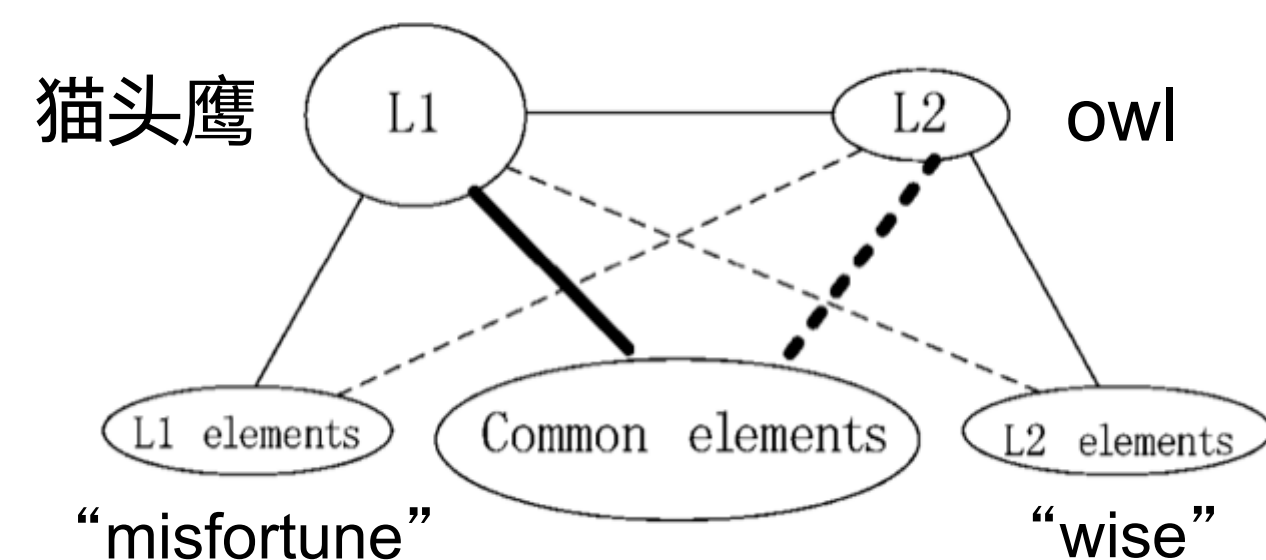


Introduction

- “Translation Equivalent” words have different cultural implications
 - animal words have different cultural extensions in Western and Chinese culture.
 - OWL As wise as an owl
An owl brings misfortune to one’s house
- The shared (distributed) asymmetrical model (Dong, Gui & MacWhinney, 2005)
 - for a translation equivalent pair, there are some common elements as well as language specific elements.
 - bilinguals first develop links between L2 words and L1 specific elements. With advancement of their L2 proficiency, they will gradually develop new links between L2 words and L2 elements, and weaken links to L1 elements.



The Current Study

- How do English animal words map to their implications in Chinese-English bilinguals’ minds?
 - Link between L2 word and L1 specific elements (owl-misfortune)
 - Link between L2 word and L2 specific elements (owl-wise)

Method

Experiment 1

Participants

- 27 Mandarin-English bilingual university students
 - born in China, lived in Canada for an average of 4.3 years
 - speak Mandarin about 48% of the time
- 27 English monolingual university students

Stimuli

- Critical stimuli:** 42 animal words and implications

	DRAGON	OWL
Chinese-related	emperor	misfortune
English-related	fierce	wise
Unrelated	polite	boring

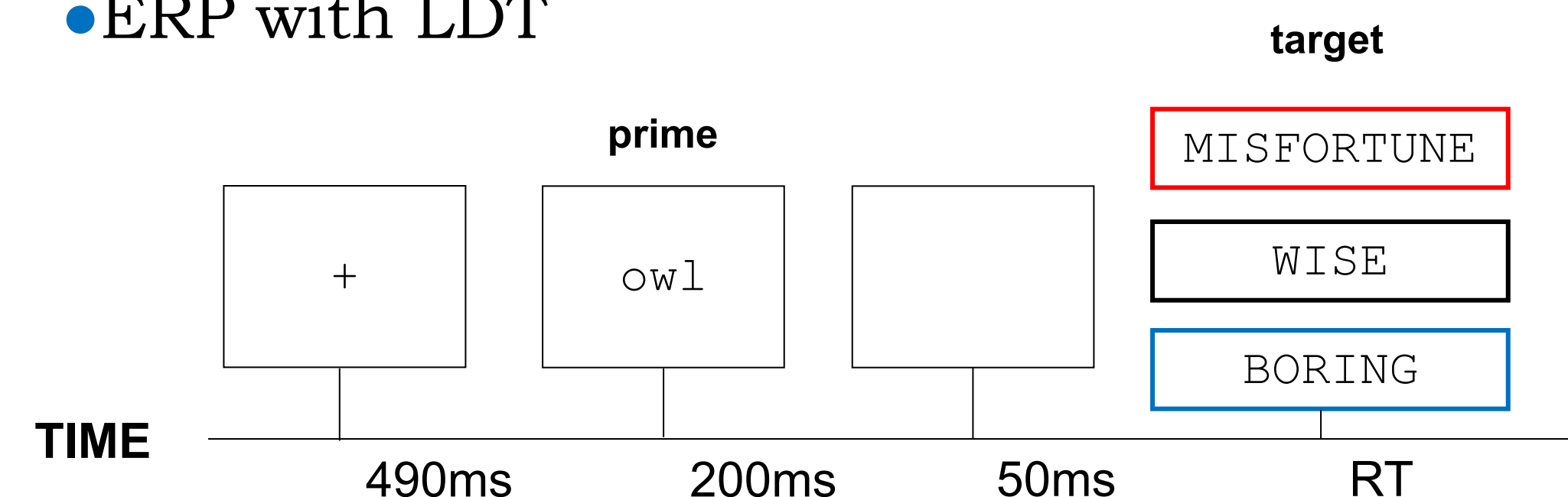
Fillers:

