#### 17. Echolalia as communicative strategy:

Fictive interaction in the speech of children with autism<sup>\*</sup>

Aline Dornelas and Esther Pascual

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We explore how fictive interaction (Pascual 2002, 2014), manifested as echolalia (i.e. verbatim or pseudo-verbatim reported speech), is successfully used by autistic children as compensatory strategy in conversation. We video-recorded four Brazilian autistic children between the ages of 4 and 12 in interactions with adults in weekly therapy sessions. We found that these autistic children do not use direct quotation to represent prior speech only, as in ordinary reported speech. Instead, they use direct speech to make mental contact with past (types of) communicative situations. Direct quotation is used fictively as a means of expressing needs, describing situations, and referring to people, animals, and events. These fictive quotations may reflect socio-communicative or socio-cultural knowledge, or experiences with prior specific interactions.

Keywords. echolalia, autism, metonymy, literal quotation

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#### 1. Introduction

Fictive interaction constructions, as in "an 'are you kidding me' look" or "an attitude of '*I'm better than you (and you, and you, too*)" (Pascual 2014: 75, 45) invariably express viewpoint. Indeed, fictive interaction more often than not involves assuming someone else's viewpoint or even more than one viewpoint simultaneously (Pascual 2006, 2014; Jarque and Pascual forth.). Autistic Spectrum Disorder (henceforth 'ASD') is characterized by a difficulty in adopting the perspective of others. It is thus interesting to explore whether autistic children use fictive interaction, and if so, how they do. In what follows, we show that in naturalistic conversation these children's use of fictive interaction is restricted to direct or loose quotation of prior speech. They produce fictive reported speech, based on prior interactions or prior type of interactions, as an adaptive strategy in communication.

Such an endeavor is important since most work on embedded fictive interaction has focused on creative one-time instances like "the knowledge that *YES, YOUAPPRECIATE ART*" or "*oh my God the pain* poetry" (Pascual 2014, p. 71). However, occurrences based on literal or loose quotation are crucial for better understanding this phenomenon. Examples are: "*How are you? Fine.* relationships" (based on the social ritual of greeting), "*the emperor has no clothes* experience" (arising from cultural knowledge of folk literature), and "*I Have a Dream* foundation" (stemming from the historic speech by Martin Luther King) (Pascual 2014, p. 66–67). Such instances present a direct relation to a factive source, thereby enabling us to get a closer look at the possible origins of the phenomenon of fictive interaction as such. Indeed, even though fictivity departs from a direct representation of reality (Talmy [1996] 2000), fictive usages emerge from their factive counterparts. Just as fictive motion and change stem from actual motion and change, so does fictive interaction have its roots in actual talk-in-interaction (Pascual 2006, p. 250; 2014, p. 1—25). It is therefore interesting to look at the language acquisition of autistic children, which is partly characterized by echoing prior speech, what is known as 'echolalia'.

#### 2. Echolalia

Echolalia, the repetition of the exact words from a prior speech event (Kanner 1943), constitutes a stage in the language development of all autistic children able to speak (Paccia and Curcio 1982). Echolalia may occur immediately after the production of the reproduced speech sequence (immediate echolalia), or after a short or long period of time (delayed echolalia). Both types may also be integrated with some old or novel information in speech production (mitigated echolalia) (Wetherby 1986). The great majority of echolalia in ASD childrens' naturalistic conversation seems to have a communicative function (Schuler 1979; Prizant and Duchan 1987; Rydell and Mirenda 1991; Fernandes 2003; Dobbinson et al. 2003; Sterponi and Shankey 2014). Echolalia may have a large range of different pragmatic functions, such as: changing conversational turns, providing new information, naming the interlocutor or a third person, or expressing needs (Prizant 1983; Prizant and Rydell 1984; Prizant and Duchan 1987).

Although some functions of echolalic speech in autism have been identified and described, they have to this date not been fully analyzed. Moreover, only a few studies on echolalia rely on valid naturalistic data analyzed qualitatively. Observing the language use of autistic children in therapy sessions is necessary, since these provide a real-life albeit controlled setting in which the children are constantly being challenged and encouraged to communicate. Also, the qualitative analysis of situated (semi-)spontaneous instances of echolalic speech is particularly revealing, since this is a pragmatic phenomenon that requires enough understanding of its context of occurrence, as well as the common ground shared by interlocutors.

