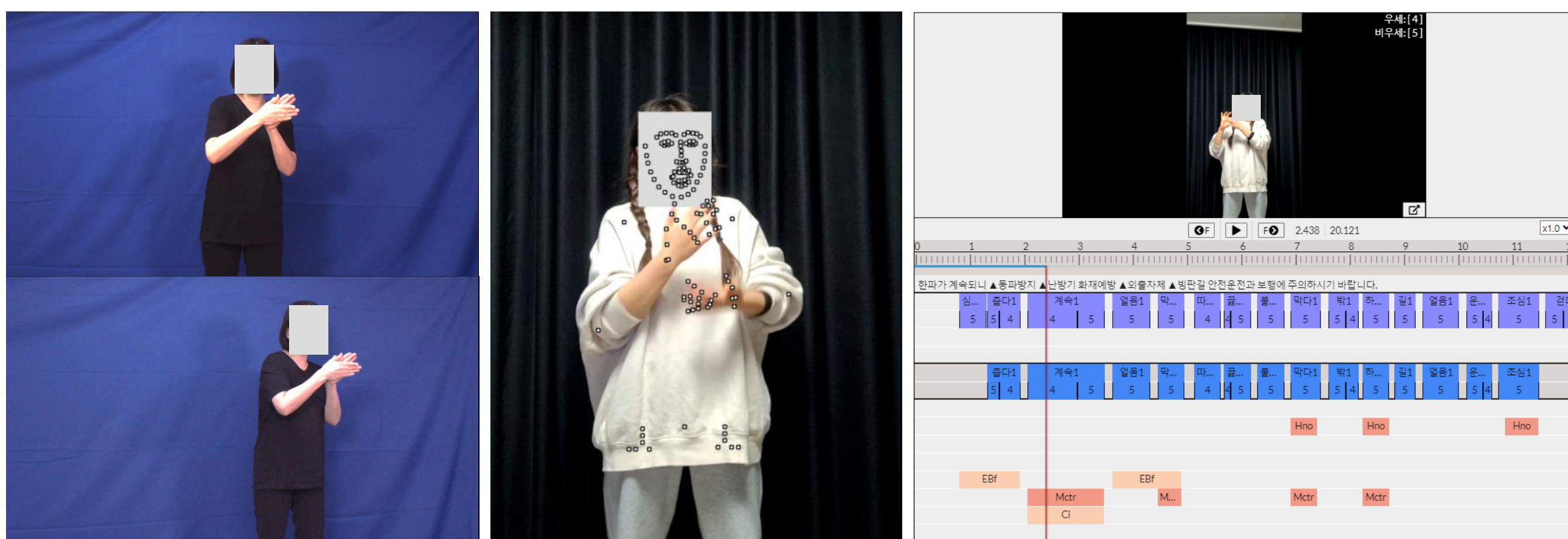




NIASL2021: Korean and Korean Sign Language Dataset

- **Topic:** government alert messages and weather reports
- Scheduled for release in Q4 of 2022



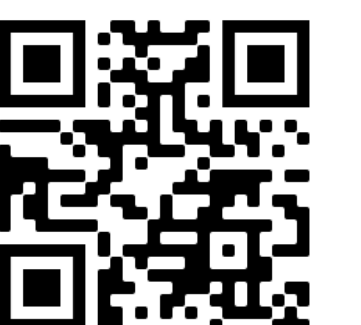
Multi-View Videos

Keypoint Estimation

Hand-Specific Annotations

	Studio	Crowd	Total
Data instances	127,624	73,402	201,026
Unique Korean sentences	75,727	73,280	148,984
Korean mean length (char)	60.5	47.0	55.6
Front view footage (h)	582.9	301.5	884.4
Total footage (h)	2028.3	301.5	2329.8
KSL video average length (s)	16.2	14.8	16.0
Pose Data	3D	2D	

Dataset Guide
(Coming Soon)



Post-Mortem Analysis

Motivation:

- How effective was our **elicitation method**?
- How can we improve **translation quality** in the future?
- What translation **correction** steps can we use in the future?

