Using CA to Find Out How a Child with High Functioning Autism Responds to Questions in Different Settings

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Anecdotal reports on the discourse of children with High Functioning Autism (HFA) often claim that failure to respond to questions is a key characteristic. However, Kremer-Sadlik (2004) found that HFA children respond 85% of the time to questions, and that 75% of the time their responses are also communicatively "adequate," meaning that they address the pragmatic intent behind the question as well as its surface form. Using Conversation Analysis (CA) as one of her methodologies, Kremer-Sadlik explained this surprisingly high number by showing that in her data, which consisted of audio/videotaped family interactions, family members extensively scaffolded the children's responses, teaching and coaching them in appropriate response patterns with every interaction. Thus, in Kremer-Sadlik's study, CA complements quantitative methods in describing language and interaction patterns of impaired individuals that run counter to popular belief. These results prompted me to ask whether response behavior of HFA children would be similar in non-family settings.

In my attempt to answer this question, Ian, a child with high-functioning autism, was videotaped for 45 minutes in two settings: first, in a speech therapy session with his therapist, Evelyn; and second, at the family dinner table with his parents and two sisters. The data were examined for instances of failure to respond to questions, and then those instances were transcribed and analyzed using CA.

For the seventeen instances in the data when Ian did not respond to questions, there appeared to be four main reasons: (1) he was focused on his own storyline or thoughts, and therefore did not appear to attend to or process the question, (2) he refused to cooperate even though he clearly understood that he was required to respond, (3) the question was a Display of Knowledge (DOK) question, and (4) he appeared to genuinely not know how to answer. A DOK question is one to which the questioner knows the answer, but is eliciting the hearer to display knowledge. The table below breaks down the failures to respond by setting and reason.

Failures to Respond by Setting

	Therapy	Dinner
(1) Focused on own storyline/thoughts	2	2
(2) Refusal	1	1
(3) Display of knowledge (DOK)	6	1
(4) Unsure how to answer	1	3
Total	10	7

Looking at this table, a few interesting patterns emerge. First, there are overall more failures to respond in the therapy session than at dinner, although both were about the same duration and featured Ian and one adult as the principal interlocutors. Second, there were many more DOK questions in the therapy setting. Furthermore, analysis of the interactions reveals that when pursued and scaffolded, Ian did eventually produce a response to questions in the "Unsure" category, but, in contrast, steadfastly refused to answer DOK questions.

Consider the following sequence from a therapy session, in which Ian and Evelyn are cutting pictures out of magazines for an activity:

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01      E:      Is it working?
02      E:      (1.5) Oooh >now it's kinda (   )<
03              (1.5) Alright, let's s[ee what else we] have.
04      I:                           [oooh ↑o o o h! ]
05      E:      How many pictures do we have so far. ((looking at the
06              pictures they have already cut out))
07→     I:      (2.0) ((pointing at some other pictures with the scissors)) happy,
08              sad, sad, happy, (0.5) worried, worried,
09              (2.1) ((E arranging the cut-out pictures on the floor))
10      E:      Alright we have a bunch so far.
11              (0.8) ((I cranes his neck around, touches left ear to left shoulder))
12      E:      Maybe we could ge:t (0.2) about five more.
13              (3.2) ((E looks at I))
14      E:      Help me pick something on this page please
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In line 4, Evelyn begins to draw Ian's attention from a diversion back to the activity, and in line 6, asks him how many pictures they have cut out already. This is a DOK question, since the pictures are spread out in front of both of them and Evelyn can see for herself how many pictures they have. In line 8, after a lengthy pause, Ian verbally labels some different pictures from an activity on emotions that was done the previous week. Evelyn chooses not to pursue Ian's response, and instead, in line 10, answers it herself. Ian is not focused on Evelyn or the conversational sequence, evidenced by his somewhat perseverative movement in line 11 and the lengthy gaps produced by Evelyn's continued attempts to re-engage him in the activity. This is a typical instance of Ian's failure to answer a DOK question in the therapy setting. It should be noted that although in this instance Evelyn chooses not to pursue or scaffold Ian's response, in other examples she did, with no success. Ian never responded to DOK questions.

In the therapy setting, it appears that DOK questions make up the bulk of the questions directed to Ian. However, again and again, he fails to respond to them, even when scaffolded. This apparent inability to understand and cooperate with the underlying agenda of DOK questions supports recent thinking about children on the autistic spectrum and *theory of mind* (Baron-Cohen, Leslie, and Frith, 1985), which refers to a person's capacity for understanding others' thoughts, knowledge, feelings, intentions, and desires. Tamar-Kredlik (2004) points out that only 20% of autistic children are able to complete theory of mind tasks which ask them to infer others' mental states, and even fewer are able to discern intentionality in situations where people's surface language conflicts with their true feelings (such as lying when receiving an unwanted gift in order to protect the giver's feelings). The present analysis shows that DOK questions are a similar phenomenon; the questioner is in a sense "lying" by "pretending" not to know something, with the intention of testing the other's competence.

To sum up, it appears that DOK questions may be quite prevalent in educational settings, and that Ian's responses to such questions are often inadequate. In contrast, in a family setting, Ian does better answering questions, most of which are non-DOK. Therefore, it seems important for educators to understand this tendency in HFA children, and to find alternatives to DOK questions as ways of measuring their competence in school subjects. Finally, it should be pointed

out that the methodology of CA is particularly effective in discerning patterns in the interaction of HFA children in a variety of settings. Whereas earlier attempts to characterize the discourse of these children often focused on coding behaviors that were deemed by the researchers to be inappropriate or odd, CA allows us to focus instead on the interactional work that the child's turns at talk are accomplishing, as sequences unfold over many turns. This approach offers greater insight into possible reasons for the child's style of discourse, and therefore more solid footing for developing ways to improve communication, both through therapeutic interventions for the child, and through adaptations in the speech of the child's conversational partners.

REFERENCES

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