# Developmental Changes in Visual Scene Statistics

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**Abstract:** Mature visual experience is tuned by inputs to the developing visual system. However, little is known about the low-level statistics of available visual input as infants interact with the world in rapidly changing ways. Recent studies of the contents of infant-perspective scenes (sampled from a corpus of over 5 million head camera images) indicate that these contents change dramatically over the first year of life. Faces, ceilings, wall edges, and high-contrast patterns characterize younger babies (below 3 months), while more crowded images characterize older babies. These differences suggest possible developmental changes in lower-level visual statistics. After analyzing a sample of infant-perspective scenes from 4- to 10-week-old infants, and from 28- to 34-week-old infants, we found that mean Feature Congestion and Subband Entropy—measures of visual clutter in natural scenes—increase with age. The full analyses include spatial frequency, orientation, contrast, and clutter measures across 1,821,021 frames.