

Multimodal cognitive processing in audiovisual translation

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Content



1. Multimodality in audiovisual translation

2. Cognitive theories on information processing

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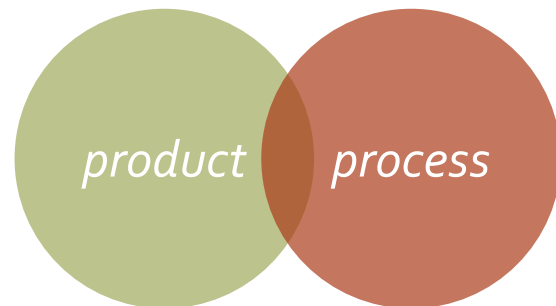
4. Theoretical and practical implications

Introduction

*Translation
research turns to
empirical methods.*



*It is yet unknown as
to how
multimodality shapes
the cognitive process
of AVT.*



*Multimodal input is a
unique feature of AVT.*



1. Multimodality in AVT



Intersemiotic
translation
Jakobson (1959)

Film
translation
• Reiss (1981),
Snell-Hornby
(1988)

New
translation
taxonomy
• Chaume (1997),
Zabalbeascoa
(2008), Gottlieb
(2005)

Classification of
non-verbal signs
• Paralanguage, kinesics,
proxemics, cultural
signs etc. (Chaume
1997)
• Sound effects (Perego
2009)
• Rhythms, subtitle
display (金海娜 & 邵海静
, 2015; 麻争旗, 2011)

1. Multimodality in AVT

Written text ↔ images

Semiotic
cohesion

Speech ↔ gesture

(Diaz-Cintas & Remael 2014)

2. Cognitive theories on information processing

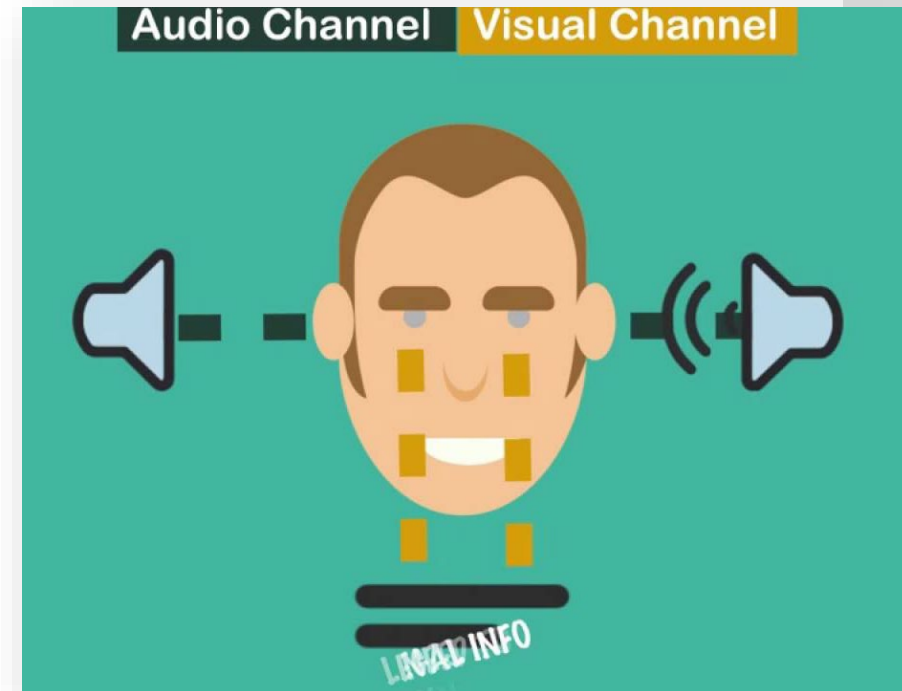
Redundancy effect theory

“ The capacity of working memory is limited. ”

(Miller 1956, Baddeley & Hitch 1974)

