



1st Jean Piaget Conferences

Theories of Development

June 26 – 27, 2014
Uni Mail – Geneva

Thursday afternoon, June 26, 2014

14h30

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Number: What we have learned and have yet to learn since Piaget

Abstract:

Piaget made three assumptions about number concepts: they are based on a logical mental structure of one to one correspondence, that efforts to train conservation of number will fail because the requisite Concrete Operational mental structure has yet to develop; and the counting of preschool children was uninteresting because it was just memorized. I trained conservation and finally gave in to children who kept asking, “can I count.” There is now a cottage industry studying counting, both nonverbal and verbal. Less emphasized (or accepted) is that counting is done in the service of arithmetic reasoning. I will emphasize the critical role of verbally expressed mathematical operations, first using some data from school-aged children. Of special interest will be the transition to the use and understanding of mathematical operations and their deployment in relation to the mathematical re-representation system.