

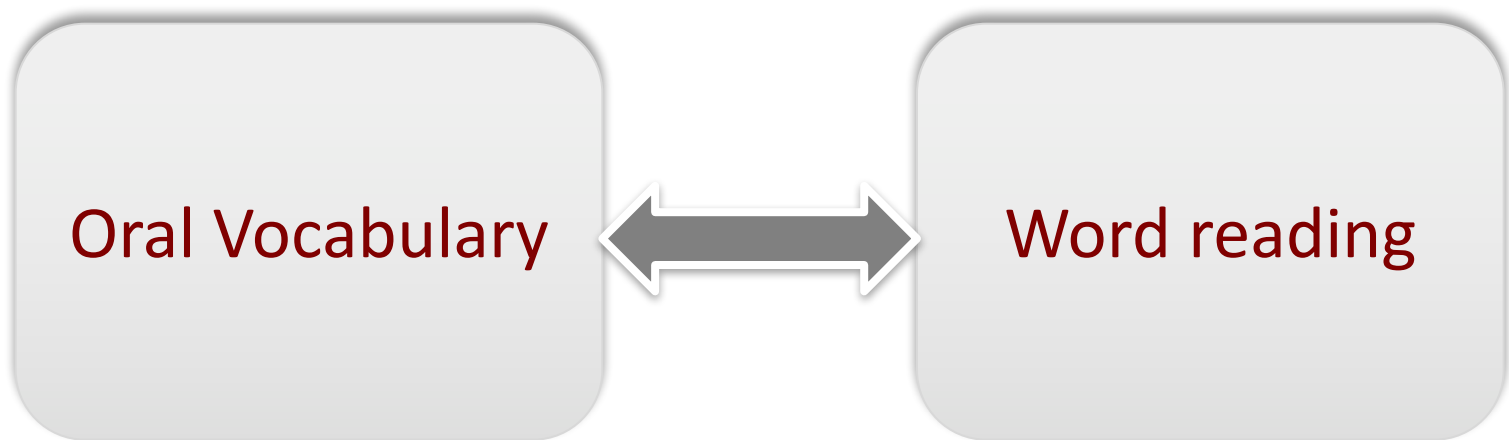
Oral vocabulary helps children learn to read before written words are seen

