

What do babies know?

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Research on cognitive abilities in young infants has, over the past two decades, suggested a wealth of complex cognitive abilities that, if taken seriously, would make the very idea of developmental psychology a vacuous enterprise. Whether deliberate or not, this work endorses a form of nativism that would make the study of cognition the realm of molecular biologists and transform psychologists into mere behavioural taxonomists. In this talk, I review the methods behind such work, as well as their shortcomings. I then discuss a formal process model of infant habituation, and look at how well it reproduces behaviour when embedded in a robot. I also review recent empirical support for predictions from the model. I then return to the issue of advanced cognition, and report on new studies that examine whether and how infants understand impossible events. The studies make use of a proper factorial design that independently and jointly examines the roles of perception and cognition. I further examine the role of pupil dilation data as a complement to looking time measures. The results suggest that perception is what drives apparent conceptual behaviour. This is good news for developmental psychologists, and has the added benefit of being consistent with genetics and neuroscience.