Thinking about thoughts: the role of language

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Understanding that people's ideas may be false is a challenging step in Theory of Mind (ToM) development, and is accomplished around the age of 4-5 years old by typically developing (TD) children. False-belief attribution remains difficult beyond this age for certain clinical populations, such as Autism Spectrum Disorder (ASD), where delays in this realm are significant (Baron-Cohen, Leslie & Frith 1985), and Specific Language Impairment (SLI), where delays tend to be subtler (Nilsson & de Lopez 2016). Research has identified links between ToM success and language skills, in particular complement clauses such as '*John thought/said that aliens landed in his garden*', and it has been hypothesized that these structures serve as tools for representing subjective truths (de Villiers & Pyers 2002; Tager-Flusberg & Joseph 2005). This talk reports results from our experimental work further exploring the link between complementation and ToM. Study 1 (Durrleman, Burnel, Thommen, Foudon, Sonié, Reboul & Fourneret 2016) determines if complementation skills in ASD support ToM reasoning or are rather merely implied in task performance (Craven, 2005). Study 2 (Durrleman, Burnel & Reboul 2017) evaluates whether clinical groups of different aetiologies, namely ASD and SLI, perform comparably for ToM once they have similar complementation skills, as expected by linguistic determinism (de Villiers & de Villiers, 2000). Studies 3 & 4 (Durrleman & Franck 2015; Burnel, Perrone, Baciu, Reboul, Durrleman 2017) investigate if complements have a more privileged influence on ToM in ASD and TD than abilities such as Executive Functions, which arguably also play a role (Carlson, Moses & Hix, 1998). Study 5 (Durrleman, Gattignol & Delage, in press) addresses speculation that complementation training may not be efficient to trigger improved ToM in instances of ToM impairments (Hale & Tager-Flusberg 2003: 10), by empirically testing whether training on complements via a newly created I-Pad application (Durrleman, Da Costa & Delage 2016) can be useful for ToM remediation in both ASD and SLI.

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