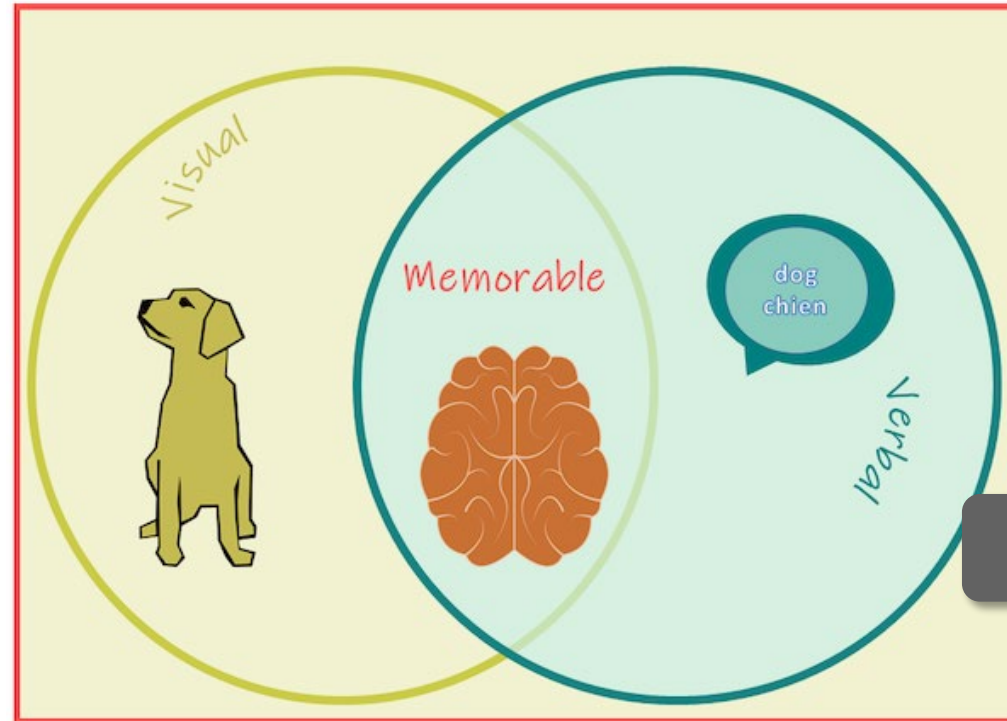
“ Additional cognitive load
due to redundancy ”

(Kalyuga et al. 1999)



2. Cognitive theories on information processing

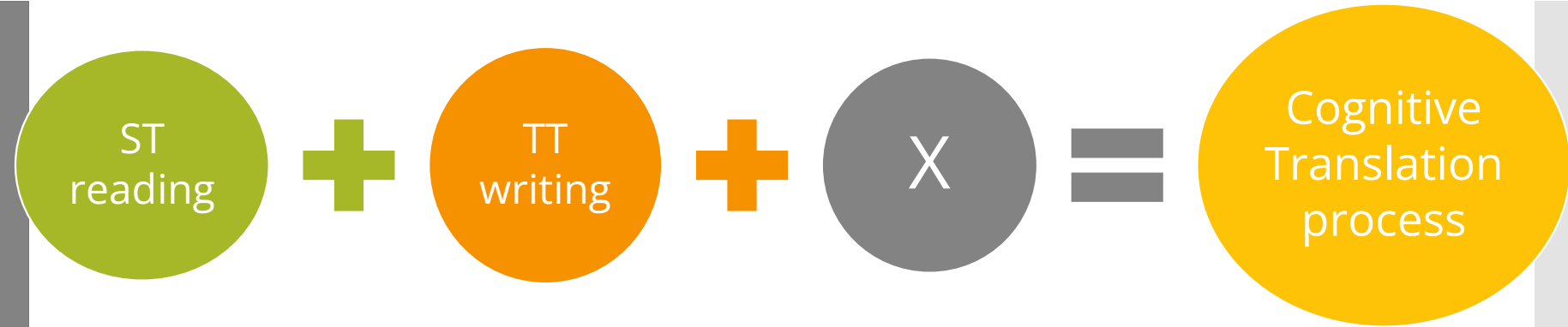
Dual coding theory



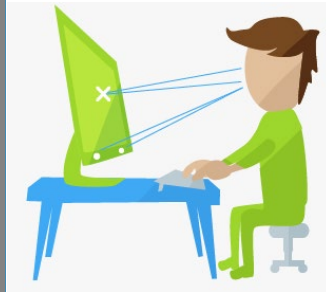
Additivity effect

Picture superiority effect

3. Translation research method



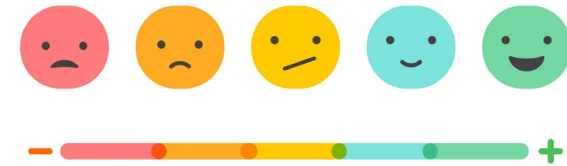
(Gile 2009, Schaeffer & Carl 2013)



