INTRODUCTION: L2 Lexical Representations can be fuzzy...

- Confusable phonemic categories
- Ambiguous lexical representations
- Repetition priming in lexical decision (Faller et al., 2001; Darcy et al., 2012)
- False-alarm recognition of nonwords as words (Bosker & Cutler, 2008; Sebastian-Gallés et al., 2005)

...and yield asymmetric lexical access

- For confusable L2 contrasts, higher L1-L2 acoustic-phonetic similarity determines one L2 category as dominant (Cutler et al., 2006)
- Category dominance allows LRs to be separated, independently of categorization accuracy (Weber & Cutler, 2004; Cutler et al., 2006).

RESEARCH QUESTIONS:

1) Are L2 learners’ lexical representations fuzzy, even if they are able to represent lexical contrast?

- We examine the degree to which a novel contrast is merged or separated in learners’ lexical representations by looking at asymmetries in lexical decision patterns

2) Does lexical “fuzziness” result from lower categorization accuracy?

- We examine categorization with ABX

RESULTS: ABX categorization

- A classical ABX task to verify their ability to discriminate between geminates and non-geminates, and between front-rounded and back-rounded vowels.
- L2 Japanese and L2 German show high categorization ability on an ABX task.
- Tasks differ in processing demands (Japanese: 1 voice; German: 2 voices)

RESULTS: Lexical Decision

- Familiarity with the words tested was verified for all learners.

L2 Japanese

- Advanced Learners: Effect of Lexical Status
  - No effect of Sound: Interaction: F (1, 39) = 5.65, p < .023
  - Interaction: F (1, 24) = 5.92, p < .001

- Beginner Learners: Effect of Lexical Status
  - No effect of Sound (p = .053)
  - Interaction: F (1, 24) = 5.92, p < .024

L2 German

- Advanced Learners: Effect of Lexical Status
  - No effect of Sound: Interaction: F (1, 60) = 1.91, p = .17

- Intermediate Learners: Effect of Lexical Status
  - No effect of Sound: Interaction: F (1, 162) = 15.4, p = .001

CONCLUSION

- Significant interactions between lexical status and category: lexical representations for new categories are not target-like; the asymmetry indicates lexical separation (no merger between new/old, even in beginners)
- G-Adv. have recovered from asymmetrical lexical access: asymmetries can be resolved with more experience in an L2
- More efficient lexical access; LRs gradually become more native-like
- High categorization accuracy for all groups = independence between both levels

Further Research Directions

- Is dominance is only determined by acoustic-phonetic similarity?
- Phonetic stability of contrast?
- Functional prominence to signal lexical contrast? (Many or very few minimal pairs?)
- Other function such as grammatical markers?

REFERENCES

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Acknowledgements: We thank Laurent Dekydtspotter, Rex Sprouse, John H.G. Scott, Christiane Kaden, Franziska Krüger, the Department of Second Language Studies and the SLPL Lab Members for comments, help and support.

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