



Responsive Translation

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Machine Detection of Ambiguity in Assessments:

The Impact of LLM AI on Source Preprocessing in the Translation Workflow

ITC Granada
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Why This Matters

Achieving Clarity in Source Documents

- Correct and clear understanding of source content is crucial to avoid translation errors that compromise reliability.

Objective

- This study assesses GPT-4's efficacy in detecting ambiguities in assessments to improve the translation workflow.

Training and Evaluation

Phase 1: GPT trained on detecting ambiguities.


Phase 2: Preliminary tests for refinement.

Phase 3: Evaluation against professional linguists.



Interactions

Translation Ambiguity Checker ▾ KE





Translation Ambiguity Checker

By Kenneth R. Clark 👤

Provides a full document ambiguity analysis

- Upload a text for ambiguity analysis.
- Provide context for your text.
- Specify the target language for translation.
- Request an ambiguity report in Excel format.

 **200 sentences - to es-ES.docx**
Microsoft Word

Please analyze the following document and generate an ambiguity report. It will be translated into Spanish. 



200 sentences - to es-ES.docx

Microsoft Word

Please analyze the following document and generate an ambiguity report. It will be translated into Spanish.

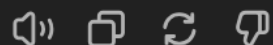


I'll analyze the document for potential ambiguities that could impact the translation into Spanish. The analysis will cover various types of ambiguities, including lexical, syntactical, semantic, and pragmatic nuances. The findings will be compiled into an Excel report with two columns: one for the text segment and the other for relevant comments on the ambiguity.

Let's begin the analysis and generate the report.

The ambiguity analysis report has been generated. You can download it using the link below:

[Download Ambiguity Report \[↗\]](#)



Report

AutoSave On Ambiguity_Analysis_Report.xlsx Saved Search

File Home Insert Page Layout Formulas Data Review View Automate Help Acrobat

E6

	A	B	C
1	Text Segment	Ambiguity Type	Comments
2	Two equal in magnitude but opposite in direction forces acting on an object will always cause an object that is moving to...	Lexical Ambiguity	Clarify whether 'magnitude' refers to size or amount of force.
3	Which of the following has the largest magnitude of momentum?	Lexical Ambiguity	Ensure 'momentum' is clearly defined for the students' level.
4	The genetic material DNA is found in cells. C) atoms.	Syntactical Ambiguity	Consider rephrasing for clarity, e.g., 'Genetic material DNA is found in: A) cells, B) atoms...'
5	What is a group of ecosystems with similar climates and organisms?	Semantic Ambiguity	Clarify if this refers to a biome or another ecological term.
6	The sea level would rise and the polar ice caps would decrease in size.	Pragmatic Ambiguity	Ensure the context makes it clear that 'decrease in size' refers to melting due to temperature rise.
7	Which best describes two organ systems working together to help maintain homeostasis?	Pragmatic Ambiguity	Provide context or examples to clarify what is meant by 'working together'.
8			

Results

- GPT flagged a total of 242 ambiguities, with 180 confirmed by human linguists.
- GPT reduced initial ambiguity detection time by 30%.
- GPT comments, though simpler, provided a useful starting point for human linguists.

Conclusion

Effectiveness of GPT:

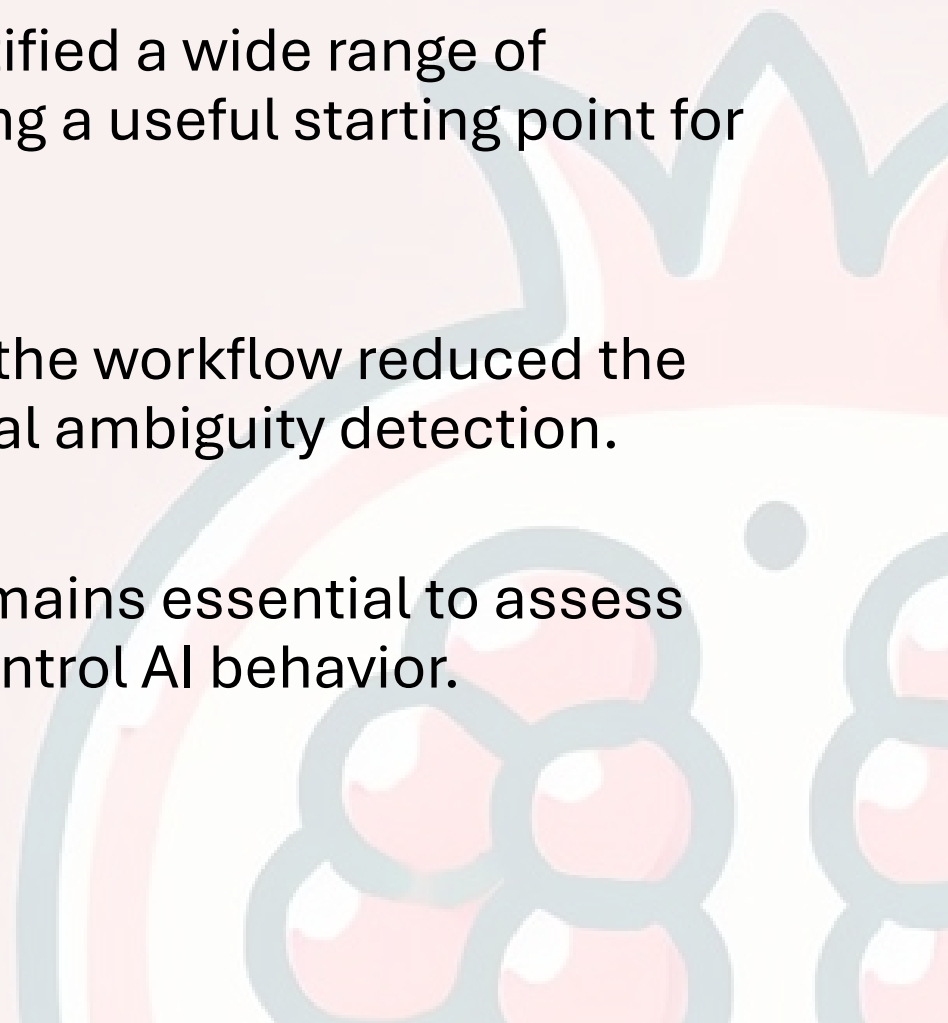
- GPT effectively identified a wide range of ambiguities, providing a useful starting point for human linguists.

Efficiency Gains:

- Integrating GPT into the workflow reduced the time needed for initial ambiguity detection.

Challenge:

- Human oversight remains essential to assess result quality and control AI behavior.





Ambiguity Checker

<https://chatgpt.com/g/g-3YWuEsiVM-translation-ambiguity-checker>



 Responsive Translation

<https://www.responsivetranslation.com/>



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