Signy Wegener

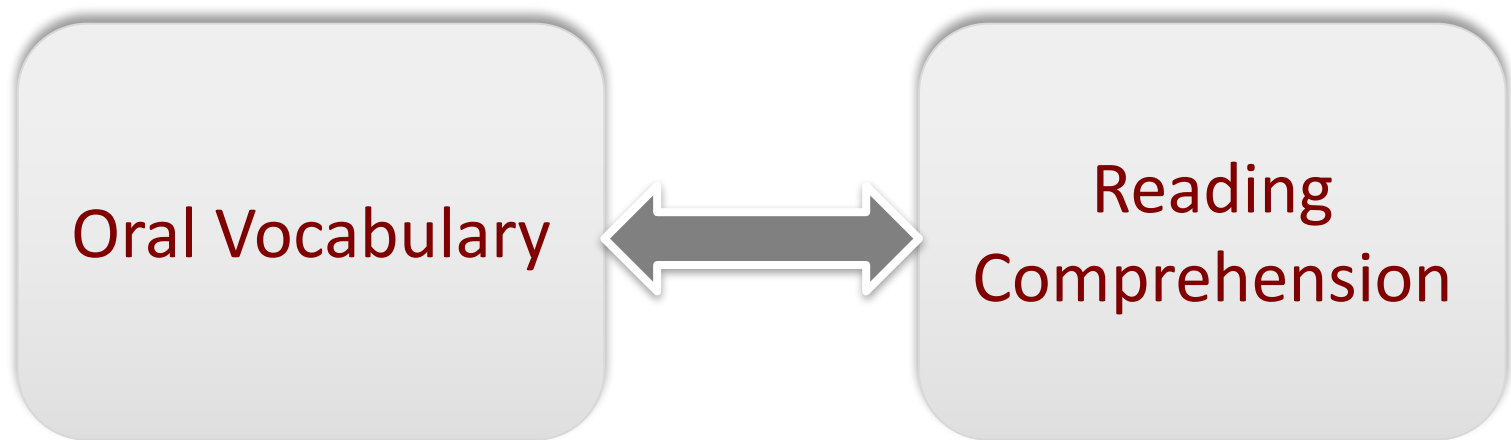
Hua-Chen Wang

Kate Nation

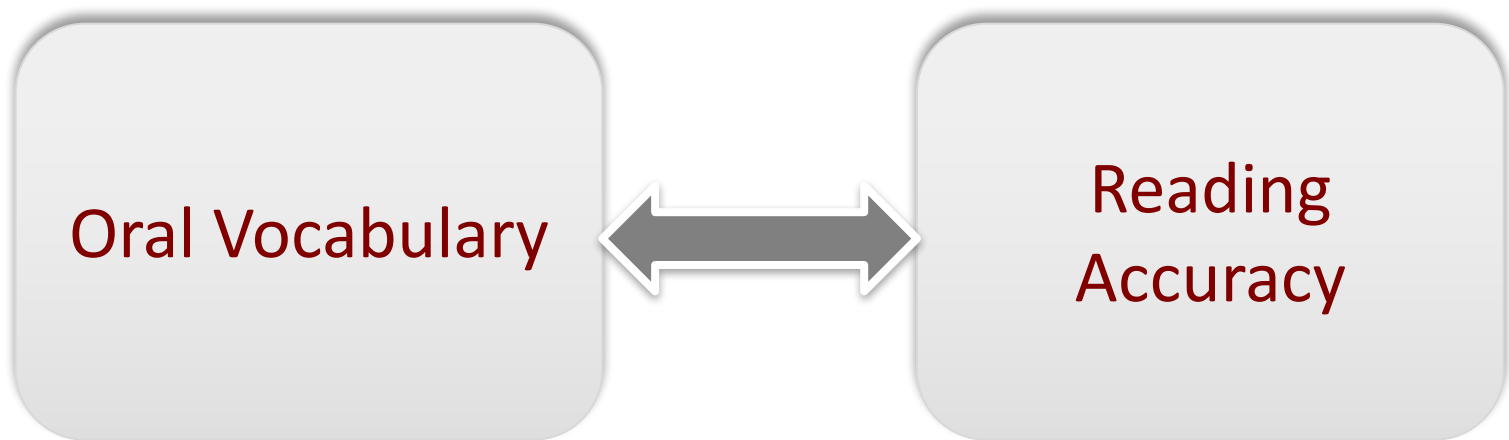
Anne Castles



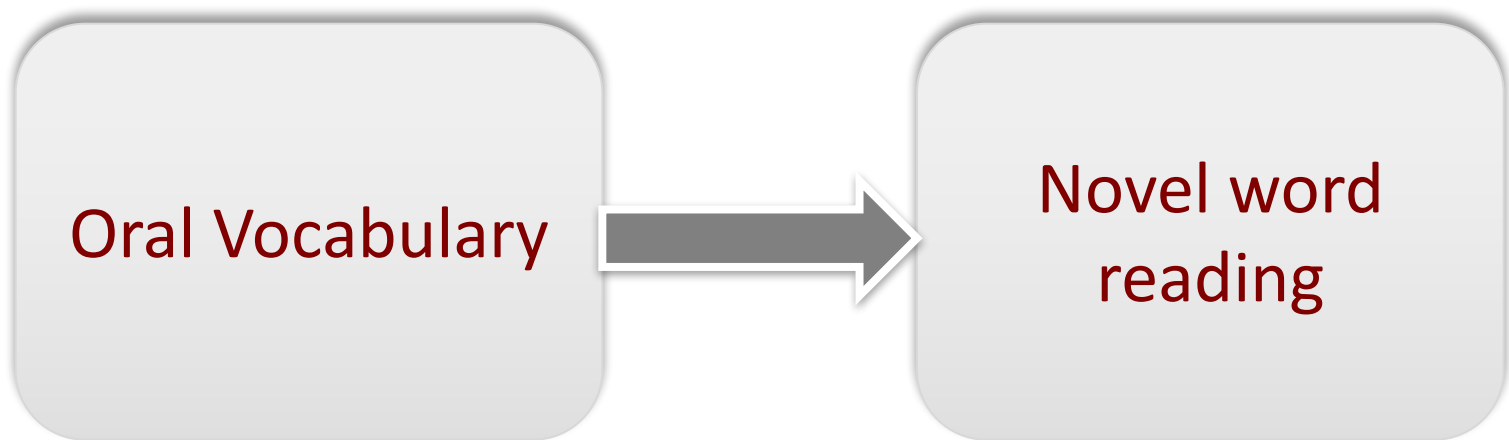
Nation & Snowling, 2004; Ricketts et al., 2007; Nation & Cocksey, 2009