Eye-tracking

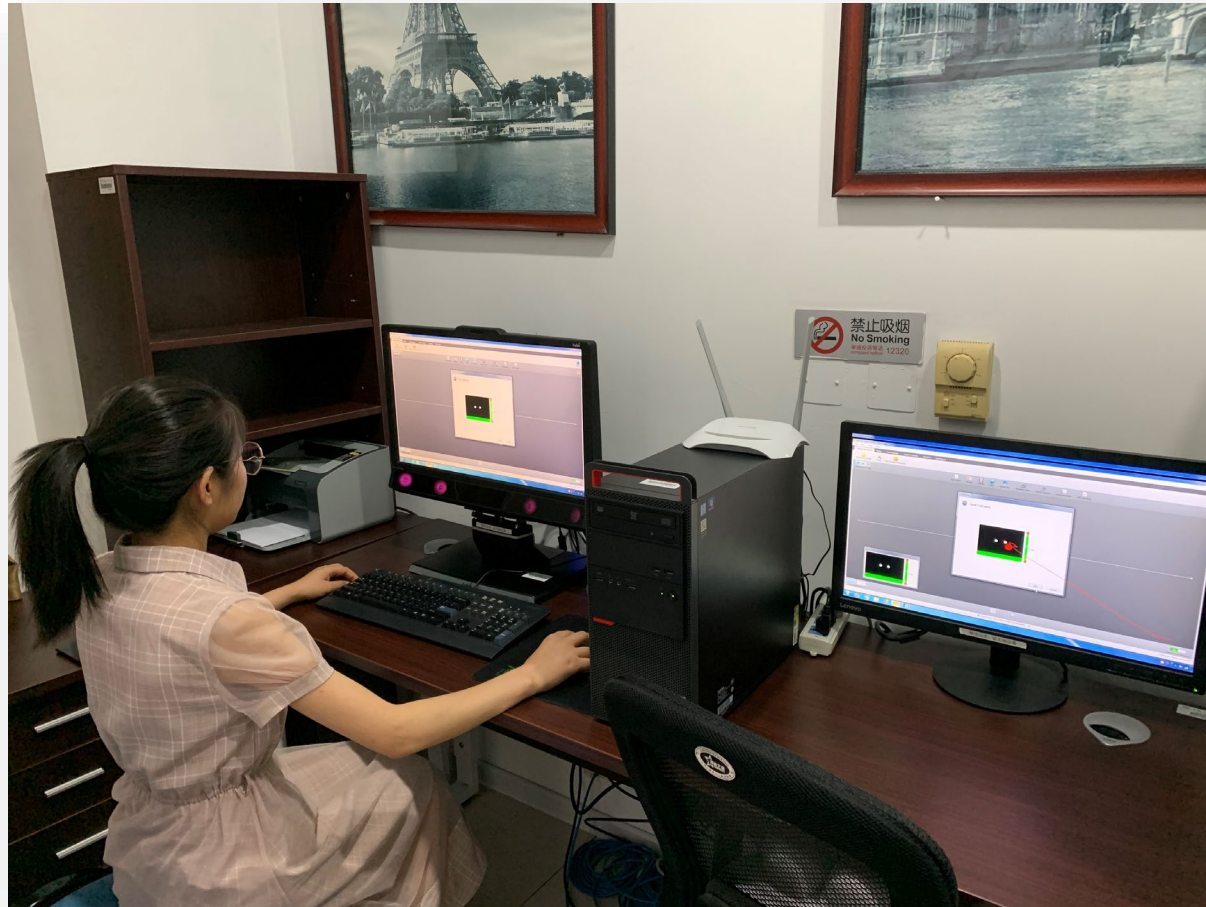


Keystroke-logging



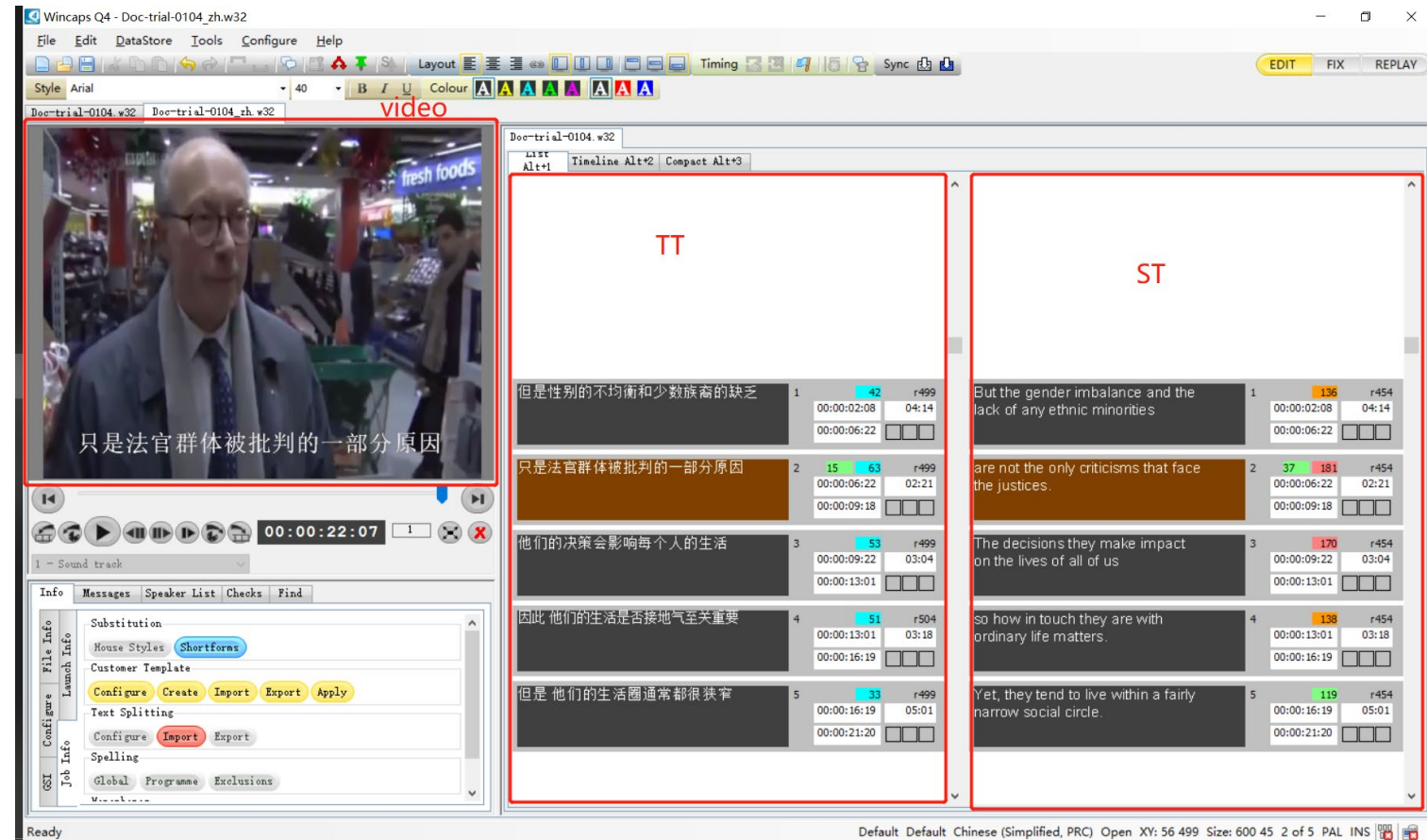
Retrospection

3. Translation research method



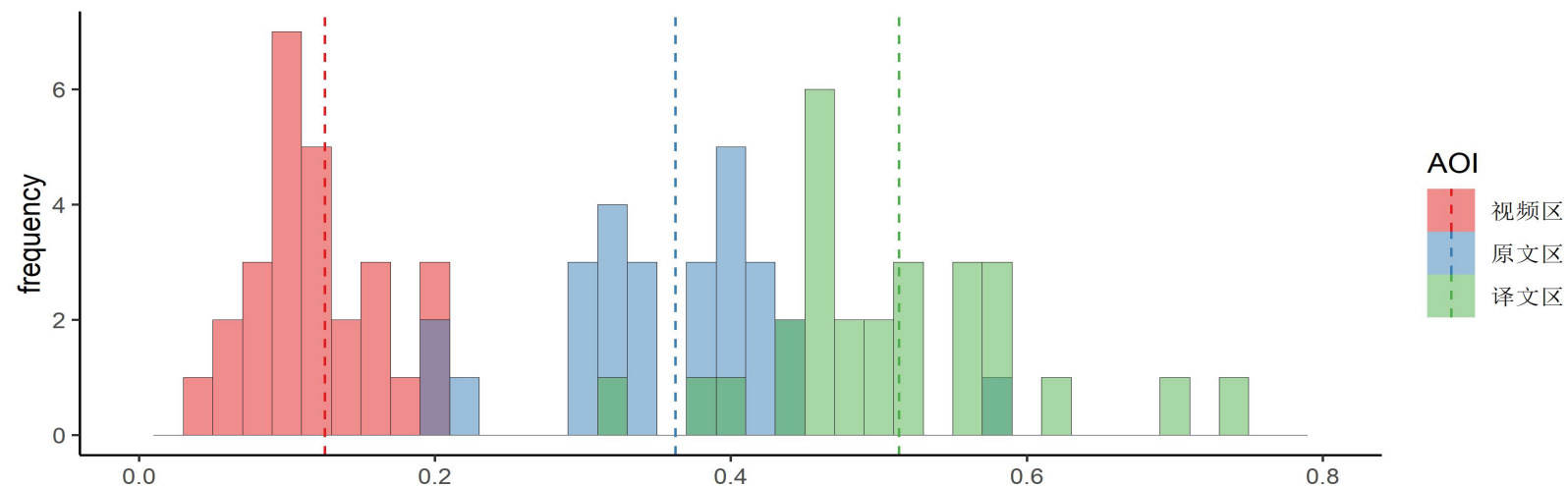
Eye-tracking lab: Tobii TX300

3. Translation research method

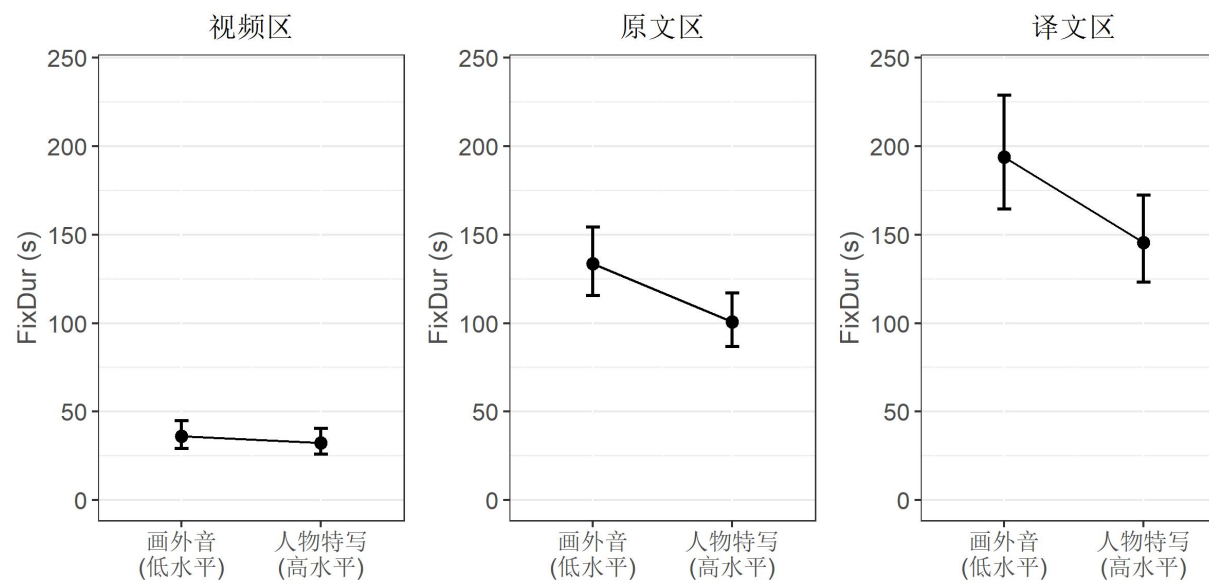


Screenshot of Subtitling software

3. Translation research method

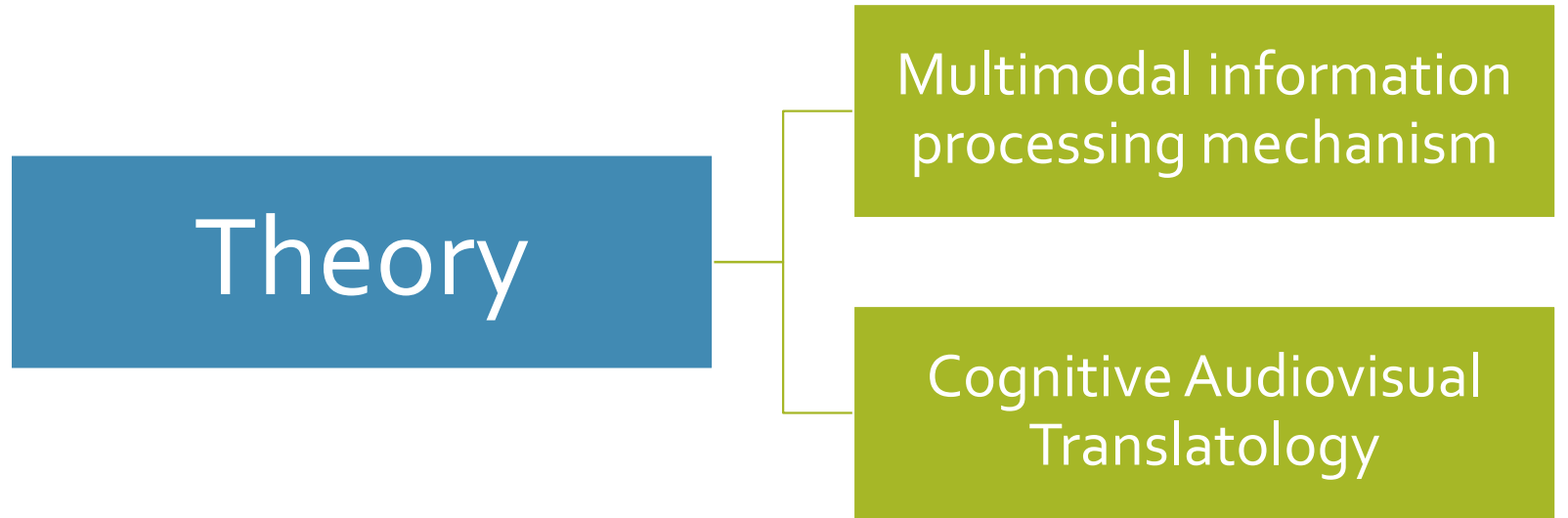


Result of attention distribution



Difference of fixation duration caused by
the amount of nonverbal information

4. Theoretical and practical implications



4. Theoretical and practical implications

Practice

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graph LR; Practice[Practice] --> Identify[Identify source text difficulty]; Practice --> Optimize[Optimize workflow]; Identify --> Training[translation training]; Identify --> Research[empirical translation research]; Identify --> Accreditation[translator accreditation]; Optimize --> Human[human translation]; Optimize --> CATT[computer-assisted translation practices];
```

Identify source text
difficulty

translation training

empirical translation
research

translator
accreditation

Optimize workflow

human translation

computer-assisted
translation practices

Summary

Role of
multimodality in
AVT process

remains largely
unexplored.

Translation process
research (TPR)
methods

can be well used
to investigate the
cognitive process
of AVT.

Understanding the
cognitive process of
human translation

helps to differentiate
source text difficulty
and optimize the
translation workflow.

References

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Thanks