We aim to demonstrate how fictive uses of reported speech are a way for autistic children to make mental contact with prior interactional experiences and effectively use them as an adaptive strategy to communicate. Also, we discuss how the gestural version of echolalic speech, namely mimetic gesture or echopraxia (Schneider 1938), can be equally used metonymically as a communicative strategy.

#### 3. Methodology

We videotaped four Brazilian children diagnosed with Autistic Spectrum Disorder in weekly therapy sessions with one psychologist and two speech pathologists. Each child was recorded in four sessions of about 30 to 50 minutes over a period of one month, resulting in a total of approximately 10 hours. The recordings took place at the *Centro de Atenção ao Desenvolvimento Integral* ('Attention Center for Integral Development'), a clinic for children with developmental difficulties in the city of Juiz de Fora, Brazil. The data gathering was approved by the Human Research Ethics Committee of the Federal University of Juiz de Fora. Parents, therapists and clinic owners had all previously signed an informed consent form.

The four children recorded, native speakers of Brazilian Portuguese, are a six-year-old female (Child 2) and three males of four, seven, and twelve years of age (Child 1, 3, and 4, respectively). Their level of autism was determined by a children's psychologist, using the Childhood Autism Rating Scale (CARS) (Schopler et al. 1986). According to this scale, Child 2, the only female, has a moderate degree of autism, whereas Children 1, 3, and 4 all have severe autism.

The interactional contexts of the sessions may be considered semispontaneous. The therapists selected a number of activities, including reading children books, playing computer games, solving puzzles, and playing with little dolls, puppets, and different kinds of toys. Children were generally allowed to choose the activities. The therapists based their work on a socio-cognitive approach to language development and tried to interpret the children's contributions as much as possible. On no occasion did they adapt the available activities to the present study or consult the researchers for advice.

For the data analysis, we first manually transcribed all examples previously selected from the recordings and specified for each one: the child who produced it, the time of occurrence, and all relevant contextual information. In some cases it was necessary to contact the parents and/or therapists for information needed to determine whether some instances were related to prior events unknown to us.

#### 4. Data analysis

In almost 10 hours of recordings we found 55 instances of fictive reported speech. The examples were divided into three categories according to their source, that is the kind of situation they echoed: (i) a socio-communicative event type, (ii) a socio-cultural event type, and (iii) a specific prior interaction.

The socio-communicative event type category includes formulae of social exchange, namely conventional expressions or gestures related to everyday communication in a given community (e.g. saying "*Alô*" when answering phone calls). The socio-cultural event type category includes pieces of speech that belong to speaker's encyclopaedic world knowledge (e.g. the

sounds made by given animals). The specific prior interaction(s) category involves quoting from a concrete prior communicative event, either one the utterer was involved in as an interlocutor (e.g. produced earlier in the ongoing conversation) or one experienced as a bystander (e.g. a line from a movie).

These are not distinct clear-cut categories, we hasten to say, but appear rather on a continuum with more prototypical and peripheral instances. The occurrences in the three categories may be verbal, non-verbal, or onomatopoetic. Most of them are linguistic units in Langacker's (1987) sense, namely groups of words that function as a whole, such as "I love you" or "Have a good day". We will now analyze some representative examples of each kind.

#### *1.1.1. The socio-communicative event type category*

Examples of this category represent formulae associated with given everyday social exchanges. These are similar to some examples of fictive interaction used in ordinary conversation, such as the nominal compounds "*Good night* kiss", "*Hi honey, I'm home* happiness", or "'*How-are-you-fine-.thank-you-and-you-fine-thank-you*' syndrome" (Pascual et al. 2013).

Examples (1) to (3) illustrate this category. In (1), therapist and child are talking about a book they are looking at. When the therapist turns to the next page, the child cuts her finger with the paper.

(1) Child 2: moderate autism (session 4/23':40"-23':50")

1 THERAPIST: *Machucou*↑ 'Are you hurt?'

2 CHILD: <u>Me desculpa.</u> 'Pardon me.'

In Brazilian Portuguese the expression "Me desculpa" ('Pardon me') is practically automatically produced when somebody unintentionally hurts somebody else or when people accidentally bump into each other in a crowded space like a bus or elevator. In (1), this politeness formula is not used to apologize, since the child is not the one who hurt the therapist but the one who got hurt. The expression is used metonymically to set up the whole event of unwillingly hurting another person as a means of expressing that she had gotten hurt as a result of the therapist's inadvertent action. Consider now a similar example involving gesture in (2), in which the child tries to open the door and leave the room.

