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Community of Philosophical Inquiry: Fostering the development of logical reasoning through metalogical understanding.

According to Piaget, the first psychologist to study reasoning from a logician point of view, children are not born logical and logical reasoning only appears progressively up to adolescence. His theory of the development of rationality (Piaget, 1964) was criticised for diverse reasons. Several studies demonstrated that children have some degree of logical understanding at a very young age (Pears & Bryant, 1990) and that adults are not optimally logical (Wason, 1969).

David Moshman, a professor of educational psychology at the University of Nebraska-Lincoln, offers a new reading of Piaget's work by understanding the development of rationality at a metalogical level. Following his *pluralist rational constructivism* theory (Moshman, 2004), logical reasoning develops through the increase of metalogical understanding. In order to have a consciousness on ones inference, it is necessary to make it explicit and that process occurs during peer interaction. I argue that Community of Philosophical Inquiry (CPI) used in Philosophy for Children (P4C), if practiced with a special attention on its metacognitive aspects, can constitute the perfect didactic to put into practice Moshman's theory. Furthermore, adding some explicit notions of logic and reflections on logical thinking could transform the CPI method into a logic lesson for children and learners of all ages.

First, I will introduce David Moshman's theory. I will then present CPI as the practice of dialogue developed by the logician and pedagogue Matthew Lipman (2003) and how this method puts into practice Moshman's theory through intellectual moves performed by the children themselves. My research consists in linking the metacognitive and metalogical strategies with those moves in order to foster the development of logical understanding, transforming CPI in CLI – Community of Logical Inquiry. I am using Michel Sasseville and Mathieu Gagnon's work in the observation of CPI (Sasseville & Gagnon, 2012) to link most common behaviours to metacognitive and metalogical strategies. We will proceed to a close examination of some of those behaviours and see how it can link to a metalogical approach of the development of rationality.

Philosophical discussions allow children to starts from concrete examples of their day-today experiences and thoughts, and then generalize to wider thoughts, constructing their own theory of mind. In P4C, not only we commonly witness participants expressing rational and logical thoughts, but also the metalogical aspects of the CPI methodology has multiple underlying strategies that could foster the development of their logical reasoning. We will discuss how these strategies consist in metacognitive and metalogic strategies that adults could also greatly benefice from. The claims I endorse put forward the possibility to build a toolbox for the learning of logical thinking in schools. This work could help teachers' work in providing them the tools they need to develop better teaching methods that they can put into practice in their classroom. Since metacognitive strategies have been proven efficient for all levels learners, this approach could have a major impact in scholar system, in teachers' training and also in a broader social scale. – Bibliographical sources –

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