Nation & Snowling, 2004; Ricketts et al., 2007; Nation & Cocksey, 2009

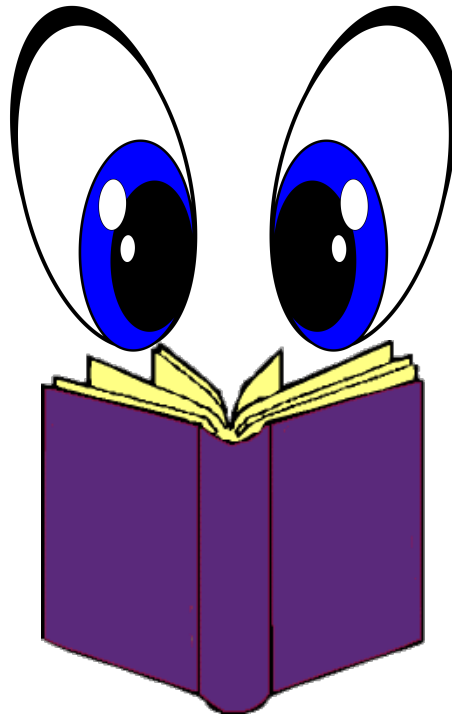


Nation & Snowling, 2004; Ricketts et al., 2007; Nation & Cocksey, 2009



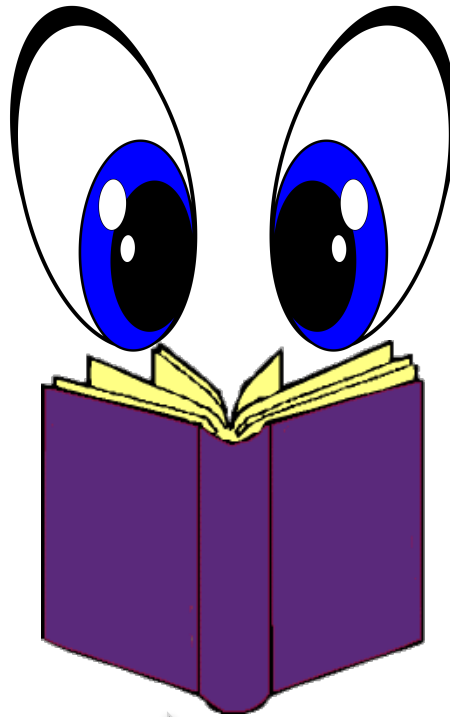
McKague et al., 2001; Duff & Hulme, 2012

When and how does oral vocabulary help?



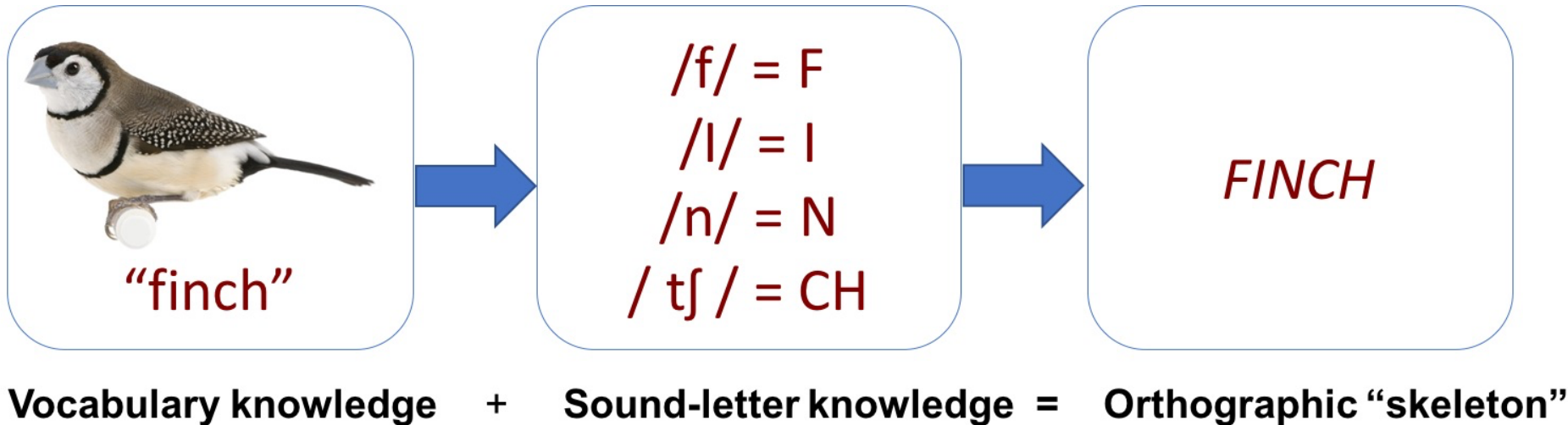
After a written word is seen

When and how does oral vocabulary help?