Translation Elicitation and Correction Methods

1. **NIA+VID**
NIA text-based elicitation (identical to NIASL2021) + VID text-free correction
2. **IMG+TXT**
IMG image-based elicitation + TXT text-aware correction

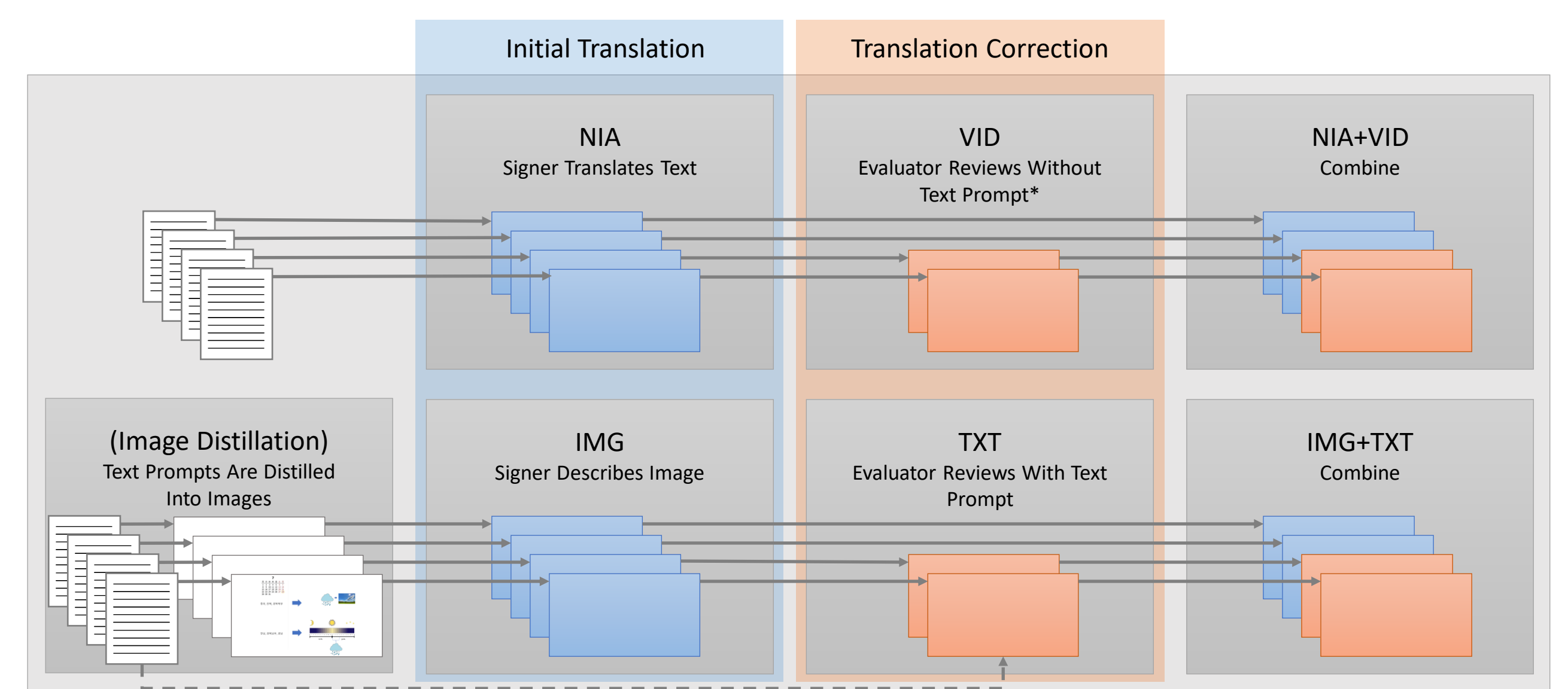
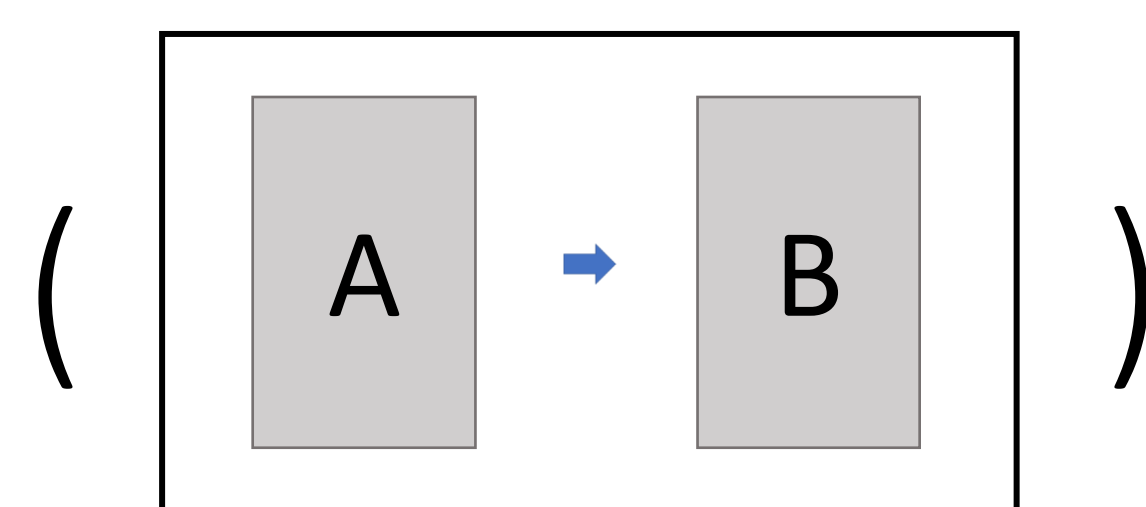
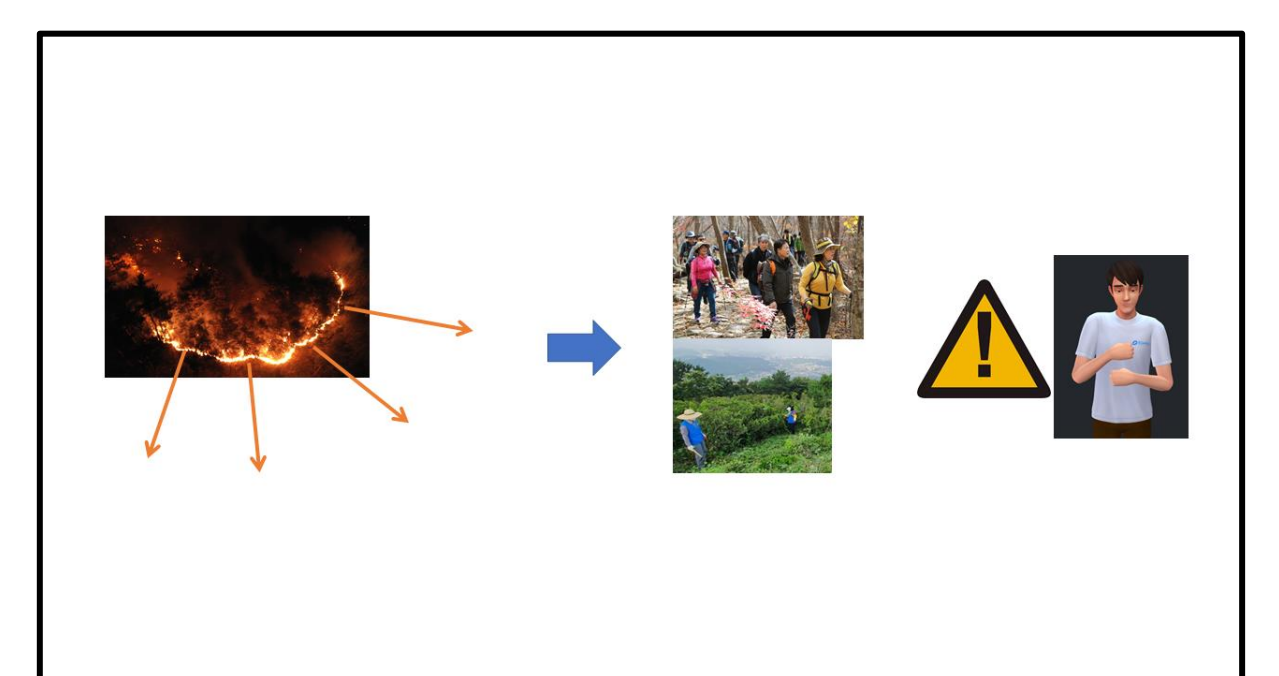


