

Understanding nonexistential negation in 18 and 24-month-olds

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While there is a rich literature concerning how infants represent the presence of objects, we know very little about whether and how they encode the absence of objects. The purpose of the current studies is to investigate the development of forming such representations based on verbal information. We tested the comprehension of a specific form of negation expressing non-existence (Hungarian ‘nincsen’). This special form of negation can express absence of entities – entities not being at a specific location, entities ceased to exist or entities that never existed. In Experiment 1, we tested 18-month-olds’ understanding of nonexistential negation in a choice task. An object was invisibly hidden into one of two cups and the experimenter indicated verbally where the object was not. Even at this young age, infants were able to find the object based on the information about the absence of the object. In Experiment 2, we tested 18 and 24-month-olds’ understanding of the same negative existential in a single-box searching task. Objects were hidden in a box and then they were retrieved from there. The experimenter told to the participants that the object was not there and then they could search in it. If they represented the absence of objects we expected them to search less compared to a control condition where different information was provided. Only 24-month-olds behaved as we predicted, 18-month-olds’ behavior was not modulated by the provided information. These results suggest that even 18-month-old infants understand negative existential and they are able to use information about the absence of an object to find it. Also, 18-month-olds’ diverging performance in the choice and in the searching task might suggest that forming and maintaining a representation of absence in a contrastive case (not here but somewhere else) emerges earlier than in a non-contrastive one (there is none).