Before a written word is seen

When and how does oral vocabulary help?



Study 1

- Test of the orthographic skeleton hypothesis
- Novel word training study
- 36 Grade 4 children
- Two sets of 16 novel words (“nesh”, “coib”)
- Children were trained on one set over four days
- Other set were untrained

This is a ***nesh***. It is used for shuffling cards.



Study 1

- After training, novel words were put into simple sentences
- Each contained either a trained word or an untrained word
- Sentences were contextual
- Children were asked to read these sentences



Predictable

The child learns the spoken word
“nesh”

As the child expects,
they later see the written word
nesh

Unpredictable

The child learns the spoken word
“coib”

Contrary to the child’s expectation,
they later see the written word
koyb

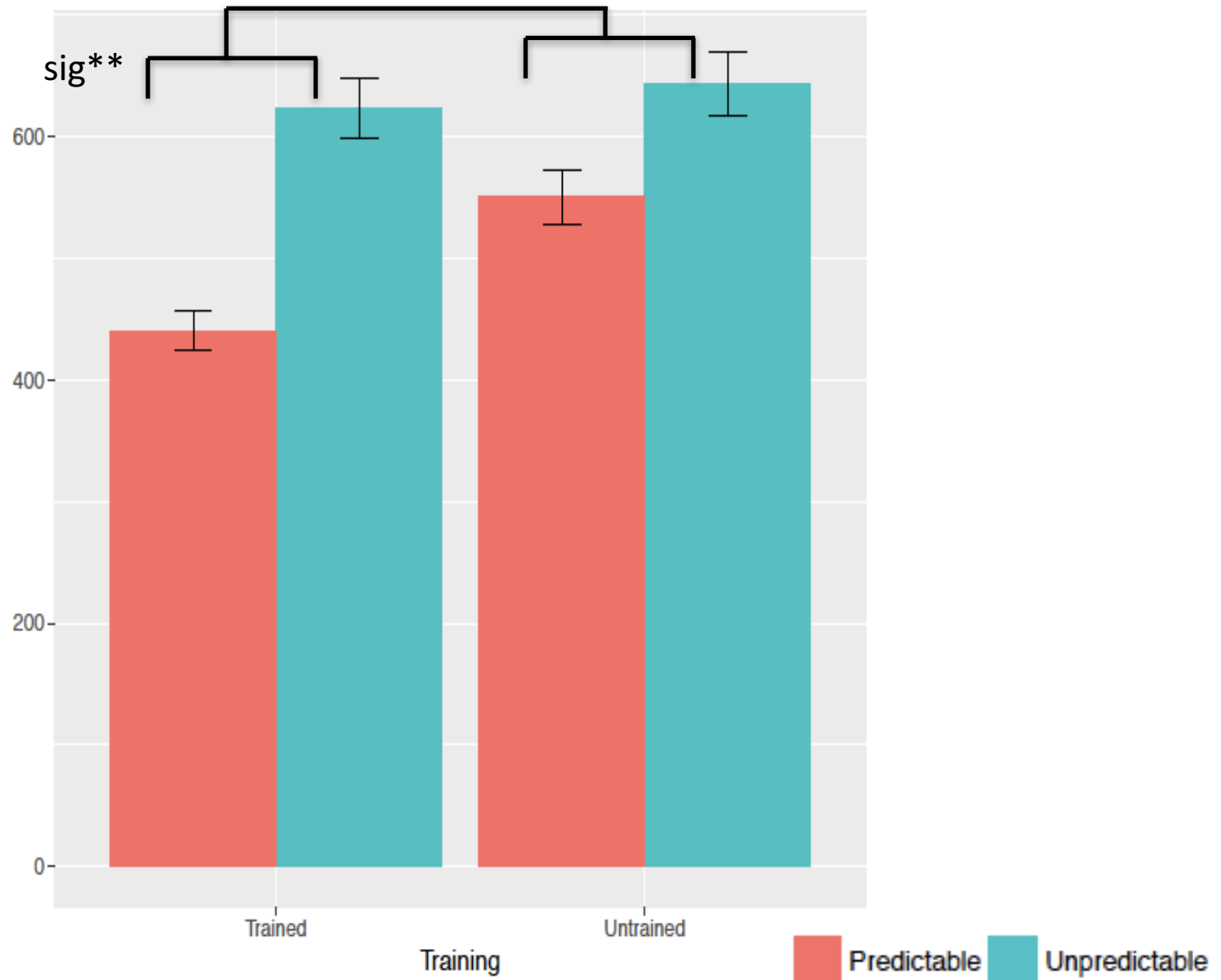
Measures

- Eye movements on target words
 - First fixation duration
 - Gaze duration
 - Total reading time

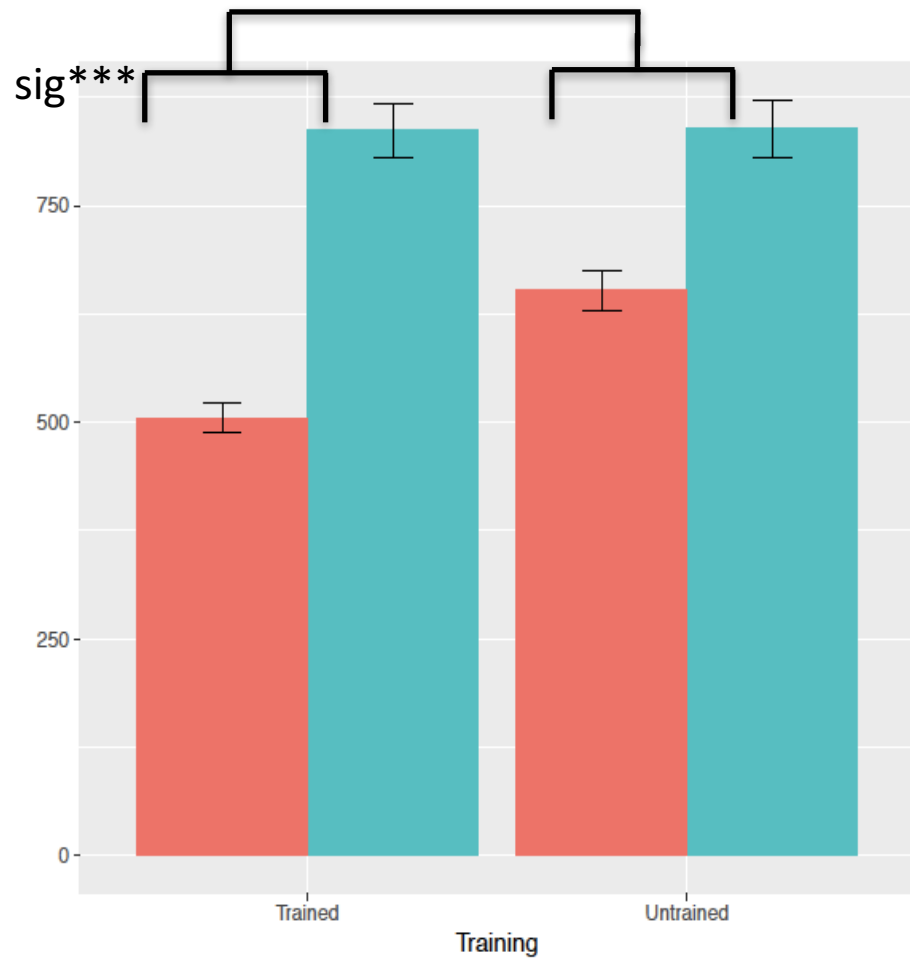
Hypothesis

- When a word has been learned orally, there will be a larger difference in looking times between predictable and unpredictable spellings, than if it was orally unfamiliar.

