

CENTER FOR ADVANCED STUDY OF LANGUAGE

#### Leveraging multilingual expertise: Improving LCTL learning outcomes through language cross-training

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#### Overview of talk

- Four complementary approaches:
  - 1. "Gateway" languages
  - 2. Psycholinguistic & cognitive factors
  - 3. Instructional methods
  - 4. Empowering learners

#### 1. Gateway languages

- Similarity enhances language learning
- Can we identify "gateway" language(s)?
- May allow faster ramp-up

   Leverage existing language expertise
   Identify points of ease/difficulty for learners



# Gateway Languages Database

- Functions:
  - o Search by country
  - o Search by language
  - o Compare two languages
- Features being codified include:
  - $\circ$  Demographics of region  $~\circ$  Word formation
  - Language relationships
     Word types
  - o Language features
  - o Script
  - o Sounds

- o Word order
- Speech levels (honorifics)
- o Resources



#### Gateway Languages Database: Potential applications

- Ramping up in response to a crisis
- Selecting learners
- Identifying a learner's optimal target language
- Identifying "trouble areas" for a learner given his/her language profile



#### 2. Psycholinguistic and cognitive factors

- Literature review: What is unique to *multi*lingualism? (Linck et al., in press)
- Main factors:
  - Relative proficiency (all known languages)
  - Age of exposure (all known languages)
  - o (Psycho)typological similarity
  - o Type of task
  - Cognitive control / executive functions



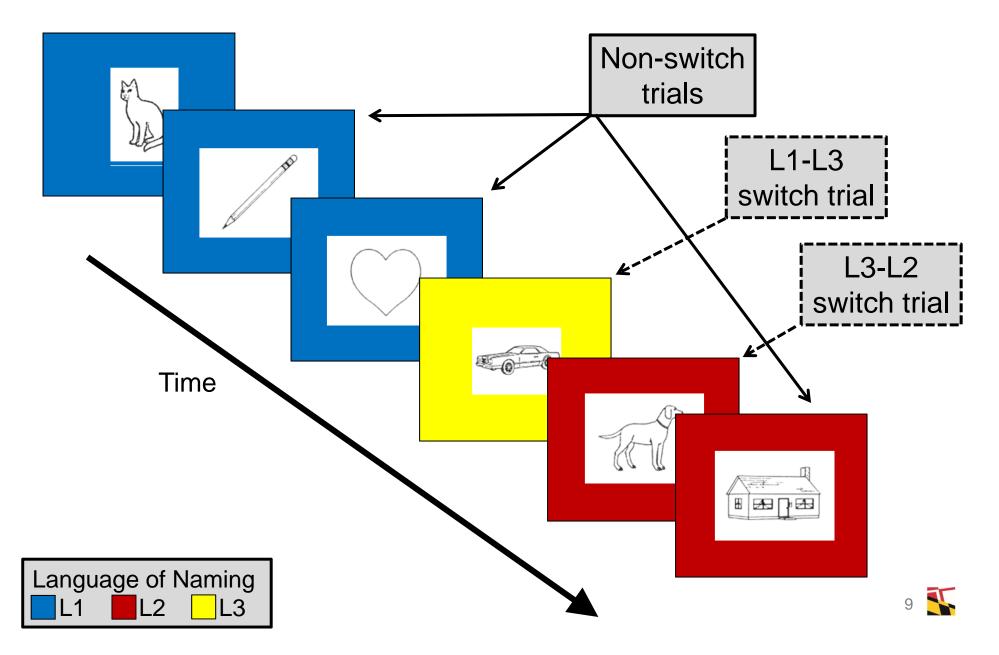
# Executive functions in multilingual language processing

Laboratory language-switching task

 Lexical access within mixed-language context
 "Language control"



#### Example switching task



# Switching study: Findings

• Executive functions related to language control

\*\*Engaging/disengaging the dominant L1

- Demands on language control change with L2 and L3 proficiency
- Phonological similarity effects across all three languages



#### 3. Instructional methods

- Limited literature on *cross-training* pedagogy
- Two empirical classroom studies
- Study 1 (glosses):
   Use of L1 vs. L2 glosses while reading in L3
- Study 2 (grammar):

 Inductive vs. deductive approaches to teaching L3 grammar



## Study 1 (glosses): Overview

- L1 English learners of Ukrainian with Russian proficiency (current n = 11)
- Target words in Ukrainian texts:
  - Non-cognates
  - o L2-L3 cognates
  - o L2-L3 "false friends"



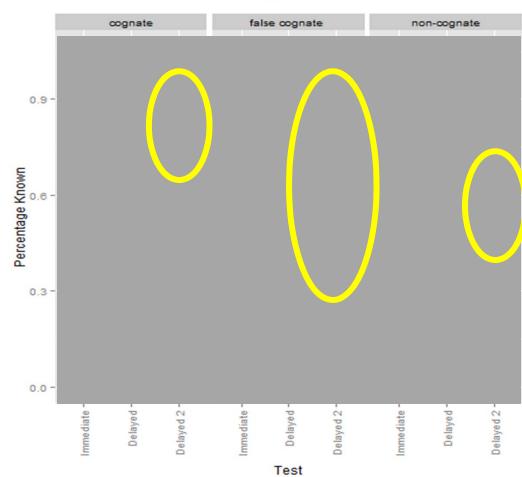
## Study 1 (glosses): Design

- Read Ukrainian texts
  - Text A with L1 glosses, Text B with L2 glosses (counterbalanced)
- Practice exercise 1: blanks in original text
- Immediate posttest
- Practice exercise 2: crossword puzzle
- Delayed posttest 1 (after 3 days)
- Delayed posttest 2 (after 4 weeks)



## Study 1 (glosses): Results





For cognates and noncognates: L1 glosses led to better learning and retention.

For L2-L3 false friends: *L2 glosses* led to better retention after one month



## Study 1 (glosses): Discussion

- Desirable difficulties

   Avoid "easy" overlap, except…
- ...when learning false friends, draw attention to cross-language conflict
- Implications for instruction



### 4. Empowering learners

- Issue: working with native speakers who are not trained in pedagogy/linguistics
   o.e.g., Immersion
- Taking a *procedural* focus (vs. content)
- Elicitation methods adopted from field linguistics and field anthropology



## Handbook for self-training

- Modular format: small, digestible chapters

   Foundational concepts (e.g., contrast)
   Foundational skills (e.g., recognizing pitch)
   Discovery techniques (e.g., using carrier sentences to elicit contrasts)
- Still in development



### Summary

Enhance multilingual learning by:

 Describing "Gateway" languages
 Identifying learner characteristics
 Developing/assessing instructional methods
 Empowering learners



Thank you! Questions?

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