

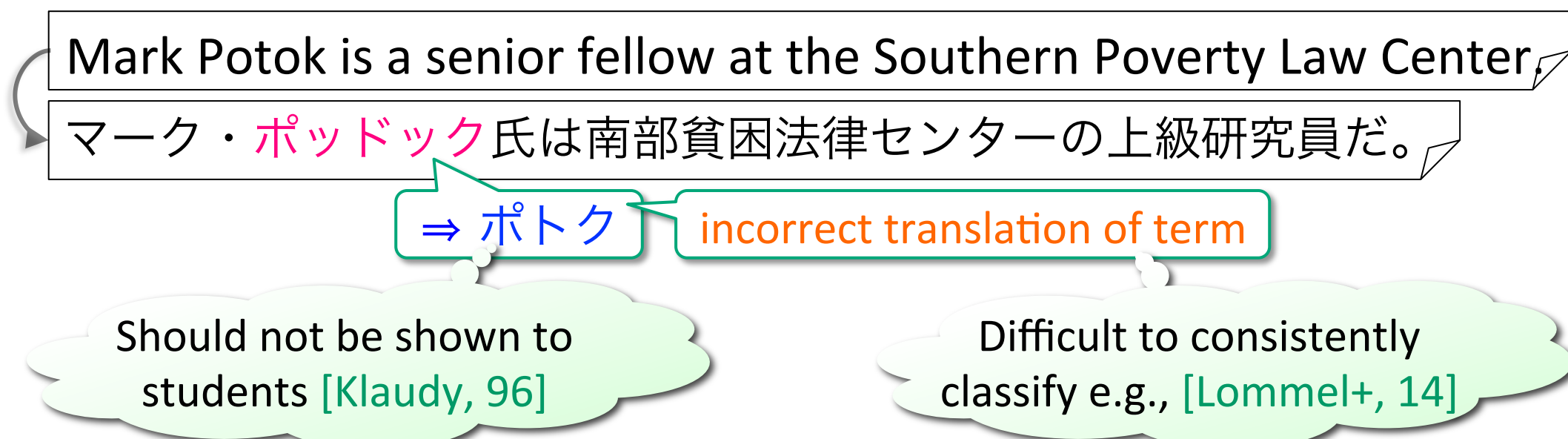
Consistent Classification of Translation Revisions: A Case Study of English-Japanese Student Translations

*Atsushi Fujita (NICT) Kikuko Tanabe (Kobe College) Chiho Toyoshima (Kansai Gaidai Univ.)
Mayuka Yamamoto (Honyaku Center Inc.) Kyo Kageura (U. of Tokyo) Anthony Hartley (Rikkyo U.)

1. Quality Assessment of Student Translations

Step 1. Identify **erroneous or deficient text spans** and suggest a **revision proposal** for reasoning

Step 2. Classify each issue into an **abstract issue type**



2. Development of an Issue Classification Scheme

Our objective

- **High consistency** to guarantee better learning performance
- **Wide applicability** for translation studies from various aspects
 - Radically different language pairs, e.g., English & Japanese
 - Different levels of learners: undergrad. vs. graduate students

Iterative refinement of the MNT-TT typology [Babych+, 12] using the OntoNotes method [Hovy+, 06]

- Step 1.** Annotate issues in the given 3 SD/TD pairs
- Step 2.** Terminate the iteration if the agreement ratio $\geq 90\%$
- Step 3.** Discuss the factor of consistent decision making
- Step 4.** Update the issue typology & decision tree

