

Phonological Competition during Spoken-Word Recognition in Infants and Adults

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Abstract: An ongoing debate concerns whether spoken word recognition happens in an incremental or continuous manner (Marslen-Wilson & Zwitserlood, 1989; McClelland & Elman, 1986). In the current study, participants (31 adults and 49 infants aged 24-30months) were presented with four images while they heard a sentence like “Look at the cat”. Among the images was one object that rhymed with the spoken word, one object that shared its onset and two phonologically unrelated objects. Growth curve analysis of eye-tracking data revealed that adults preferentially fixated onset competitors over unrelated objects soon after word onset but did not preferentially fixate rhyme competitors. Fixations of the onset competitors were modulated by the degree to which the onsets of the three remaining competitors were phonologically similar to the spoken word. Infants showed no preference for either type of phonologically related competitor. The absence of a rhyme effect contradicts continuous theories of spoken word recognition.