

# Which Side will Win?

- "No-cost" *machine* translation, based on AI,  
or
- paid *human* translation

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Background information: This presentation distinguishes between two methods of production: UEMT and HT

- Who is responsible for what is delivered to end users?
- What risks are involved?

## **UEMT**

- Unedited Machine Translation
  - once MT system has been trained on a collection of human translations, each fully automatic translation is delivered to end users without being edited by a human

## **HT**

- Human Translation
  - for each translation, a human is responsible for what is delivered to end users, even if machine translation is involved in the translation process (and it often is)



# UEMT and HT: Incremental cost

Once a machine translation system has been trained, the incremental cost for an unedited machine translation is tiny

Once a human translator has an education and has gained experience, the incremental cost for a human translation is much higher

# Which side will win?

- To some, it is obvious that UEMT will completely replace human translation. To others, it is obvious that it will not. Which side will win?
- **This is the wrong question!**
- Instead, let's explore a chain of alternative questions ...

First alternative  
question: **When** to  
use UEMT and  
**when** to use HT, not  
**who** wins

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When deciding between UEMT and HT, remember that HT is not anti-MT and often uses it as a resource

- A simple pro-human rule that assumes a lot on the part of the stakeholders (requesters, providers, and end users)
  - Use **UEMT** if it meets requirements (there are not enough translators)
  - Otherwise, request **HT**



# Some factors to keep in mind when deciding between UEMT and HT

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## **Type of linguistic service**

- Localization
- Transcreation
- Summary translation
- AVT (such as subtitles)
- Conventional translation

## **Source vs target orientation**

## **Translation Grade needed**

See the FIT Position Paper on Translation, Localisation and Transcreation for an explanation of these types of linguistic services and the source-target orientation distinction ( <https://www.fit-ift.org/publications/papers/> )



# What are Translation Grades?

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- New tool to guide initial conversation between requester and provider
- Product grades are used in many industries
- Translation grades (high, medium, and low)
  - Based on use cases and risk tolerance
  - Defined in terms of tolerance for errors:
    - Degree of correspondence between source and target
    - Level of fluency of target







# Before selecting a translation grade, conduct a risk analysis

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- Potential damage to:
  - People
  - Equipment
  - Reputation
- Consequences can be legal or financial



# Good business

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- Request lowest grade that meets requirements
- Keep risk tolerance in mind



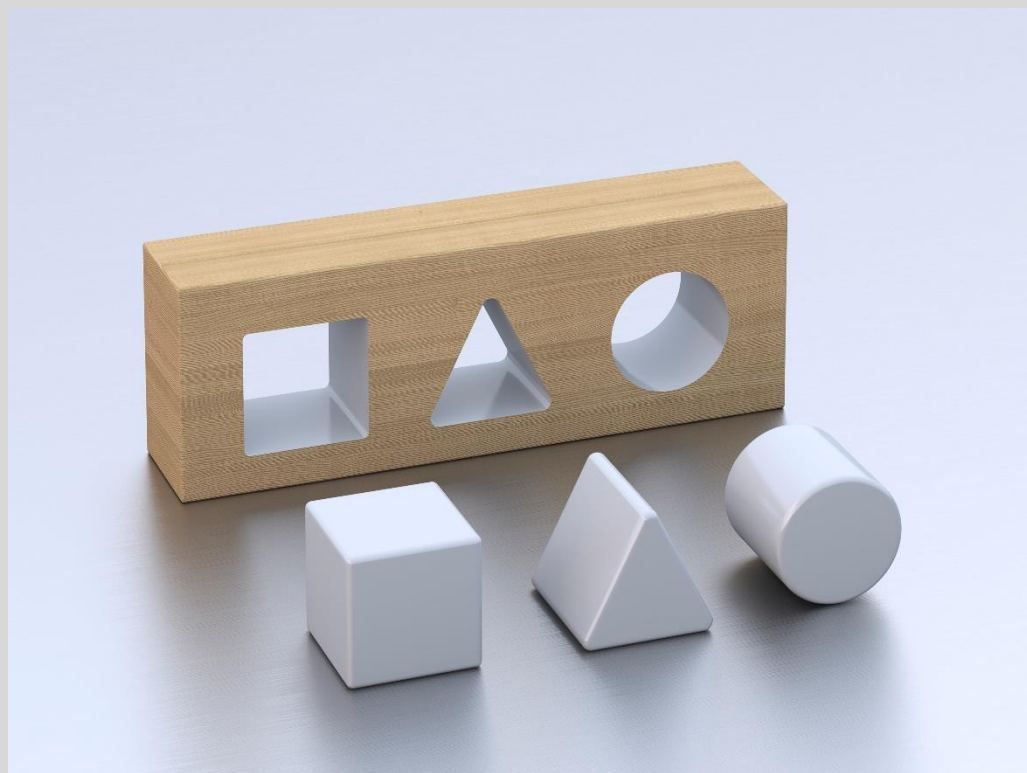
# The Elephant in the Room

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Fundamental question:

*Can UEMT consistently produce  
high-grade translation?*

My Answer: Not currently



If UEMT is limited, why not focus on improving it so it can be used for all three grades?



Erik Brynjolfsson,  
Stanford University

## Societal consideration


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### The Turing Trap

For some tasks, AI should be used to augment human productivity rather than replace humans



# What are some additional factors when choosing between UEMT and HT?

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- Purpose & intended audience of the translation
  - Source & target languages (substantial training data is available in only a few languages)
  - Properties of source content
    - General vs domain-specific lexical units
    - Dynamic vs frozen language
    - Constraints on syntax, semantics & pragmatics



Please consider attending the presentation by Pascale ELBAZ  
on the topic of current use of AI in machine translation



CONGRÈS MONDIAL  
SUR L'INTELLIGENCE ARTIFICIELLE  
5, 6, 7 mai 2022 Université de Montréal, Canada

**La traduction automatique neuronale va-t-elle remplacer les humains ? Plongée au cœur de la traduction chinois-français**



PASCALE ELBAZ





# Philosophical questions

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- What is context (beyond co-text)?
- What is meaning and where does it reside?
- Is the AI used in MT truly intelligent?
- Is it necessary to understand language to produce high-grade translation?
- The saying (versus the said) cannot be translated – only experienced



# Human Language

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How important are:

- Ambiguity (outside narrow domains)
- Cultural diversity
- Beauty?





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## Concluding remarks and discussion

- Which side wins: UEMT or HT?
- Both:
  - Automate when low grade translation is sufficient
  - Augment HT when high or medium grade translation is needed
  - Label all translation as UEMT or HT

Note: for more about grades and labels, see

<https://www.tranquility.info/>

- Place value on people, freedom, and linguistic beauty!