Image Distillation

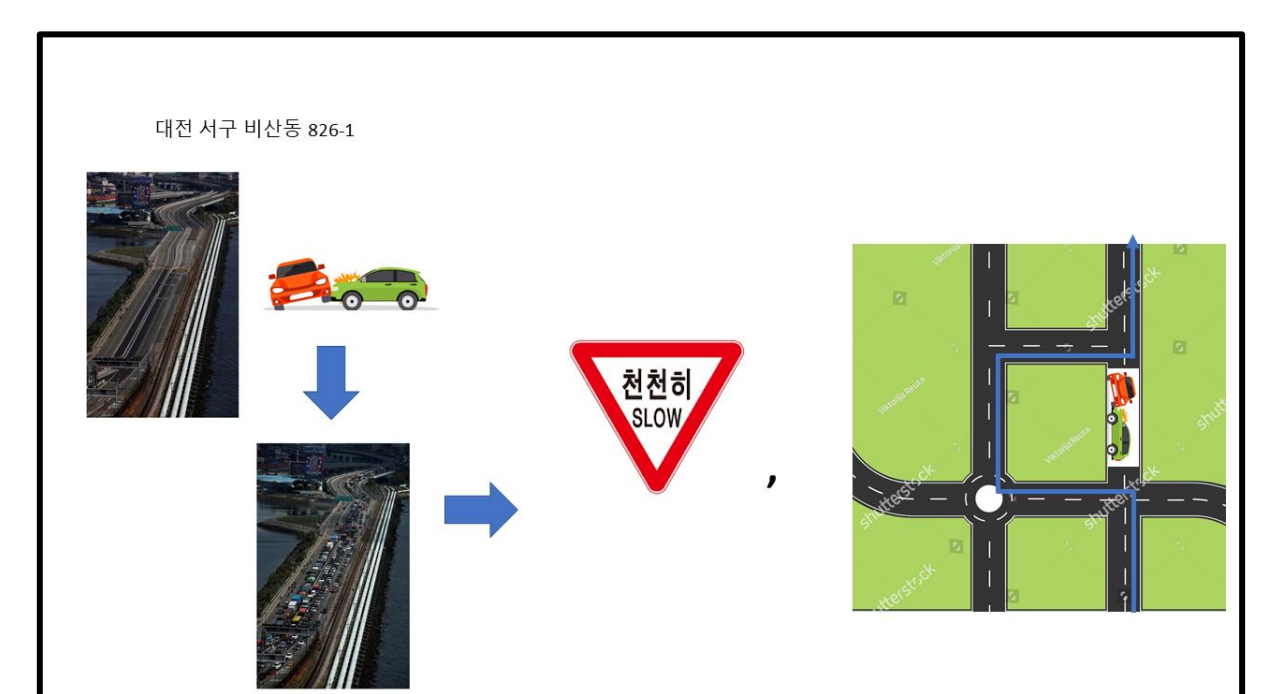
General format: situation A therefore do B



EX: "Wildfires are spreading quickly. Residents and hikers should be careful as wildfires are high risk areas."

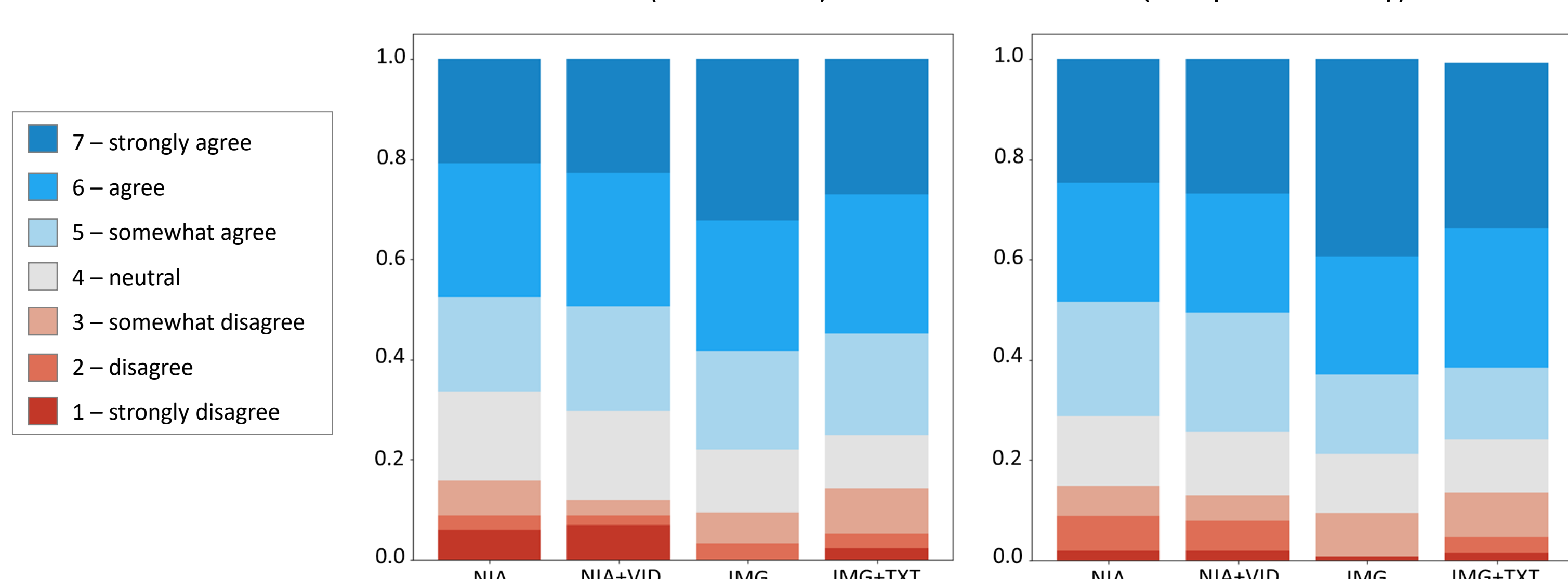


EX: "Due to an accident on the highway at 826-1 Bisan-dong, Seo-gu, Daejeon, there is significant congestion. Please drive slowly and take the marked detour."