- 84 pairs with non-word targets (half with animal primes, half with non-animal primes)
- 42 pairs with real word targets (14 related pairs, 28 unrelated pairs)

Method

Procedure

- ERP with LDT



Experiment 2

Participants

- 28 Mandarin-English bilingual university students
 - born in China, lived in Canada for an average of 4.6 years
 - speak Mandarin about 47% of the time

Stimuli

- Critical stimuli:** 84 implications of animal words

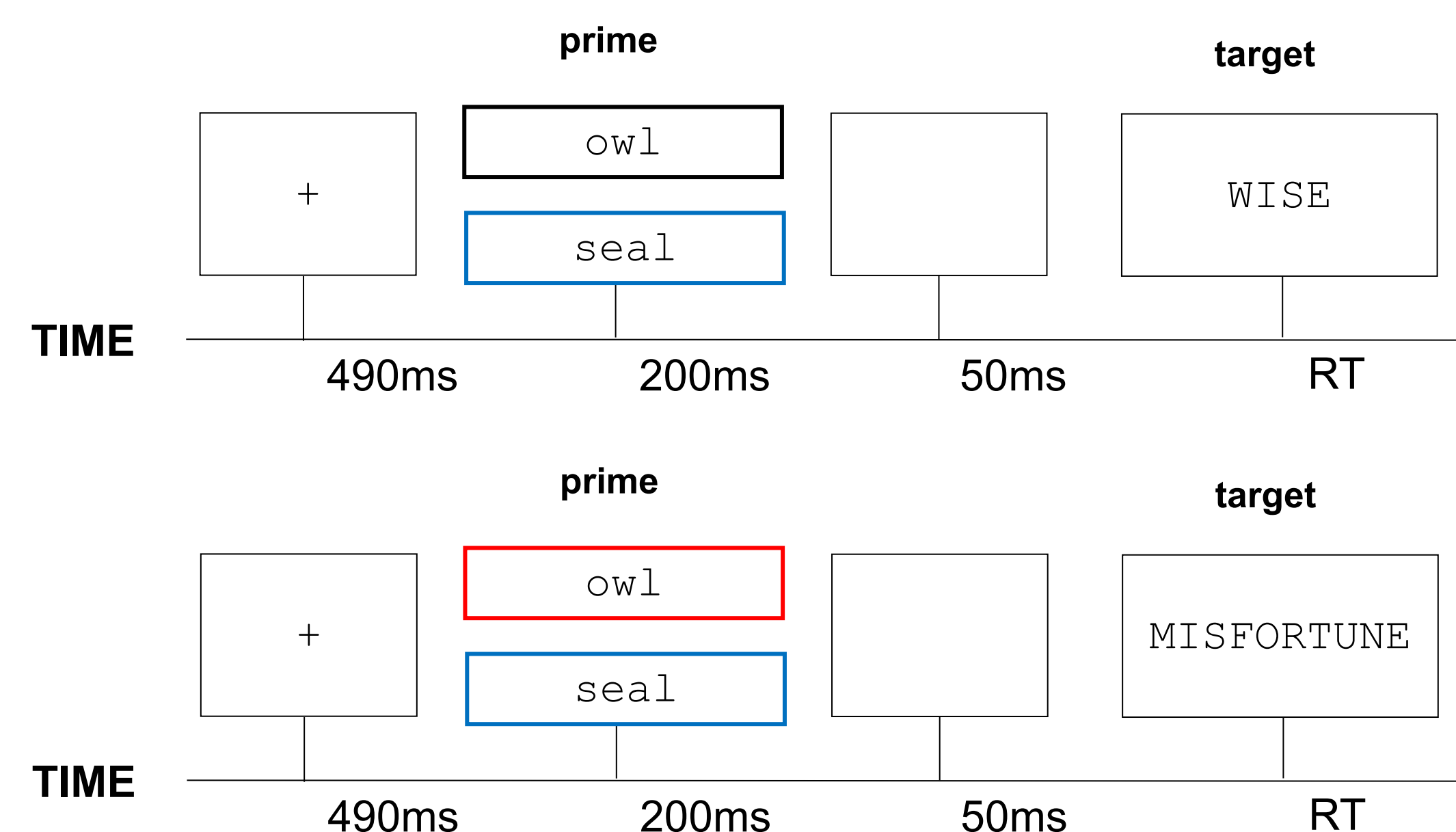
	WISE	MISFORTUNE
Chinese-related		owl
English-related	owl	
Unrelated	seal	seal