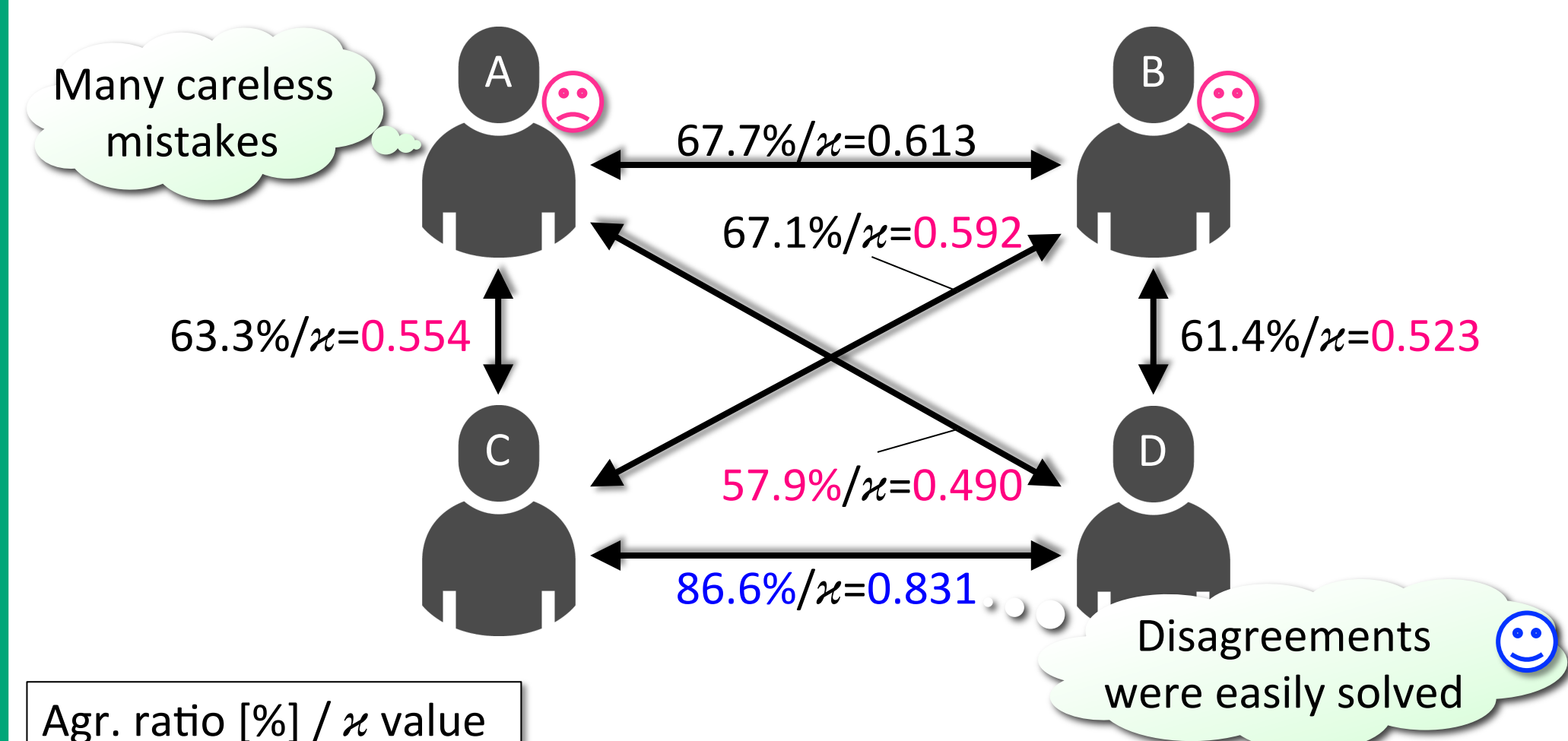
3. Notably High Inter-assessor Agreement

Using our carefully designed scheme

Given faithful & careful annotation

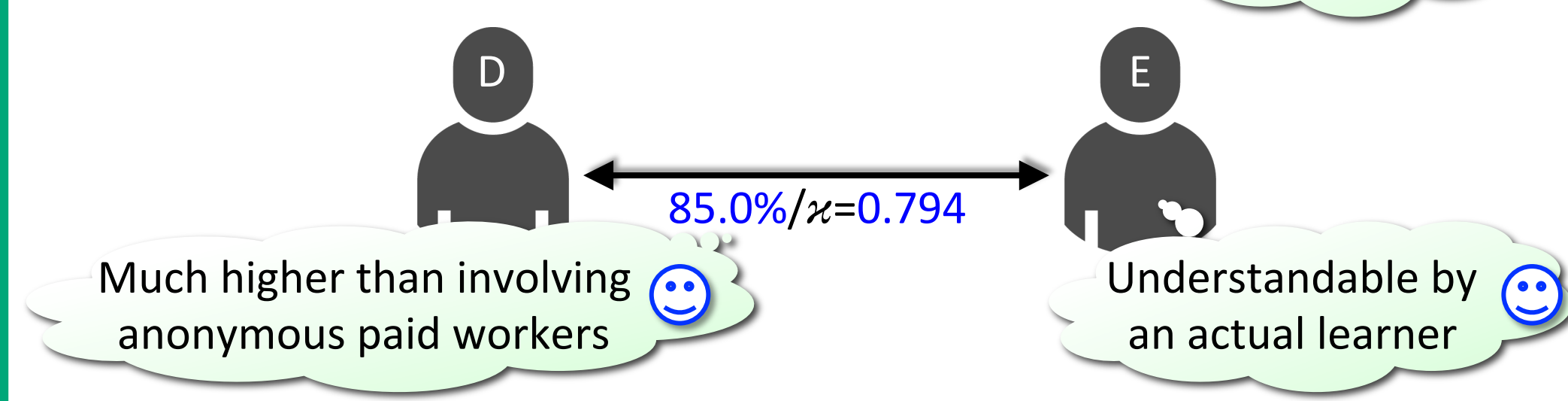
Validation 1: classification of 575 issues in 17 TDs