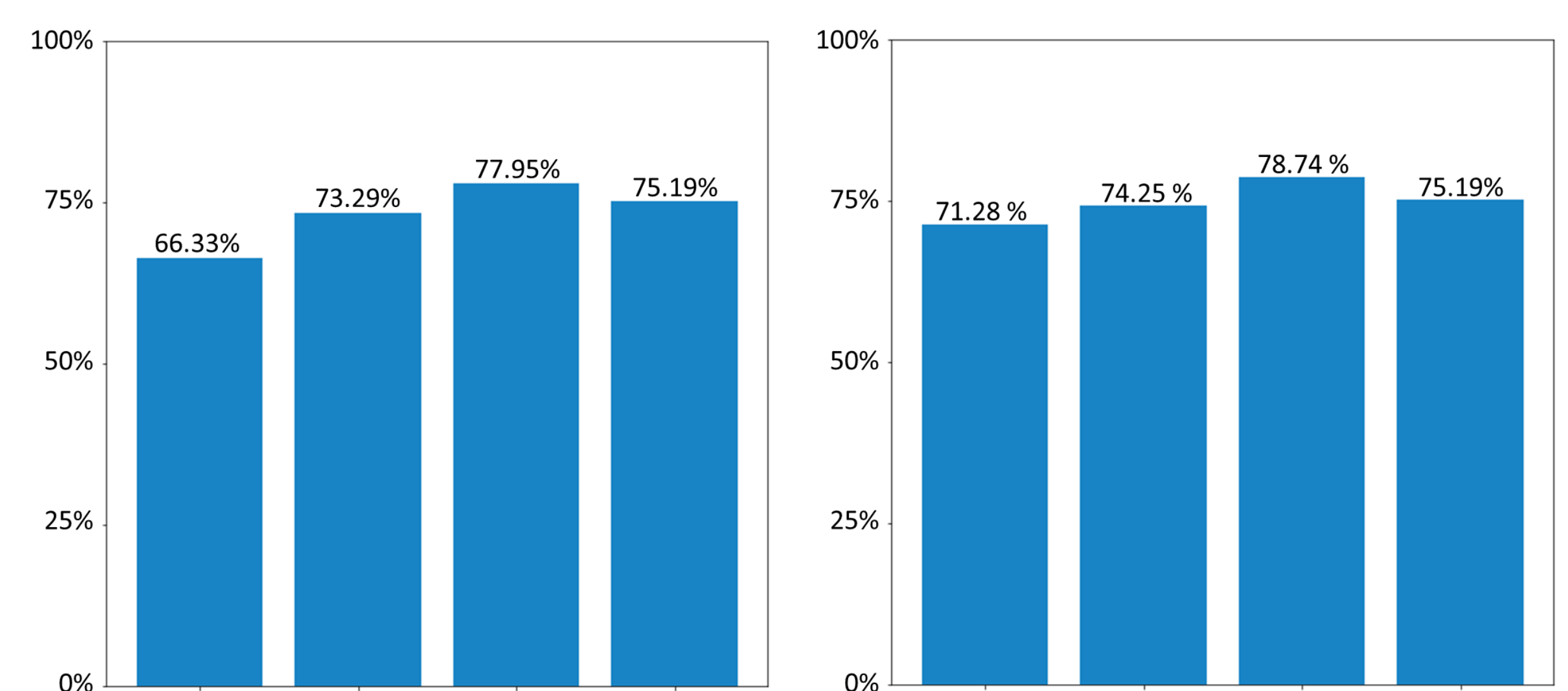


Evaluation Results

Likert Scores Per Elicitation Method (Naturalness) (Comprehensibility)



Likert Agreement (strongly agree + agree + somewhat agree) (Naturalness) (Comprehensibility)



Conclusion:

- **Image-based translations** are the most **natural and understandable**
- Image-based translations with text-based corrections are better than text-based translations with text-free corrections