



A Rising Tide Lifts All Boats?

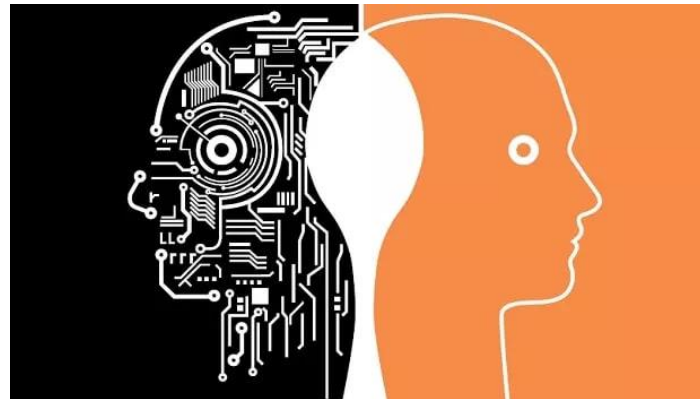
Quality Correlation between Human Translation (HT) and Machine Assisted Translation (MAT)

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Introduction

- Does the human who produces the best translation without MT also produce the best translation with the assistance of MT?
- Are translation and post-editing completely different skills?
- Is “human + machine” always better than machine alone in terms of quality?

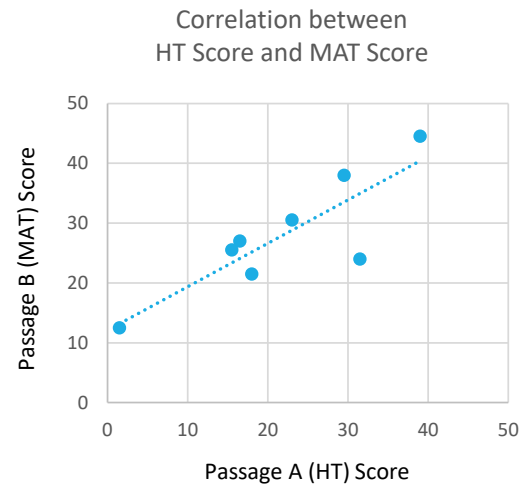


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Methodology

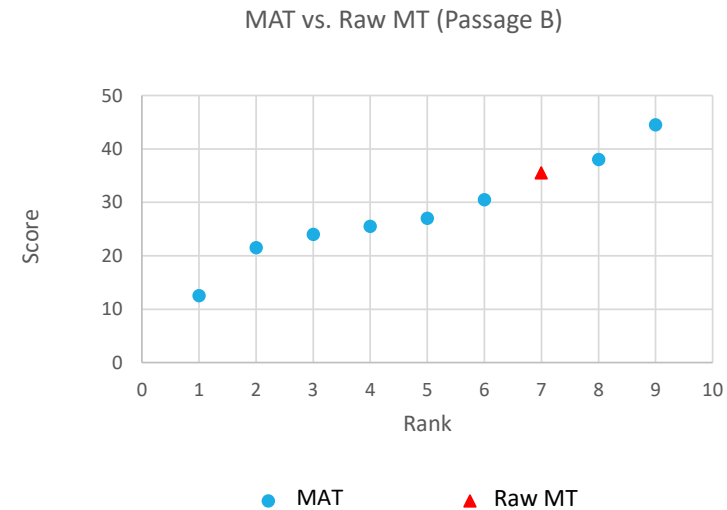
- Main hypothesis: positive correlation between HT quality and MAT quality
- Subjects: 8 volunteers (English-to-Chinese translation practice group)
- Source Texts: two 250-word passages in English similar in style and difficulty level
 - Passage A. Human Translation (HT): MT tools NOT allowed
 - Passage B. Machine-Assisted Translation (MAT): one MT version provided as reference; all other MT tools allowed
- Quality Evaluation: ATA grading framework

Results 1: Correlation between HT and MAT?