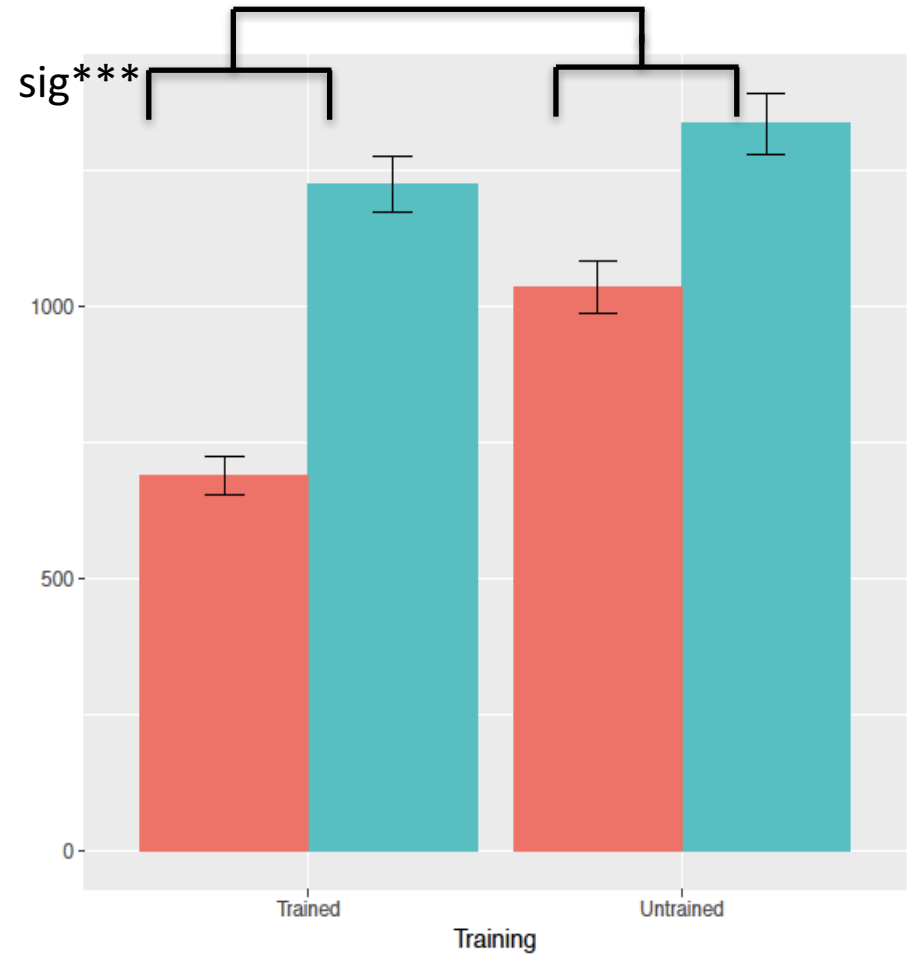
First Fixation Duration



Gaze Duration



Total Reading Time



Predictable Unpredictable

Interim Discussion

- Children do seem to form orthographic skeletons when they learn the pronunciation and meaning of novel words
- These affect children's reading at the first visual presentation of a word

