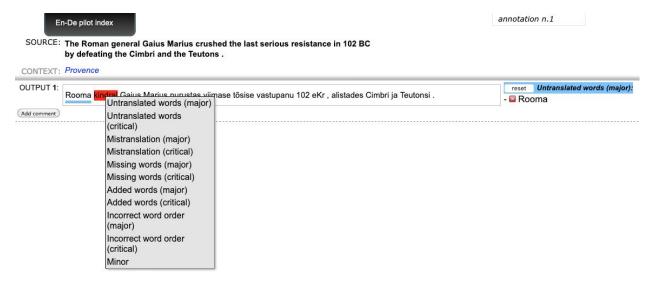


Illustration of the error typology menu (centre) and error list (right).

You can enter and leave an annotation task at any time. Once you are done with a specific annotation item, whether or not it contains errors, confirm your annotation by clicking on "Confirm annotation?" at the bottom of the page (as illustrated below). If you don't confirm your annotation(s), we won't be able to export and use your work. Note that once you have confirmed an annotation task, this task can still be modified at any time. To do so, simply annotate a new token/span, or delete one or more of the previous error instances. Confirm your annotation once again when you are done. Once you have confirmed your annotation, the button turns green and displays "Annotation confirmed!".

You can go back to the previous task or move on to the next task by using the "prev" and "next" button at the bottom of the page.



Illustration of the confirmation button as well as the navigation buttons (prev, next) at the bottom of the page.

For each annotation task, you can leave a comment if you desire. To do so, simply click on "add comment". Click on "save" once you are done.