the ironic statements as instances of either lies or false belief. The majority of children with autism thus recognized the presence of mental states, but not the complex ironic intentions. Within-group variation was large, with a few children exhibiting sophisticated mastery of irony, others giving random or stereotyped answers.

The contribution of language and general cognition to explaining variation in irony understanding was evaluated with mixed-effects models. Contrary to the results for false belief and lies, no effect of embedding syntax was found for irony, suggesting a different pattern of development. Linguistic level (measured with the vocabulary test PPVT) emerged as a significant predictor for all children, whereas differences in short-term memory only explained variation for children with autism. In this group, correlations were also found between irony understanding and a parent questionnaire assessing children's social communication and cognition in everyday life (Social Responsiveness Scales), indicating external validity of the test.

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Irony comprehension in individuals with Down Syndrome

Introduction. Comprehending irony is a complex task that requires the detection of speaker's meaning (that is typically the opposite of sentence meaning) and the recognition of speaker's mocking attitude. Several scholars linked irony understanding to Theory of Mind (ToM) abilities, in typical (Sullivan et al. 1995) and atypical populations (Happé 1993 for adolescents with autism): 2nd order ToM abilities are claimed to be necessary in particular to distinguish jokes from lies. Nevertheless, linguistic abilities predict ToM development (Astington & Jenkins 1999). Moreover, irony criticisms (literally positive remarks used to comment on a negative situation, the more common form of irony) seem to be recognized earlier and better than ironic compliments, and this fact is unexpected if (only) ToM abilities lie at the heart of irony comprehension. We thus decided to further explore the factors that better predict irony comprehension, aiming at disentangling the contribution of ToM, linguistic and social abilities. We are testing children and adolescents with Down Syndrome (DS), since they are

reported to have severely compromised linguistic skills but also a relative strength in social functioning, and affect sharing emotions (Fidler et al. 2009).

Participants. Up to now, we tested 13 Italian children and adolescents with DS (7 F; Age: M=13;6; Range: 10;9 – 15;3) and 13 typically developing (TD) controls (7 F; Age: M=4;10; Range: 3;2 – 6;6), matched for both mental age (p=.59) and linguistic age (p=.71).

Materials. We assessed mental age (Raven Coloured Progressive Matrices), linguistic age (BVL, Marini et al. 2015); ToM level (6 tasks adapted from Wellman & Liu 2004, Gopnik & Astington 1988, Baron-Cohen, Leslie & Frith 1985, Sullivan et al. 1994). Irony comprehension was evaluated with a new task, that consists of 10 brief stories, concluding with a remark, literal (4) or ironic (6 – 3 ironic criticisms and 3 ironic compliments). Participants were asked three questions about i) detection of speaker's meaning, ii) context (control), and iii) recognition of speaker's attitude.

Results. Accuracy in the irony comprehension task was analyzed using mixed logit models. Accuracy was higher for literal stories than for ironic stories (β=1.9371, SE=0.47, z=4.131, p<.0001), and did not differ between DS and TD participants (β=-0.1731, SE=0.42, z=-0.419, p=.68). For both groups, ironic criticisms were easier than ironic compliments, but for individuals with DS the difference was more striking (ACCURACY criticisms/compliments – DS: 82% / 44%, p<.0001; TD: 64% / 48%, p<.05). In both groups, linguistic abilities correlated significantly with irony (DS: r=.58, p=.039; TD: r=.88, p<.001), whereas ToM level did not.

Discussion. Even if our sample of participants with DS is small, our results seem to indicate that ToM abilities do not constitute *per se* a good predictor of irony comprehension, while linguistic abilities play a major role. The fact that ironic criticisms are much easier than ironic compliments in participants with DS, who are much older than their TD matched controls, suggests the importance of conversational experiences as well.

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'The ironical tone of voice' from an intonological perspective?

This paper argues that an intonological point of view is relevant in describing and explaining ironical intonation. From a general point of view, it seems obvious that 'the ironical tone of voice' exists, and it is usually mentioned in linguistic studies investigating irony interpretation. Although the ironical tone of voice is not believed to be mandatory in ironical communication, it seems to be a cue