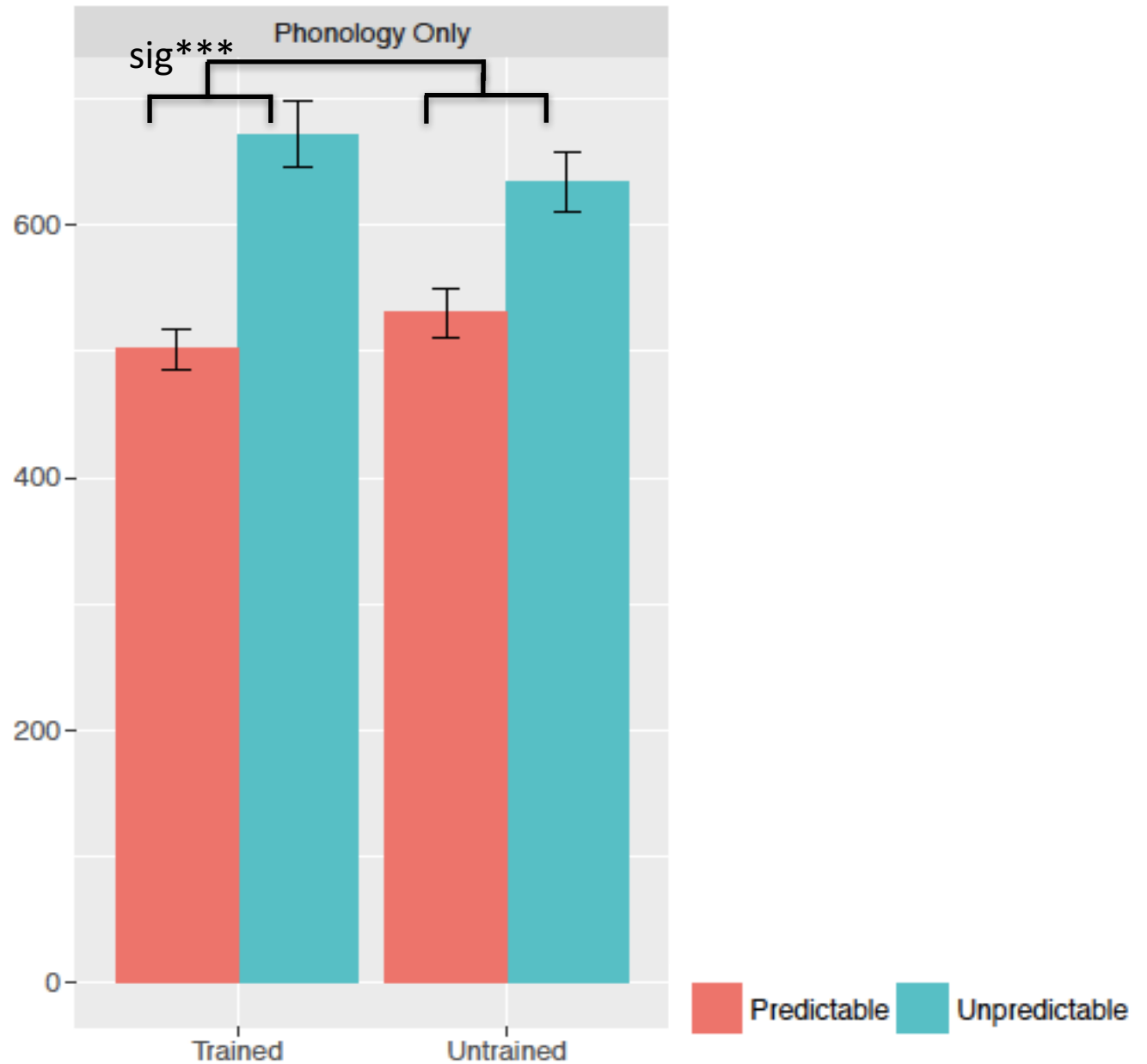
Study 2

- Is meaning essential to the formation of the orthographic skeleton?
- Do children generate orthographic skeletons when they only learn pronunciations?

