

■ PROFILING LEARNER FINNISH AND ESTONIAN: INTERACTION OF FREQUENCY AND ACCURACY AS AN INDICATOR OF LANGUAGE SKILLS

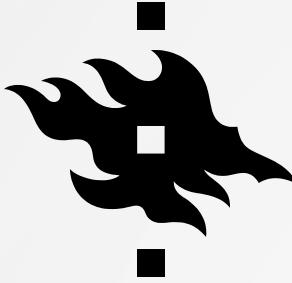
Workshop on Profiling second language vocabulary and grammar

Gothenburg, 20-21 April 2023

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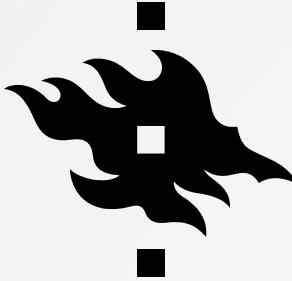
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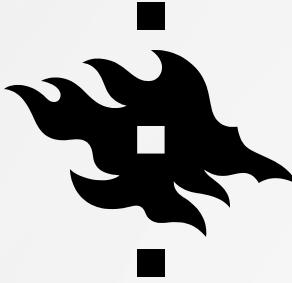
OUTLINE

- Aim of the presentation
- Background: SLATE-network and related projects
- Language resources
- Approach and methodology: CAF and DEMfad
- Research on interaction of frequency and accuracy in learner Finnish and Estonian
- Conclusions and further perspectives



AIM OF THE PRESENTATION

- To introduce some resources of written learner Finnish and Estonian aligned with language proficiency levels of the Common European Framework of Reference for Languages (CEFR)
- To exemplify, how these resources can be applied to the research on language proficiency development, in particular in terms of accuracy and frequency



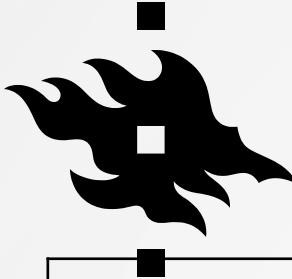
SECOND LANGUAGE ACQUISITION AND TESTING IN EUROPE (2009-)

- SLATE-network
 - The first attempt to integrate SLA and language testing research perspectives
 - Included projects of 12 European universities, involving a number of languages: Dutch, English, Finnish, Estonian, French, German, Italian, Norwegian and Swedish.
 - The main research question : “Which linguistic features of learner performance are typical at each of the six CEFR levels?”
 - Comparability of findings: common research design, tasks, procedures, and analyses



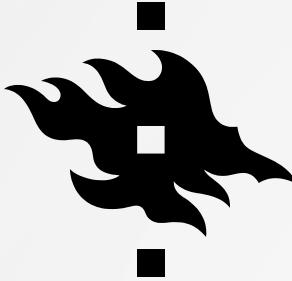
RELATED PROJECTS

- CEFLING (<http://www.jyu.fi/cefling>): Linguistic Basis of the Common European Framework for L2 English and L2 Finnish (University of Jyväskylä, 2007-2009)
- Topling - Paths in Second Language Acquisition (University of Jyväskylä, 2010-2013)
<https://www.jyu.fi/hytk/fi/laitokset/kivi/tutkimus/hankkeet/paattyneet-tutkimushankkeet/topling/en>
- *Symmetry of the cross-linguistic influence in the acquisition of closely related languages* (Jyväskylä University and Tallinn University, 2010-2013)
- *Cross-linguistic influence and second language acquisition: corpus-based research* (Tallinn University, 2010-2013)
- *Corpus study on language-specific and universal features in learner language* (Universities of Oulu, Umeå and Tallinn, 2006-2013)
- *Learner Estonian* (Tallinn University, 2015–2018)



LANGUAGE RESOURCES

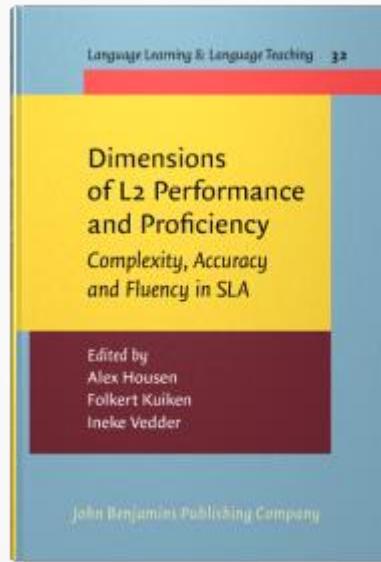
| | ICLFI https://www.kielipankki.fi/corpora/ | AFLC (LAS2) https://www.kielipankki.fi/corpora/ | Cefling | Topling https://www.kielipankki.fi/corpora/ | EIC (EVKK) total https://evkk.tlu.ee/ | EIC (EVKK) ELPE (REKK) |
|--------------------------|---|---|----------------|---|--|-------------------------------|
| Tokens | 920 000 | 657 000 | 806 000 | 101 000 | 3 000 000 | 46407 |
| Proficiency level | A1-C2 | B2-C2 | A1-C2 | A1-C2 | A1-C2 | B1-B2 |
| L2/FL | FF (22 L1s) | F2 | F2 | F2 | E2/EF (21 Ls) | E2 |
| Longitudinality | (yes) | yes | no | yes | (yes) | no |
| Reference corpus | no | yes | yes | yes | yes | no |



