# The Origin of Object Knowledge: Perceptual Completion at Birth

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**Abstract:** Perceptual completion is a fundamental process for object perception. Recent evidence shows that, when a stroboscopic motion is used, newborns are able to perceive partly occluded objects (i.e. amodal completion), (Valenza et al., 2006), or to perceive illusory objects (i.e. modal completion), (Valenza & Bulf, 2008). The present study was designed to extend these findings, investigating whether newborns can perceive a rod occluded by a Kanizsa-type illusory box as a complete object. To solve the task, both amodal (occluded rod) and modal (illusory box) completion had to be simultaneously performed. Three experiments were carried out, in which the rod and the box underwent an out-of-phase stroboscopic motion. Results showed that newborns were able to simultaneously use modal and amodal completion to perceive objects unity in the rod-and-box display, further demonstrating that, when a motion easily detectable by newborns visual system is used, a veridical object perception is available from birth.