

phloat: Integrated Writing Environment for ESL learners

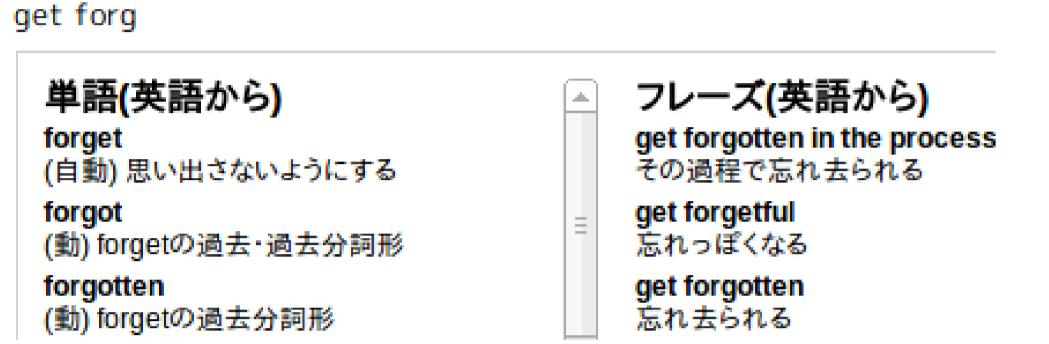
* Yuta Hayashibe, #Masato Hagiwara, # Satoshi Sekine

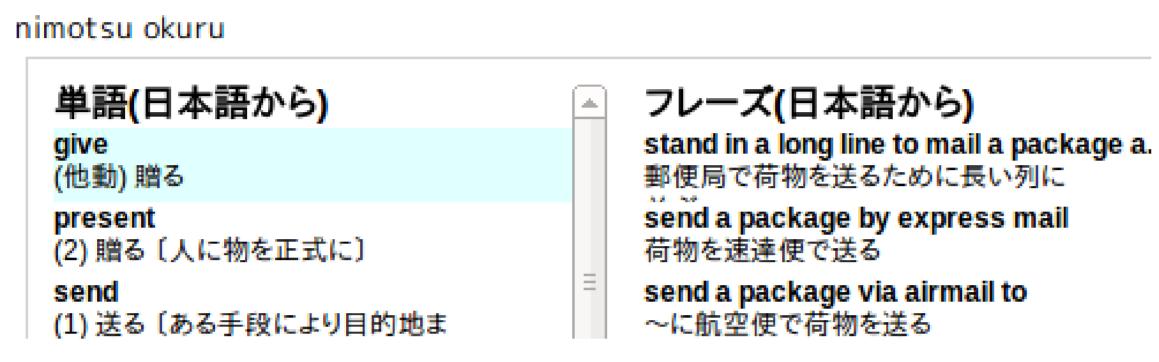
Nara Institute of Science and Technology # Rakuten Institute of Technology, New York

Overview

Phrase Suggestion

Phrases can be searched from both English or Romanized Japanese, by keyword(s).





Slot Suggestion

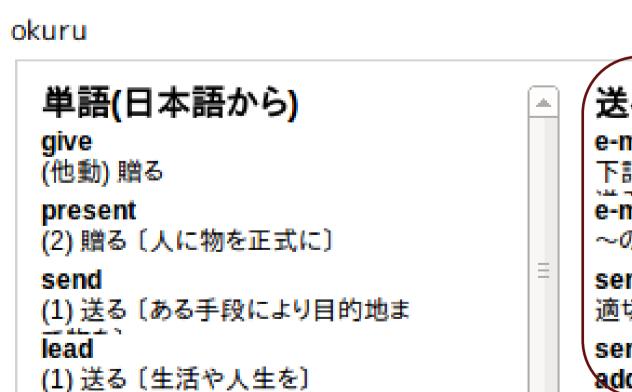
After the user chooses one of the candidate phrases, the system subsequently suggests candidates to fill in the slots of the phrase. These slot candidates are generated from the context of the suggested English phrase and its Japanese translation. This enables users to complete a long expression just by choosing a phrase and filling out the blanks in it.

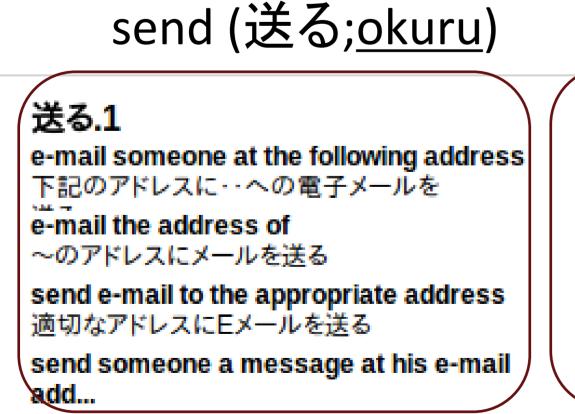


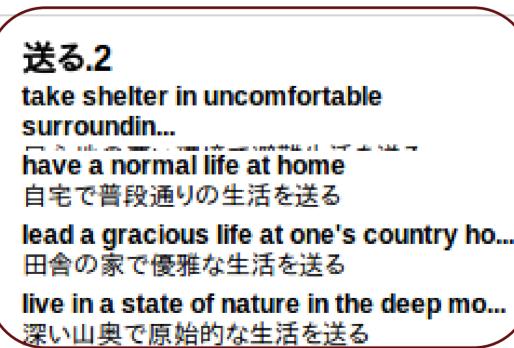
Semantic Clustering

Allowance of L1-based input in Romanized scripts results in a large number of phrase candidates which (probably partially) contain the L1 query,

many of which belong to different semantic clusters. To make easy to select a candidate, the system suggests candidates with semantic groups, arranged it in multiple columns.







