A novel interpretation for grammatical anomalies in self-reference in Autism Spectrum Disorders (ASD)

Non-standard forms of self-reference have been widely documented in ASD (Tager-Flusberg, 1992, Evans & Demuth, 2012, Hobson et al. 2010). These paradigmatically involve a ‘Person-shift’ towards non-1st personal forms of self-reference, as manifest e.g. in a preference for the child’s own proper name in referring to himself (Mizuno et al., 2011, Lee et al., 1994; Jordan et al., 1989; Shields & Meier, 2014). The same Person-shift is seen in forms of memory that are sensitive to the 1st vs. 3rd Person difference (Lee & Hobson, 1998; Hare et al., 2007). These findings raise the question of what, exactly, is difficult about 1st Personal forms of reference universally available in human languages, and what makes them cognitively significant. Neurotypical speakers, too, on occasion switch to non-1st Personal forms of reference, as in honorifics, yet this does not deprive them of a capacity to adopt a 1st Person perspective and it indicates no change in their fundamental cognitive make-up, as compared with children with ASD, who do manifest a different ‘cognitive style’. That us, linguistic diversity seen in the latter population connects with cognitive diversity in a way that diversity in pronoun inventories and use across languages in neurotypical individuals does not.

Here we argue that prior hypotheses about the causes of difficulties with pronouns in ASD have paid insufficient attention to the grammatical dimensions of the problem. Pronouns paradigmatically manifest Person distinctions, which are an inherent aspect of grammatical organization. As shown in Hinzen & Sheehan (2013,ch.4), Martin & Hinzen (2014), the 1st Person pronoun lies at the top of a referential hierarchy that begins from generics and indefinites and ranges further to definite, rigid, deictic, and finally personal forms of reference, with grammatical configurations of increasing complexity corresponding to each of these. Reliance on lexical information is maximal at the bottom and minimal at its top, where ‘I’ has lost all descriptive content including Gender and arguably Number. We hypothesize that difficulties with self-reference in the 1st Person are difficulties with the grammaticalization of reference and with Person in particular.

This predicts that reference impairment in ASD should leave non-declarative forms of reference spared; that descriptive and non-Personal forms of reference should be more preserved than ones involving grammatical Person; the same Person-shift should be seen in children with ASD in typologically different languages; and the cause of the problem does not lie in non-grammatically specific impairments identified under such notions as ‘pragmatics’, ‘turn-taking’, or ‘perspective-taking’. We tested these predictions against the literature and a new corpus of autistic speech (Dascalu, 2014), and found extensive evidence that children with ASD can take the perspectives of others; need not have problems with taking conversational turns as such; and show no referential confusions. Instead, what is impaired is the use of particular linguistic forms that mediate (self-) reference in the normal referential and declarative use of language. Kwan (1998) and Ling (2010) suggest that typological differences between Cantonese and English do not affect the generalization.

We conclude that autistic speech disorder manifests a fundamental change in a language-mediated cognitive style. Neither reference as such nor perspective-taking in any non-linguistic sense are the point, but the cognitive difference that grammatical Person distinctions mark. This conclusion lends further support to the claim that pronouns can exhibit ‘essential indexicality’ (Perry, 1993), while at the same time tracing such indexicality to their special grammar (Hinzen & Martin, 2015).
References