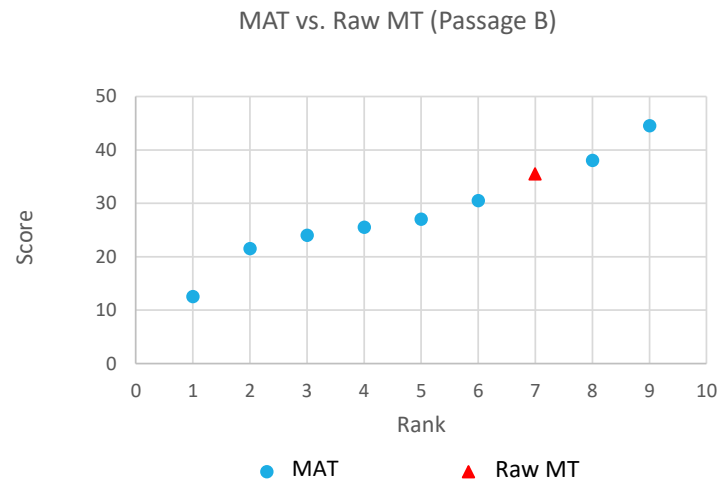
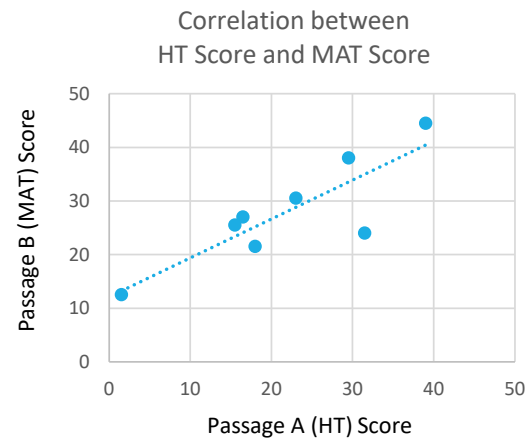
Descriptive Statistics			
	Passage A (HT)	Passage B (MAT)	p-value
Mean	21.8	27.9	0.025
Median	20.5	26.3	
Range	37.5	32.0	
Standard Deviation	10.9	9.2	
N	8	8	
Correlation			
		t-stat	p-value
Pearson	0.85	3.99	0.007

Results 2: How do MAT and raw MT compare?

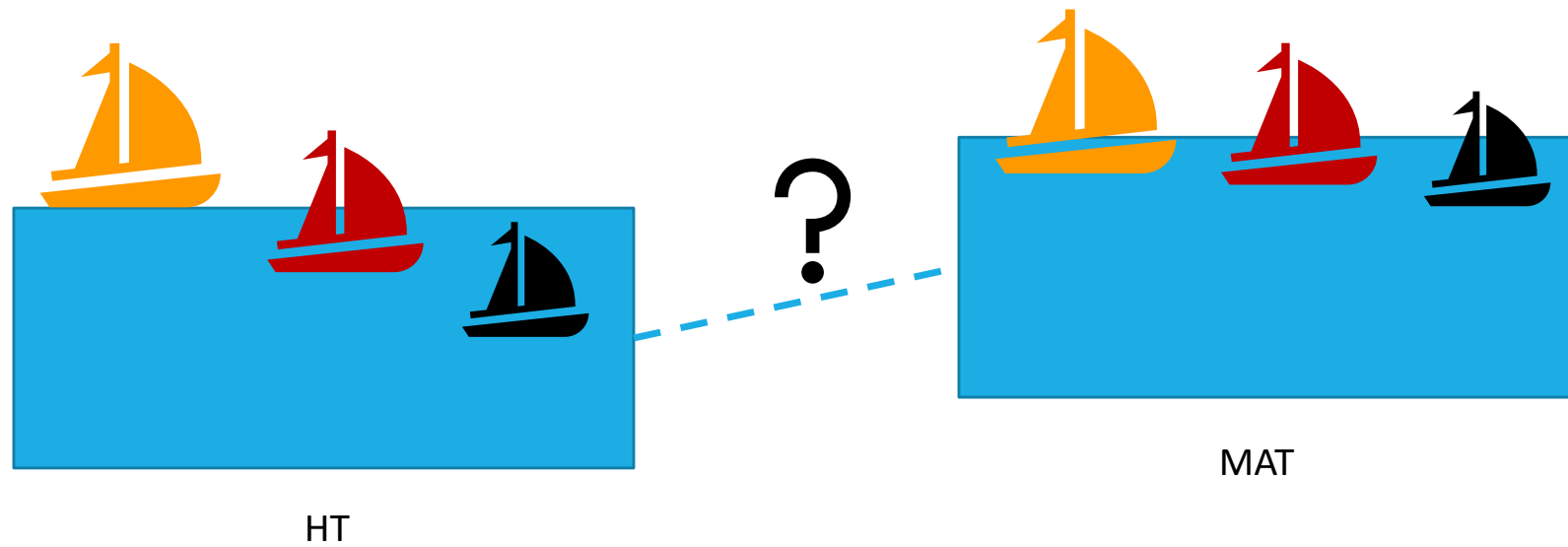


Discussion 1

- Does the human who produces the best translation without MT also produce the best translation with the assistance of MT?
- Are translation and post-editing completely different skills?
- Is “human + machine” always better than machine alone in terms of quality?



Discussion 2



Limitations

- Small sample size
 - Uncontrolled before-and-after study
 - No personal or professional information collected
- Lack of empirical data to confirm the difficulty levels of the two passages
- Only one evaluation criterion: quality score under the ATA grading framework
 - Time, productivity, or cost not measured

Acknowledgement

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