live (送る;okuru)

贈る.1 send one's loved one flowers 好きな人に花を贈る give someone a birthday pres ・・に誕生日プレゼントを贈る shower presents on ・・にたくさんのプレゼントを贈る shower presents on ・・にプレゼントをたくさん贈る

present (贈る;<u>okuru)</u>

Related Work

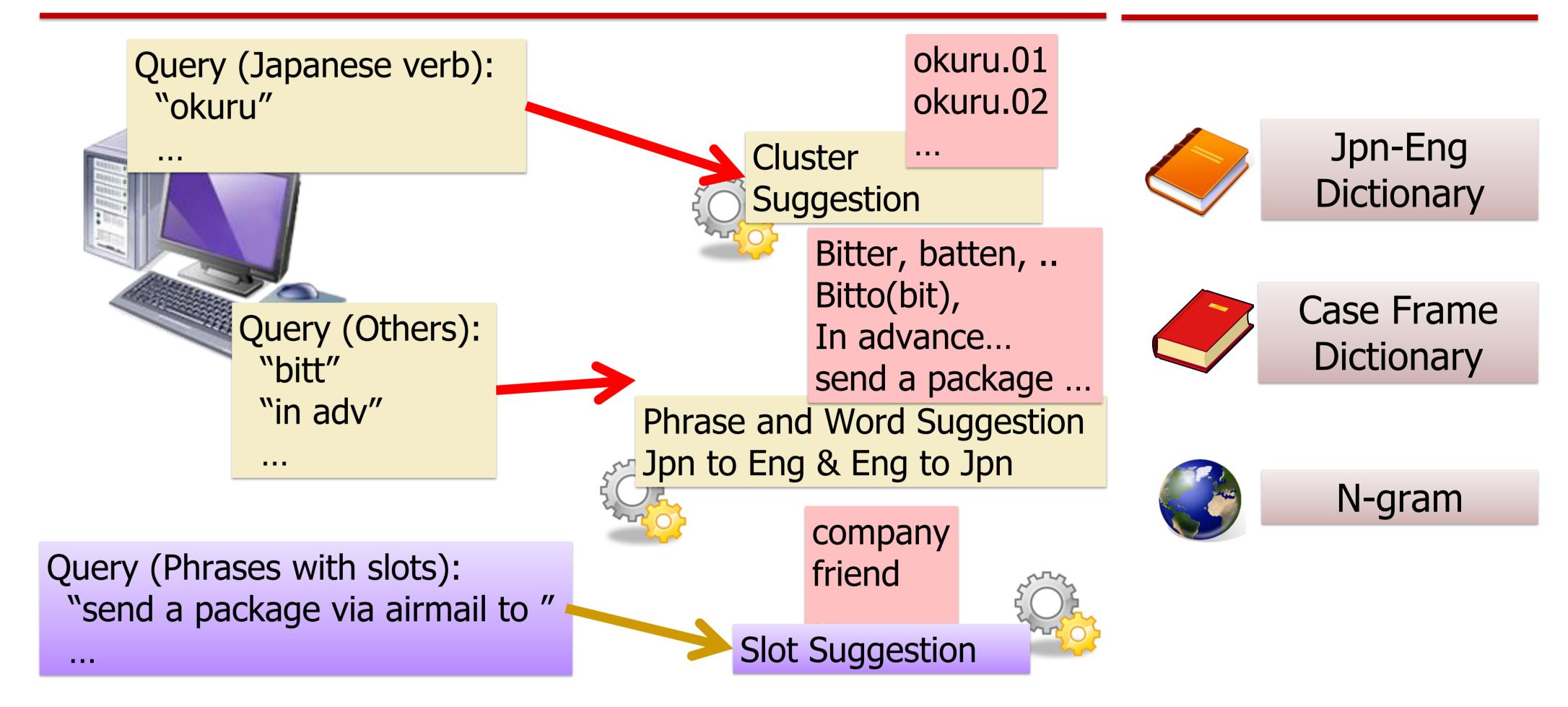
- Translation Word Processor [Muraki+94@COLING]
- PENS [Liu+00@ACL]
- FLOW [Chen+12@ACLDemo]

TransAhead [Huang 12@EACL]

• AceWiki [Kuhn+ 08@ALTA]

Implementation

Overview Resources



Evaluation

- 10 Japanese ESL learners
- 3 tasks (Fill in a blank in an E-mail, Picture description, translation)
- Scored by "fluency," "adequacy," and "time"
- Obtained no statistical significance for the objective measures

Positive Examples

- Spotted, tabby (ぶち; buchi)
- Change the time of meeting to X o'clock
- Wasteful expenses/spendings by the government
- Comply with the advice

Negative Examples

- ✓ She accused him of having broken his word.
- × She <u>pilloried him</u> to break faith with her.
- × She <u>berate him</u> to break faith with her. rare expressions to describe the original intention searched by "semeru" (accuse)

Future work

- Flexible Match
- Smarter Suggestion using Contexts
- Fine Grained Selection
- Better Ranking Algorithm

Second Workshop on Advances in Text Input Methods (WTIM 2) 15th December 2012, Mumbai, India