Shared pattern of face preferences in human infants and pet dogs

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Abstract: Human eyes are unique. Unlike other primates whose pupils are masked by a dark sclera, the human eye highlights a dark pupil against a white sclera. Newborn infants look longer at schematic stimuli with three blobs arranged in a face-like configuration – but only if the blobs match the dark-on-light phenotype of the human eye. If a visual preference for faces with human-like eyes is innately specified, it is a candidate for selection across domestication. Over thousands of years of evolution, wolves became dogs who are adept at working and living with us. We report visual preference data showing that adult pet dogs prefer to look at face-like stimuli with a human-like eye phenotype, even though this phenotype is not prevalent in dogs – just as human infants do. Convergence in this visual preference suggests sensitivity to human eyes is an important behavioral adaptation for social partnership with humans.