

2nd JEAN PIAGET CONFERENCES

Infant development from Piaget to today

Geneva, Uni Mail, June 20-21, 2016

Monday afternoon, June 20, 2016

16h00 **Richard Aslin**, University of Rochester

Mechanisms of learning during infant development: The

role of distributional information

Abstract:

Classic views of the sensory-motor period during infancy emphasize the role of action in discovering structured information in the environment. While there is no question that action is a powerful tool for learning, research in the past two decades has revealed another powerful tool -- the extraction of structure from the environment by mere exposure. That is, observation of events that contain either temporal or spatial structure as defined by the distribution of elements within those events can lead infants to learn those structures, despite no overt action on the part of the infant. It has been argued that these demonstrations of "statistical learning" in infancy are limited because they do not generalize to novel events (i.e., they are not rule-based). I will argue that this conclusion is unwarranted – the patterning of the input enables a learner to either generalize or to treat the specifics of the input as unique (i.e., as exceptions rather than rules). In turn, the contrast between learning the input and generalizing from it can serve to bias future learning, thereby enabling the transition to a developmental more mature level.