- (2) Child 1: severe autism (session 2/2':24"-2':32")
  - 1 THERAPIST: *Que que você quer*↑ 'What do you want?'
  - 2 CHILD: ((waves his hand, with the palm turned towards himself))
  - 3 THERAPIST: *Tá na hora de ir embora não* 'It's not time to go!'

With the conventionalized gesture for farewell in Latin and other cultures, the child sets up the social scene of people saying goodbye to each other when leaving a location. With this gesture, he could get his message across, which was perfectly understood by the therapist, as is evident by her reaction ('It's not time to go!'). By turning the palm of his hand towards himself rather than towards his interlocutor, the boy shows his difficulty in adopting the point of view of others in reversal imitation. He enacts what he always sees when another person gestures goodbye to him.<sup>1</sup>

Examples (3) and (4) show more creative instances. In (3), therapist and child are talking about fictional characters in different pictures. The child thinks that the character in one of the pictures is startled by something.

- (3) Child 2: moderate autism (session 2/26':20"–26':40")
  - 1 THERAPIST: Quem é essa aí↑ E o que que ela está fazendo↑
    'Who is this? And what is she doing?'
  - 2 CHILD: *Está: <u>que susto</u>* 'She is: what a shock!'

<sup>&</sup>lt;sup>1</sup> Austistic children cannot imitate from the point of view of others, only from their own (Carpenter et al. 2005). For instance, if one taps the nose of an autistic child, the child will have difficulty in imitating this action by taping another person's nose. By contrast, if one taps one's own nose, autistic children are able to repeat the action themselves by taping their own nose.

Child 2's "Que susto!" ('What a shock!') presents what the character could say to express its state. This strategy involves the ability of taking the character's perspective and demonstrating rather than describing its state through a Portuguese expression commonly produced when in such a state. It should be noted that the child introduces this piece of speech with "Está" ('She is'), thereby embedding the enactment of the character's reaction in a sentential structure. Although Child 2 demonstrates a very simple and common expression, this instance does not seem to be purely echolalic. Indeed, "Que susto" was both introduced by "Está" ('She is') and, according to the parents and therapists, it was not heard by that child earlier in this session, nor was it produced by that character in this or another story.

Consider now (4), produced by the same child, in which therapist and child are working on a puzzle and talking about the process of finding the pieces. The child is looking for a piece with bees on it.

- (4) Child 2: moderate autism (session 1/27':56"–28':18")
  - 1 CHILD: <u>Abe::lhas!! Abe::lhas!!</u> 'Bees!! Bees!!' (The child finds the piece with the bees.)
  - 2 CHILD: <u>0::i!!</u> 'Hi!!'

When looking for the bee piece, the child calls the bees with a high pitch of her voice and using an intonation as though she was looking for a real group of individuals who could actually hear her and answer back. When she finally finds the piece, she changes to a lower pitch to enact the bees answering her fictive call ('Hi'). The child thus engages in a brief non-actual interaction with the animals portrayed in the puzzle piece. Rather than being presented in the third person as the topic of conversation, the two-dimensional animals become her fictive interlocutors. Strictly speaking, this occurrence is not echolalic, since it does not represent a specific dialogue the child encountered in the past. It is, however, not entirely creative either, since it naturally reproduces a common interactional routine (cf. Pascual 2014). Examples (3) and (4) show that this girl, Child 2, can communicate better than the other children in this study, as predictable from her more moderate degree of autism.

#### 1.1.2. The socio-cultural event type category

Instances of this category involve using certain fixed utterances and expressions in order to refer to individuals to whom these are generally ascribed (animals, fictional characters, real people) or to refer to or introduce something socio-culturally associated with them (concepts, events, scenes, places). Direct quotation arising from overall knowledge of the world also occurs in ordinary non-autistic conversation. Typically developing pre-school children often use the sound of an animal to refer to that animal (e.g. "*woof-woof*" for 'dog'), and both children and adults may refer to a type of individual by their stereotypical (fictive) verbal behavior (e.g. "*not-in-my-backyard*er", Pascual 2014, p. 20). Also, as Fauconnier (1981) points out, when a particular linguistic expression (e.g. "I do") consistently occurs in a specific symbolic act, this expression is conceptualized as a symbol of that act (i.e. wedding). This enables the use of the ritualized expression "I do", for instance, as the first element of a compound to refer to entities, events, or concepts related to the wedding day or the state of being married (e.g. "*I do* ring", "*I do* kiss", "*I do* fear", Pascual et al. 2013).