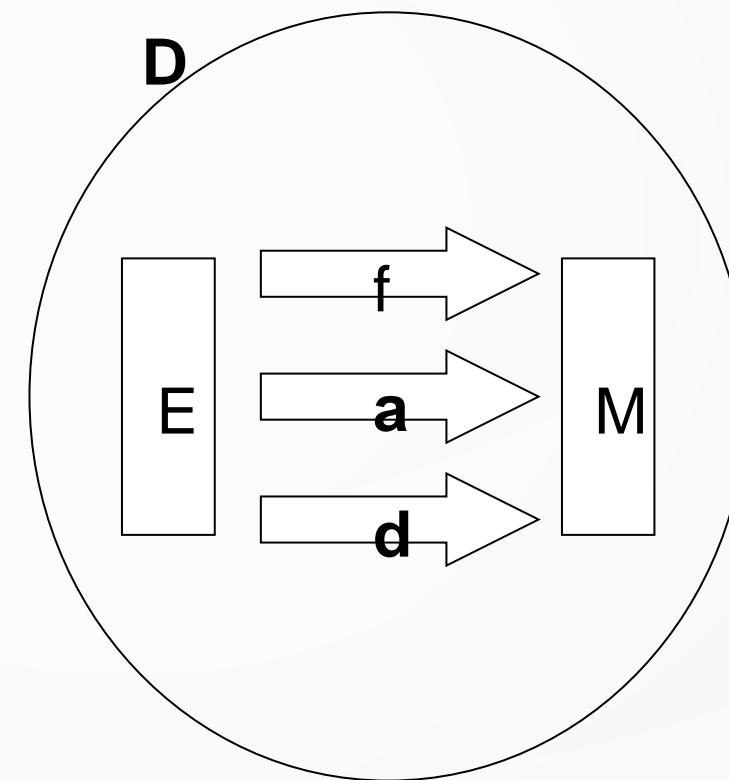
CAF-TRIAD AND DEMFAD

CAF-triad (Housen et al 2012)

*complexity
accuracy
fluency*



(Franceschina, F. et al 2006)



D = Domain

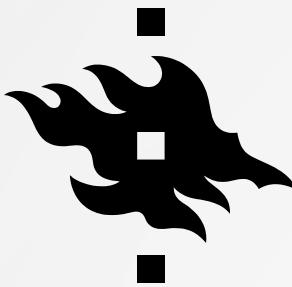
E = Emergence

M = Mastery

f = frequency

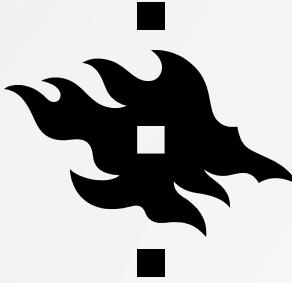
a = accuracy

d = distribution



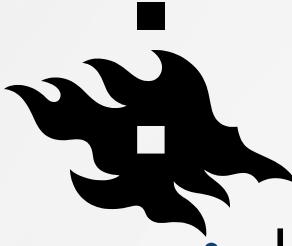
SOME EXAMPLES ON INTERACTION OF FREQUENCY AND ACCURACY

| | | A1–A2 | A2–B1 | B1–B2 | B2–C1 | C1–C2 |
|---|-----------|-------|-------|-------|-------|-------|
| Existential clauses (F) (Kajander 2013) | Frequency | < | = | = | > | > |
| | Accuracy | = | < | < | = | < |
| Passive clauses (F) (Seilonen 2013) | Frequency | = | < | < | << | = |
| | Accuracy | < | > | < | < | = |
| Local cases (Spat-T0, F) (Mustonen 2015) | Frequency | >> | > | = | = | >> |
| | Accuracy | << | << | < | = | = |
| Conditional mode (E) (Kitsnik 2015) | Frequency | | | >> | | |
| | Accuracy | | | < | | |



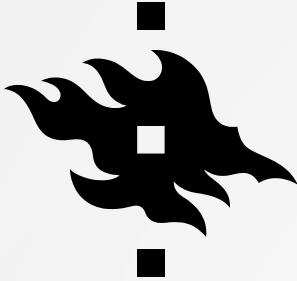
CONCLUSIONS

- Most often, accuracy increases from one CEFR level to another.
- In general, errors increase from A2 to B1 and decrease from B1 to B2
- Errors can also decrease from A2 to B1 and then increase to B2.
- An increase of use often precedes an improvement in accuracy at the next CEFR level.
- Common constructions peak earlier both in use and accuracy than the less obligatory ones



FURTHER PERSPECTIVES

- • Low accuracy in rarer constructions can function as indicator of high-level language skills (Siitonen & Martin 2012)
- Fluency in writing (Gaitšenja 2019)
 - Keystroke logging software ScriptLog (the newer version graph theory-based GGXLog)
 - keeps a record of all events on the keyboard
 - pause locations and durations can be extracted
 - P-burst = production of text between two pauses
 - Results
 - At A2 level, text production was the most limited of all levels
 - At B2 level increased accuracy is combined with decreased fluency, i.e. increase of corrections, deletion, additions.
 - Text production is the most fluent at C1 level.

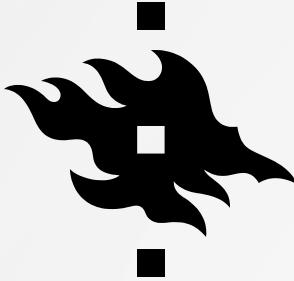


WRITING PROCESS

- <21.314>
- päästään<BACKSPACE8>stään
- <8.156>
- sinne minne ne <BACKSPACE22>

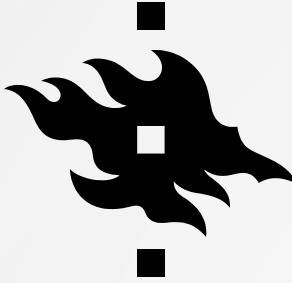
annettu, ja eivätkä tarvisi muuttaa tuhansia kilometrejä kotiseudujta pois |

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