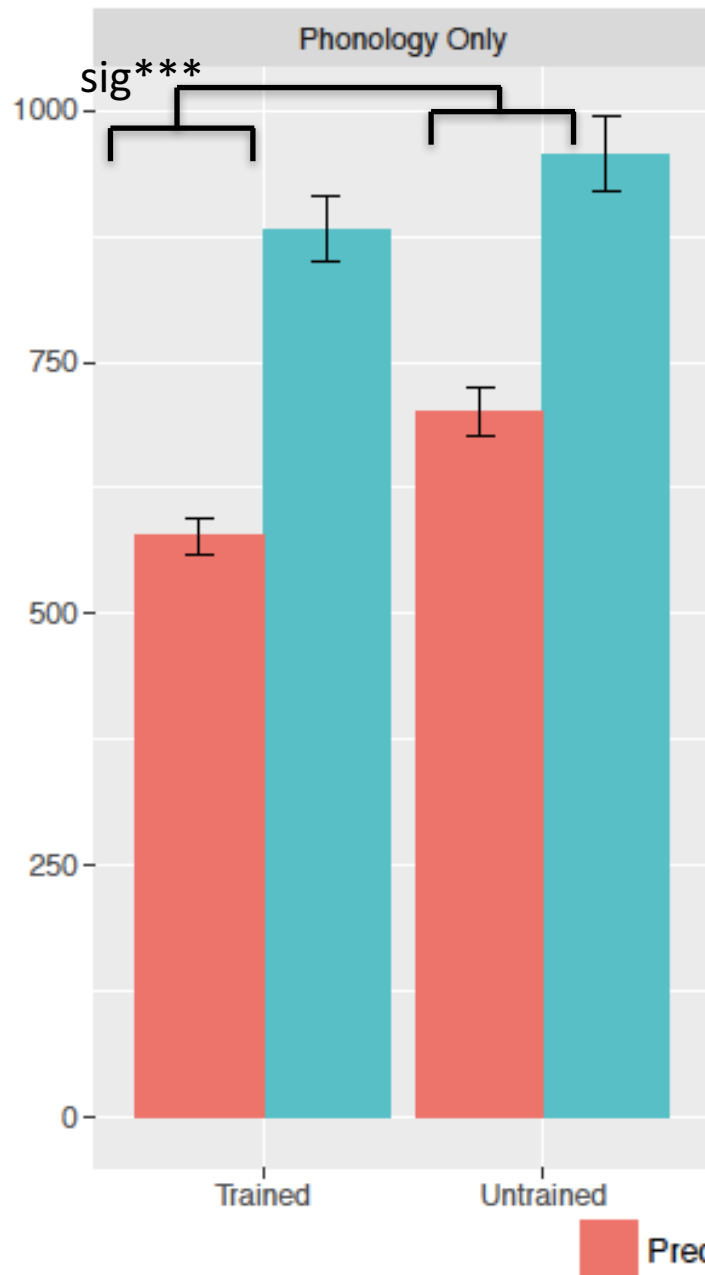
Study 2

- Exactly the same design, with the exception of the type of training
- Children learned pronunciations only and were required to listen to and repeat novel items
- 43 Grade 4 children

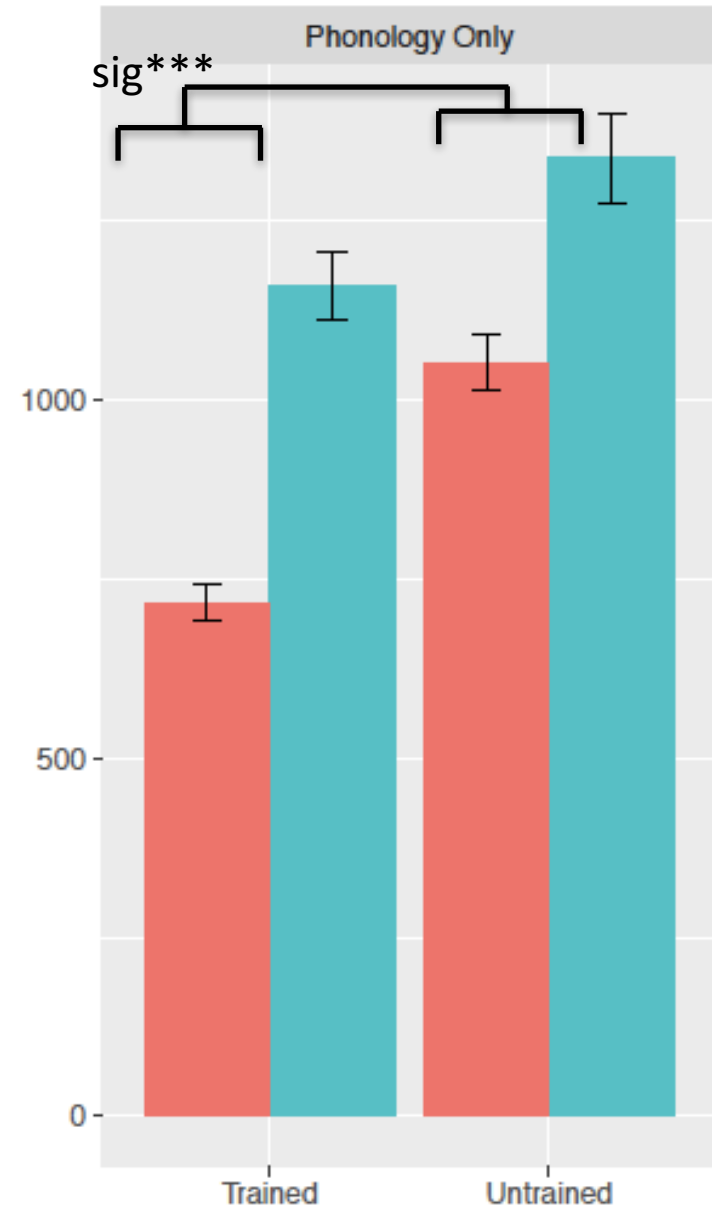
First Fixation Duration



Gaze Duration



Total Reading Time



Discussion

- Children form orthographic skeletons on the basis of their oral vocabulary knowledge
- These arise when pronunciations are learned with or without associated meanings
- First evidence that children commence orthographic “learning” prior to first seeing printed words
- May represent another mechanism through which oral vocabulary assists orthographic learning
- Educational implications: teaching oral vocabulary (even if only pronunciations) will support reading efficiency



Thank you!