Consider (5), involving onomatopoeia and the imitation of a facial expression, in which the therapist shows the child a picture of a cockroach playing guitar and singing like a rock star.

- (5) Child 2: (session 2/32':57"-33':00")
  - 1 THERAPIST: Quem que é essa↑ 'Who is this?'

2 CHILD: *Béééé!!!* ((with her tongue outside her mouth and screaming))

This occurrence shows the theatrical enactment of a rock star's prototypical behavior on stage in order to name a character playing a rock star.<sup>2</sup> A type of communicative behavior socio-culturally ascribed to an individual of a given

<sup>&</sup>lt;sup>2</sup> See Brandt and Pascual (this volume) for a discussion on the important role of theatricality in fictive speech.

profession thus metonymically serves to refer to a character with that profession. Similarly, the children in our data commonly used sounds of animals fictively, as a means to either refer to them (e.g. "*Uri uri uri!!!*" for a parrot, Child 4: session 2/46:30–46:46) or to describe their behavior (e.g. 'O leão *urraw!*', 'The lion *urraw!*' for 'The lion is roaring', Child 4: session 1/21:26– 22:15).

In (6), therapist and child are looking at a book, with on the first page a new-born alligator by his mother, an adult alligator. It seems that the child thought the small alligator was being attacked by the big one. In order to describe the scene, she produced a fictive reported speech emerging from sociocultural knowledge.

#### (6) Child 2: (session 4/22':41"-22':46")

- 1. CHILD: <u>Soco::rro</u> 'Help!'
- 2. THERAPIST: Socorro↑ Por que↑ 'Help? Why?'
- 3 CHILD:: *Desculpa*. 'I'm sorry.'

As we saw in example (5), the child's speech involves a theatrical enactment. This time she screams, taking the voice of the baby alligator, depicting someone desperately asking for help. The cry "Help!" metonymically evokes a communicative scene of danger (not necessarily caused by an actor, as it may also be produced when drowning), in this case danger of a physical attack.

Example (7) below involves a literal quotation retrieved from cultural knowledge, which appears integrated in the ongoing conversation, giving rise to a novel form. The child is asked to put pictures of objects or people in their corresponding places in a bigger picture of a small city with a circus, church, houses, etc. The child chooses the picture of a man playing a bell.

- (7) Child 4: severe autism (session 3/25':18"–25':40")
  - 1 CHILD: *Sino* 'Bell!'
  - 2 THERAPIST: *O sino fica aonde*↑ 'Where is the bell supposed to be?'
  - 3 CHILD: <u>Respeitáve::l público (.) Com vocês o [melhor] tocador de</u> <u>sino de todos os tempo::s</u>
     'Ladies and gentlemen, boys and girls! With you (is) the best bell player of all times!'
  - 4 THERAPIST: *Ele trabalha no circo*↑ 'Does he work in the circus?'
  - 5 CHILD: Sim

'Yes!'

With the vocative "Respeitável público!", which is the prototypical introductory speech of Portuguese-speaking circus directors, Child 4 metonymically sets up the circus frame. Interestingly, he adds to this report the novel information about the bell player, thereby implying that this picture should be in the circus. This seems to be a structure with fixed parts (i.e. "Ladies and gentlemen, boys and girls! With you (is) the best  $\underline{X}$  of all times!") and a variable slot (i.e. "bell player"), a so-called "pivot schema" (Tomasello 2006).<sup>3</sup> One may also analyze this example as a grammatical blend (Fauconnier and Turner 1994, 2002, see also Pagán Cánovas and Turner this volume). Socio-cultural linguistic information from the circus frame is mapped onto and fused with information from the ongoing situation of communication. This results in a new emerging structure, which would have been different if the dialogue in the here-and-now did not involve a bell player.

Hence, even though Child 4 presents a severe degree of autism, his use of language is not entirely echolalic. He is able to integrate information from the ongoing conversation into the expression socio-culturally associated with the circus frame. This is therefore an instance of mitigated echolalia.

<sup>&</sup>lt;sup>3</sup> Typically developing children start using such schemas around 18 months of age. These constructions consist of the use of linguistic expressions based on experiential scenes with multiple word combination possibilities, such as "Where is the X?", "More X!" or "X gone".

