

What did you expect? Linguistic prediction occurs in both a first and second language but there are differences!

Seth Wiener
Carnegie Mellon University

Hannah Rohde
The University of Edinburgh

How do we understand a possible message?

At least two sources of knowledge:

- Language independent, real-word
- Language dependent, linguistic

L1 and L2 listeners integrate both types of knowledge.

- Resolution of lexical and syntactic ambiguity (e.g. Altmann Steedman, 1988; Grüter, Lau, Ling, 2020)

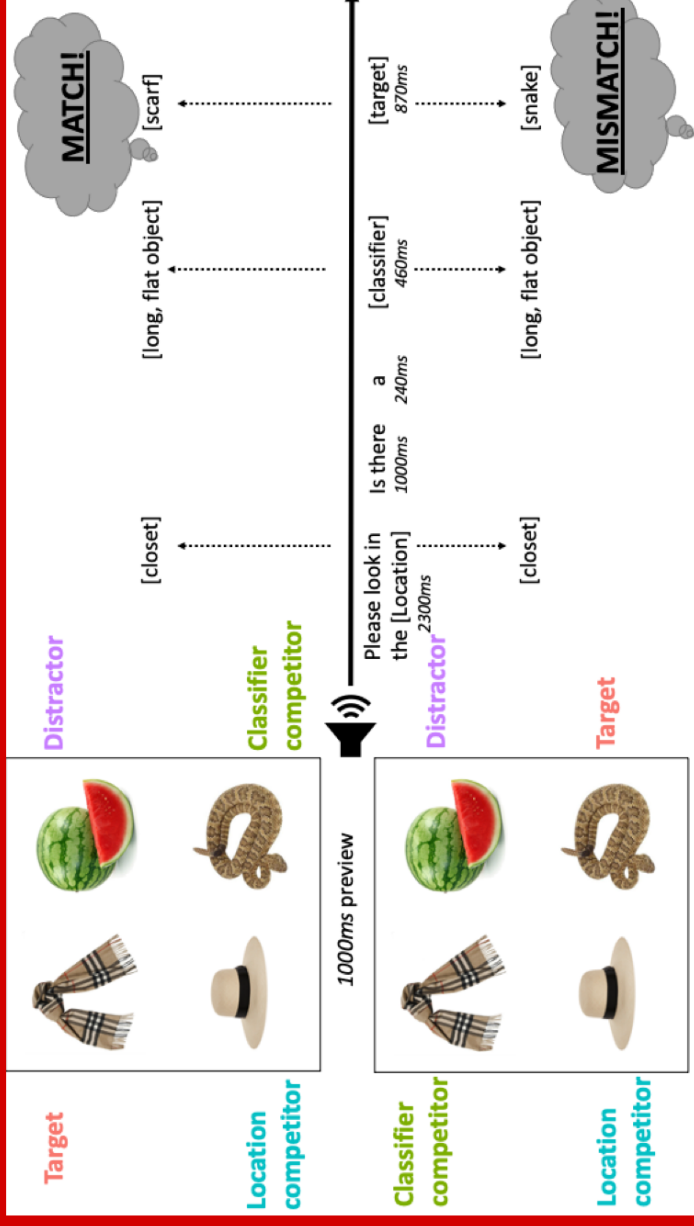
- Anticipation of speech (e.g. Altmann Kamide, 1999; Lew-Williams Fernald, 2010)

- Not all L2 listeners can do this successfully (e.g. Mitsugi MacWhinney, 2016)

- Typically delayed relative to L1 listeners (e.g. Grüter, Lew-Williams, Fernald, 2012)

Integration and prediction by L1 and L2 Mandarin Chinese listeners

- Visual world paradigm
- Manipulate real-world knowledge (closets have scarfs)
- Manipulate linguistic knowledge (classifier system)



Mandarin classifiers

- Required when counting (two pairs; three books)
- Required for demonstratives (this round thing; those kittens)
- Reflects intrinsic and transparent semantic properties of the object itself
- Comprehension provides an index of anticipatory processing in L1 and L2 listeners (e.g. Kwon, Sturt, Liu, 2017; Grüter et al., 2020)

Stimuli creation & piloting

- 64 L1 speakers reported the general category and three prototypical examples for 64 classifiers
- 60 new L1 speakers saw images and reported the noun's most appropriate classifier and an expected location
- 24 items chosen and tested on 30 L1 listeners
- From these, 14 were chosen for the L2 listeners
- Here we report on 24 L1 and 26 L2 participants

Findings

- L1 and L2 comprehenders reconcile grammar-driven biases about an upcoming referent's semantic properties with larger context-driven biases about event-plausible referents.