- A, B: anonymous paid workers (professional translators)
- C, D: identified assessors (two of the authors)



Validation 2: assessment of 10 TDs from scratch

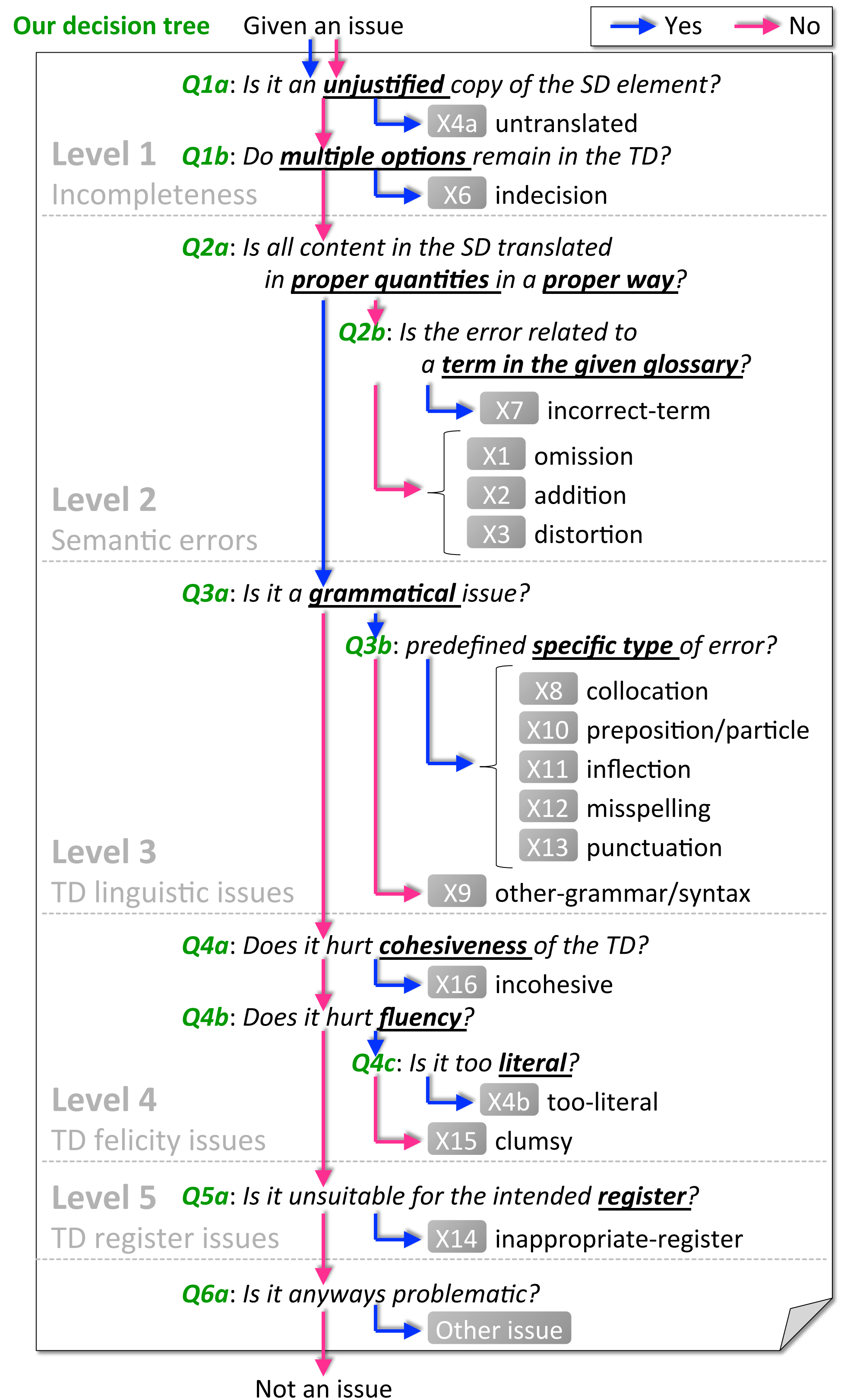
- D: same as in validation 1 → 561 issues
- E: undergraduate learner translator → 406 issues
- 340 identical text spans with similar revision proposals



Summary of this work

- Quality assessment of human-produced translations
- Development of **issue typology** & **decision tree**
 - For assessing English-Japanese student translations
 - Using the OntoNotes method
- **High consistency** of issue classification
- Installation into a **translation exercise course in a university**

Our decision tree



4. Application to a Translation Course at a University

- As a means of feedback for assignments
- Useful for finding clusters & monitoring their learning patterns