#### *1.1.3.* The specific prior interaction category

Examples of this category are directly related to concrete previous instances of communication. This kind of fictive interaction is also found in non-autistic conversation, as in the dialogue from a comics strip below, in which the utterances in one conversational turn become nominal modifiers in the next turn (Pascual 2002, p. 203):

- (8) 1 A: All the good Halloween candies are gone!
  - 2 B: Maybe these aren't so bad.
  - 3 A: Now all the '*maybe these aren't so bad*' ones are gone.
  - 4 B: I didn't even like these when I was a kid!
  - 5 A: Now all the '*I didn't even like these when I was a kid*!' ones are gone.
  - 6 B: These are so gross!
  - 7 A: And now all the *'these are so gross'* ones are gone!<sup>4</sup>

In humor, the use of the specific prior interaction category obviously arises for different reasons and has a very different communicative goal than in autistic speech. In our data, children with autism often reproduce an utterance produced by the therapist earlier in the session as an adaptive strategy in order to say something related to that utterance. They may also quote their caregivers to explain situations experienced outside the therapy sessions, or

<sup>&</sup>lt;sup>4</sup> Cathy cartoon, by Cathy Wisewhite, The San Diego Union-Tribune, Oct. 31, 2002.

report the speech of entirely fictional characters from songs or movies as a means to name them or to describe a scene they are involved in.

Consider example (9), where therapist and child are playing the game 'Pop up, pirate!', where players insert plastic swords of different colors into a barrel with a puppet pirate inside until the pirate jumps up. As a way to practice color names, the therapist had told the child that he would get the swords only if he named them by the right color. Thus, almost every time she gives the child the sword, the therapist says "Take the sword" or "Take the (color) sword" (e.g. "Take the red sword!").

(9) Child 3: severe autism (session 1/10':57"–11':39")

1 THERAPIST: *Espada azul Muito bem* 'Blue sword! Very good!'

- 2 CHILD: *Toma a espada*↑ 'Take the sword?'
- 3 THERAPIST: Que cor é essa espada↑
  'What color is this sword?'
  [...]
  4 CHILD: Toma a espada

'Take the sword!'

In line 2, the child reproduces the exact words the therapist usually uses when giving him the sword in order to request the sword rather than give it to her. To do so, he uses an interrogative intonation instead of the imperative intonation from the therapist's original utterance. This prosodic change seems to involve the integration of a verbatim quotation (when the therapist gives the sword to the child) with the child's communicative goal in the the current situation (wanting the sword to be given to him). This may be explained by the child's improved intention reading ability, a development in viewpoint-taking. Obviously, this is still not the most effective way to make a request, but it is certainly more sophisticated than in similar examples without a viewpoint shift, as in (1). In line 4, the same child says "Take the sword" again to request the sword, but this time without changing the original intonation. This shows an oscillation between more and less adequate uses of reported speech by a child who is still in the process of functional language learning. Also, this child produces "Take the sword" only four turns after the psychologist last said it. This time, he had not provided the correct color but seemed to want to receive the sword all the same, therefore trying to evoke the desired scenario through an imperative, originally associated with getting it right.

Both cases of echolalia in (9) illustrate the phenomenon of resonance (Du Bois 2014), which is also common in ordinary non-autistic conversation. This is "the catalytic activation of affinities across utterances" (Du Bois and Giora 2014, p. 351) by creating a parallelism between linguistic elements in the discursive process, only available to the participants of the ongoing conversation (ibid.). In a study on autistic adolescents, Du Bois et al. (2014) show how these individuals are able to sustain conversational interaction using the parallelism of prior utterances in discourse. Treating autistic language use in terms of resonance allows us to show how engaged in interaction they can actually be and how communicatively effective their echolalic speech most often is.

In the next example, therapist and child are playing the game 'Crosswords'. The therapist is trying to teach Child 4 how to write some words. The boy only writes the initials of political parties and the therapist plays along with his game.

- (10) Child 4: severe autism (session 3/14':40"-15':03")
  - 1 THERAPIST: Vou botar outro 'P'. Vamos ver se você lembra de outro partido.

'I'm going to put another 'P'. Let's see if you remember another political party name.'

(The child completes the 'P' with an 'R')

2 CHILD: **PR** 

- 3 THERAPIST: *O que que é PR*↑ 'What is PR?'
- 4 CHILD: <u>Representa a sua voz (.) é a sua vez</u> 'It represents your voice. It is your time.'
- 5 THERAPIST: É partido também 'It's a political party too.'