Fillers:

- 84 pairs with non-word targets (all with animal primes)

Procedure

- ERP with LDT



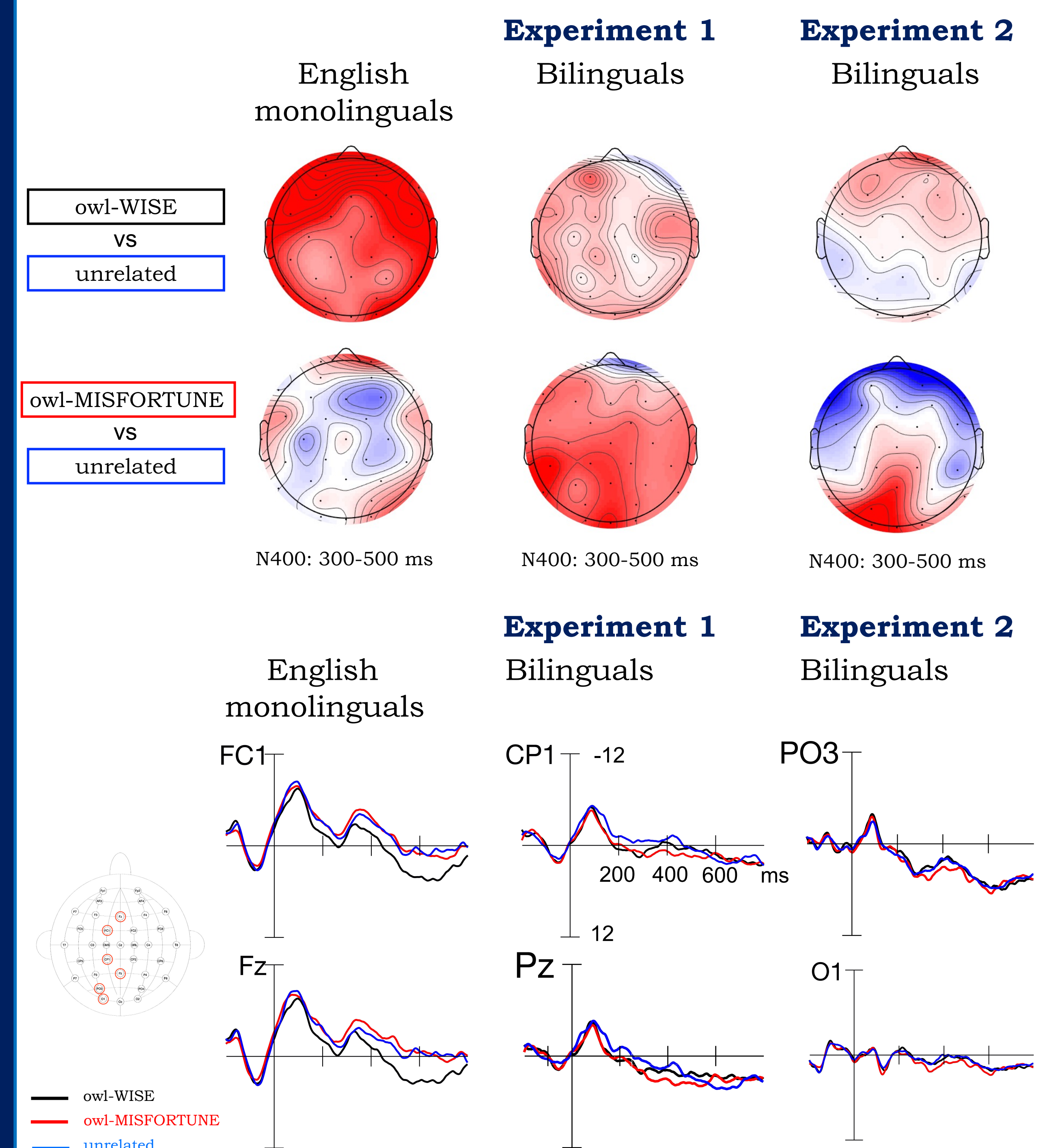
Results

Behavioral

- No significant priming effects for either bilinguals or monolinguals

Results- ERP

ERP- Priming Effects



Discussion

- Translation equivalent words of different languages do not operate simply as “equivalents”.

Chinese-English bilinguals (reading in English):

- owl-misfortune:** priming effects in N400
 - bilinguals form links between L2 animal words and L1 specific implications semantically
- owl-wise:** no priming effect in N400
 - bilinguals haven’t developed new links between L2 animal words and L2 specific implications
- consistent with the shared (distributed) asymmetrical model (Dong et al., 2005); unclear when new links develop between L2 words and L2 elements, and whether the links weaken between L2 words and L1 specific implications