Covering the eyes or mouth of a speaker does not prevent toddlers' word learning

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Prior research shows that both infant gaze-following skills and attention to the mouth of a talking face are positively correlated with vocabulary growth during the second year of life. This correlational evidence has prompted researchers to suggest that these two attentional strategies are essential mechanisms that support infants' acquisition of new words. If that is the case, covering the eyes or the mouth region of a talking face that teaches infants novel word-object associations should disrupt or diminish their word learning performances. To explore this question, we recorded 17- to 42-month-old toddlers' eye gaze (N=165) while performing an audiovisual word learning task in one of three conditions: 1) Full-Face condition, with the face of the speaker teaching new words entirely visible, 2) Glasses condition, with the eyes region of the speaker covered by black opaque glasses, and 3) Mask condition, with the talking mouth and nose of the speaker covered by a black surgical mask. The results showed that infants from 24 months of age learned the new word-object associations, and crucially, that they did so regardless of condition. Interestingly, in the Full-Face condition, word learning performance correlated with infants' gaze following behavior (i.e., target-object looking and face-target shifts) but not with attention to the eyes or mouth. These results show that word learning capacity from a quick audiovisual interaction emerges around 24 months of age and suggest that infants' optimal attentional strategy at this stage involves social understanding (i.e., gaze following, social referencing) and object exploration, rather than attention to the eyes or mouth of the speaker. In this talk I will discuss the implications of these results, notably for naturalistic vocabulary learning situations.