In this piece of dialogue, Child 4 uses the quotation "Representa a sua voz! É a sua vez!" ('It represents your voice! It is your time!') in order to communicate that "PR" stands for a political party. This utterance was a standard line that a group of parties used at the 2012 national election campaign in Brazil. In (10) the child seems to have extracted a piece of discourse from its specific interactional frame in order to refer to a party he associates with this utterance or to the entire category of political parties, as the therapist indeed interpreted it.

In (11), the therapist points to the picture of a few characters from a cartoon that the boy is very familiar with and asks him to say their names.

(11) Child 3: severe autism (session 4/47':06"–47':13")

1 THERAPIST: Quem é esse? 'Who is this?'

2 CHILD: <u>Ladrilhar</u> 'To pave it!'

3 THERAPIST ((looks at the camera)):
Ah É a música Ele associou o menino à música.
'Ah! It is the song! He associated the boy with the song.'

Here the child reports a piece of prior discourse in order to refer to an element in the scenario in which it had been produced. In the animated film for children referred to, a woman sings a song to a little boy to put him to sleep. The verb "ladrilhar" ("to pave") is prominent in this song, since it appears at the beginning, it rhymes with verbs at the end of every verse, and its last syllable is prolonged ("*ladrilha*....*r*!"). This is also the part of the song that Brazilian children are most familiar with. In order to name the young character to whom this song is sung, its addressee, the child reproduces part of the song. This is considered to be functional delayed echolalia, because apparently a considerable period of time had passed since the last time the boy had listened to that song. The therapist's reaction, explaining to the camera why the child used this word in order to refer to the character, confirms how effective his strategy was. The fact that an explanation was considered necessary naturally also indicates that it is based on common ground of prior experiences shared by child and therapist, which may escape others. A similar case is that of Child 4 saying "Quasimodo! Onde ele se meteu?" ('Quasimodo! Where is he?', session 3/58':35"-58':59") in order to refer to the character of a priest who uttered these words in the Disney movie 'The hunchback of Notre Dame'.

Example (12) involves a paraphrase of a piece of speech from a scene observed by the child, which is slightly more creative than the aforementioned examples from this category. Therapist and child are looking at and talking about a Snow White picture book. In one picture, Snow White is running away to the forest after talking to the hunter.

(12) Child 2: moderate autism (session 
$$3/6$$
':41"-6':50")

### 1 THERAPIST: Quem levou ela na floresta↑ 'Who took her to the forest?'

# 2 CHILD: <u>Quer fugir</u>↑ (.) <u>Quer fugir, Branca de Neve</u>↑ 'Do you want to run away? Do you want to run away, Snow White?'

It is worth pointing out that the enunciation in italics is not literally quoted from the book itself, the movie that this book is based on, or the therapist's earlier narration of the story. In the Disney movie, which the child has seen, the hunter lets Snow White run away saying (in the Portuguese dubbed version that the child is familiar with): "Vá! Fuja, menina! Vá! Para bem longe!" ('Go! Run away, girl! Go! Far away!'). Thus, the child paraphrases the hunter's words to Snow White at that point in the story in order to refer to him. This seems to indicate a development of functional echolalia and it is a step forward to more creative speech, also as illustrated in the next example, by the same child.

In (13) an interactional pattern from the Snow White Disney movie is used as a schema to create a novel dialogue, as a means to answer a question. Therapist and child are looking at the Snow White book and talking about the pictures in it. One of the pictures shows Snow White feeding birds.

(13) Child 2: moderate autism (session 3/4':38"-4':51")

# 1 THERAPIST: O que que o passarinho estava fazendo com o milho↑

'What was the little bird doing with the corn?'

## 2 CHILD: <u>O que está comendo↑ O milho↓</u> 'What are you eating? Corn.'

3 THERAPIST: Ah! O que você está comendo o milho↑ Ele está comendo o milho mesmo
 'Ah! "What are you eating? Corn!"? It is eating corn, indeed!'

The piece of dialogue in italics is entirely constructed, as it does not reproduce any dialogue in the book, the movie on which the book is based, or the therapist's prior speech. What this interaction seems to imitate is Snow White talking to birds in the Disney movie, which this child has seen. It should be emphasized, however, that the content of the dialogue in the Snow White scene differs from that in the child's. The first time Snow White talks to the birds in the Brazilian Portuguese dubbed version, she asks them: "Sabem de um segredo? Não irão contar?" ('Do you know a secret? Won't you tell it?'), to which the birds respond by chirping. The second time Snow White asks them "O que fazem quando levam susto?" ('What do you do when you are frightened?') and the birds chirp a song, to which Snow White exclaims "Ah! Cantam uma canção!" ('Ah! You sing a song!'), and the birds reply affirmatively by chirping again. In (13) the child is thus reproducing the interactional pattern of a question by a human and an answer by the birds. Note that the child could have answered the therapist's question "What was the bird doing to the corn?" merely by saying "eating", which is a verb the child has access to. Instead, she inserted that verb in a whole constructed verbal exchange with the birds, thereby turning the topic of conversation into a conversational participant, by addressing the birds and subsequently speaking for them.

#### 5. Discussion

The four children recorded for this study produced different instances of fictive reported speech, which could be identified as belonging to three different categories. Table 1 shows the distribution of occurrences found in the data between the three categories and four children, with construction types and total construction tokens noted for each – an important distinction for measuring the children's creativity. Child 1, for instance, produced one construction type from the socio-communicative category (i.e. waving his hand, with the palm turned towards himself, as in (2)), but he repeated this, with the same form and function, six times in the recordings.

Child			Category			Total
No.	Age	Degree of ASD	Socio- communic.	Socio- cul- tural	Prior interac- tion(s)	per child
1	4	Severe	1 type (6 tokens)	0 type (0 token)	1 type (2 tokens)	2 types (8 tokens)

2	6	Moderate	5 types (5 tokens)	2 types (3 tokens)	6 types (6 tokens)	13 types (14 to- kens)
3	7	Severe	1 type (1 token)	1 type (1 token)	7 types (25 tokens)	9 types (27 to- kens)
4	12	Severe	0 type (0 token)	3 types (3 tokens)	3 types (3 tokens)	6 types (6 tokens)
Total			7 types (12 tokens)	6 types (7 tokens)	17 types (36 tokens)	30 types (55 to- kens)

Similarly, although Child 3 produced the most tokens (27), these all fall into only 9 construction types, all of them being fully echolalic. His fictive reported speech is thus very non-creative. By contrast, Child 2, the only one with moderate autism, produced 13 different types, 6 of which are not echolalic but illustrate the use of reported speech as a schema. Child 4, the oldest one, produced only 6 types, of which only one is of mitigated echolalia. This points to the beginning of more creative speech, probably related to the severity of his autistic condition. Child 1 was the least productive of the four, with only two kinds produced, which is consistent with his severe autism and very young age (4 years old).

Even though this was a relatively small dataset, it is further interesting to note the number of occurrences per category. The socio-communicative and cultural event categories were instantiated in our data by 7 and 6 constructions types respectively, while the specific prior interaction category became manifested in as many as 17 construction types and 36 tokens, more than twice the amount of each of the other two categories. Most of the 36 specific prior communication category occurrences are from interactions directly experienced by the children on TV, in cartoons, or movies. This reflects their difficulty in properly engaging in social interactions with interlocutors, which characterizes autism. Moreover, the fact that specific prior interaction expressions seem to be more useful for autistic children than conventionalized ones from social events and cultural knowledge shows these children's need to anchor their speech in previous concrete instances of talk-in-interaction rather than creating new utterances based on general, social, and/or cultural linguistic knowledge.

Indeed, in the first echolalic stage of their communicative development autistic children seem to need a basis, a concrete communicative scenario they can reproduce or draw upon to support their discourse. They select a segment from this specific prior interaction or a familiar scenario in order to metonymically refer to the whole scene (or an element related to it) in a new interaction. Later, as they experience more and more interactional events, they seem to be able to use that strategy as a pattern. At first, parts of the original speech event, still anchored in the specific base scene, are reported and integrated with new information (as in (7) and (9)). Then, paraphrases of speech are produced (12), and an altogether new interaction is created in order to provide information in the ongoing conversation (13). These observations are agreeable with the argument that echolalia is a stage of language development of speaking autistic children (see section 2). A remaining question is why autistic children use fictive speech at all, even when they have access to the right vocabulary to refer to or describe a given situation or cognitive state. Why talk *for* or *to* characters, people, or animals instead of just talking *about* them? The answer may lie in their neurological and cognitive structure. Autistic children seem to have a better memory for events – including communicative ones – performed by others than by themselves (Millward et al. 2000). Also, they show difficulties in changing viewpoints in imitation (Carpenter et al. 2005), and in inhibitory control (Courchesne and Pierce 2005), which affects their language use. Since functional repetitive speech and gesture allow autistic children to successfully communicate with their interlocutors, their schematic conversation style is fundamentally based on this strategy. Moreover, when they are finally able to produce more creative, non-echolalic discourse, they use the reported speech pattern in order to engage in conversation.

Although the way autistic children use fictive interaction may seem atypical, it does show striking similarities with its use in another kind of language pathology, aphasia, an acquired neurocognitive condition that affects language production and/or reception. Indeed, non-fluent aphasic speech also shows the use of fictive reported speech as an adaptation strategy (Pascual and Versluis 2006; Versluis and Kleppa [2008] this volume). Both speakers with autism and aphasia use quotations metonymically in order to evoke the entire quoted scenario, as well as to refer to an individual or event related to it. An example is a Dutch speaker with Broca's aphasia saying "test test test" ('testing testing') in order to ask his interlocutor whether she had checked that her tape-recorder was working (Versluis and Kleppa [2008] this volume). This is similar to an instance in our data of an autistic child saying "Alô! Alô!" (used when answering phone calls in Brazil) in order to ask the therapist to play with a toy telephone. In a different study (Bánréti 2010), most subjects with aphasia used fictive direct speech (e.g. "My Godness! How *much!*") to describe the thoughts of a woman depicted on a weight scale and looking unpleasantly surprised at the number on the scale. A similar example from our autistic data is saying "Que susto!" ('What a shock!!') to describe a character's startled state in a picture in (3). Speakers who do not suffer from any speech pathology may naturally also describe emotions and attitudes through fictive speech ascribed to the experiencer, but this appears to happen less frequently (Bánréti 2010). Aphasic speakers also use onomatopoeia as referential strategy, as when a speaker said "krrrrk" to describe someone trying to break through a locked door (Pascual and Versluis 2006; Versluis and Kleppa [2008] this volume). Some onomatopoeias produced by autistic children for similar purposes also occur in our data, for instance "Béééé!!!?" to refer to a rock star (example 5) and sounds of animals, like the use of "Uri uri uri!!!" to refer to a parrot (Child 4: session 2/46'30"-46'46"). These onomatopoeias in the presented cases are used as adaptive strategy rather than for humorous or argumentative purposes.

As was pointed out in section 4 above, the aforementioned three categories of fictive reported speech are also used in ordinary conversation. A few instances of these categories are creative, that is, not entirely echolalic. The conversation frame is creatively used in many situations in ordinary language, both as fictive speech and as non-information-seeking questions, as shown elsewhere in this volume. This is comparable to autistic children saying *"Bees? Hi!"* in order to say that the speaker is looking for the bee piece of the puzzle and finally finds it (4) and *"What are you eating? Corn!"* to answer a question on what the bird is doing with the corn (13). Thus, both autistic and non-impaired speakers alike use face-to-face interaction as a pattern to achieve their communicative goals.

#### 6. Final Remarks

It has been argued (Tannen 1986, 1989) that direct speech is rarely a verbatim reproduction of previous discourse. Rather, it typically is used as a selective and not entirely uncreative demonstration of prior speech (Clark and Gerrig 1990). Also, direct speech may be used, among other things, to refer to or characterize a feeling, attitude, or situation related or relatable to the communicative event represented (Pascual 2002, 2006, 2014). Hence, direct speech is not an objective representation of prior discourse, but – even when it seems to have an echolalic value – carries information related or relatable to a prior event for the purposes of ongoing discourse.

In this chapter we showed how autistic children use reported speech as a compensatory strategy in conversation. They use literal quotation to metonymically set up different aspects of the communicative scenario (re)enacted in order to adjust to the interactional needs of the here-and-now. Like other instances of intra-sentential fictive interaction, the ones discussed here provide further evidence that linguistic connotation is as important as denotation (Fauconnier [1985] 1994; Lakoff 1987; Langacker 1987, 1991). The pattern of metonymically evoking frames, individuals, and events through reported speech also seems to be used as a basis for a more original discourse construction. That is, a conversational structure may be used as the basis for more creative speech, as in (6), where a circus director's introduction of a bell player serves to set up the entire circus frame, and in (13), where an imagined conversation with birds serves to answer the question on what they are doing.

To conclude, individuals with autism seem to compensate for their difficulties in cognition, social communication, and language, by strategically using prior conversational experiences in new face-to-face interactions. The instances discussed show how fictive interaction stems from, and is related to, its factual counterpart. The results further suggest that the strategic use of the conversation frame in general and reported speech in particular is fundamental for language development and communicative competence in autism.

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