ABSTRACT

Lynne E. Hewitt, Advisor

The purpose of this case study was to explore the conversational repair responses of 3 adolescents with autism spectrum disorder (ASD) to communication breakdowns that occurred naturally in conversations. Adolescents with ASD are at the threshold of entry into independent living in society where their ability to manage communication breakdowns is essential. Of equal interest to the purposes of this study was describing how individuals with ASD were similar or different from each other in their sources of communication breakdowns, types of clarification requests, and repair responses used. The study used an embedded multiple-case study design to identify the sources of breakdowns, types of clarification requests made by the listener, and the types of repair responses used. Language samples were elicited across two conversational contexts (an Adult-Client context and a Peer with ASD context). A compiled coding system based on coding systems in the existing literature, pilot study findings, and those that emerged from the data was used to analyze the language samples.

Results showed that all 3 participants exhibited and repaired breakdowns. Although similarities existed between the 3 participants in the types of repair responses used, they differed from each other in the variety of repair strategies used to resolve the breakdowns. Furthermore, the use of a compiled coding system enabled the identification of a pattern of strengths and weaknesses for each participant when faced with a communication breakdown. Investigations of linguistic pragmatics in autism are needed because they will generate information essential in designing effective assessments, interventions and support. The findings of this study are
discussed with respect to prior theory and research, and its implications for the clinical and research fields.
To George Joseph, my loving husband whose patience, support, and love, got me through the roughest moments of this dissertation.
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CHAPTER 1

Introduction

Autism spectrum disorders (ASDs) or pervasive developmental disorders (PDDs) are used synonymously to refer to a wide spectrum of disorders characterized by three defining features: impairments in social interaction, impairments in verbal and nonverbal modes of communication, and an unusually restricted repertoire of activities and interests (American Psychiatric Association, 1994). Current conceptualizations of the syndrome of autism describe the social and communication impairments as the primary diagnostic features.


Although there is a wide heterogeneity in the manifestation of the language impairments seen in individuals with autism (see Kjelgaard & Tager-Flusberg, 2001 for a critical review); their deficits in pragmatic language remain a consistent diagnostic finding (Volden, 2004). Some of the preverbal pragmatic difficulties reported in autism include a failure to orient to socially relevant stimuli (Klin, 1991; Osterling & Dawson, 1994), poor eye contact, and a paucity of proto-declarative behaviors – that is, pointing to an object for purposes of sharing
interest alone with another person, as versus to *proto-imperative* behaviors – that is, pointing to an object for purposes of attaining one’s requests (Baron-Cohen, 1989; Wetherby & Prutting, 1984). Some of the pragmatic deficits reported in conversation include an inability to initiate conversations (Stone & Caro-Martinez, 1990) and manage ongoing discourse (Baltaxe, 1977; Fine, Bartocucci, Szatmari, & Ginsberg, 1994; Tager-Flusberg & Anderson, 1991), difficulty in social reciprocity – appropriately initiating and responding to bids of interactions and taking turns appropriately (Wetherby et al., 2000), difficulty in taking the listener’s perspective (Tager-Flusberg, 1996) or inferring the mental states of others – that is, recognizing others as *intentional* human beings (Baron-Cohen, 2000; Tager-Flusberg, 1999), and poor narrative ability – inadequate use of referencing, cohesive devices, mental state or emotional terms, and making appropriate inferences of the goal-directed behaviors of the protagonists (Tager-Flusberg & Sullivan, 1995).

Given the extensive research done in examining the pragmatic competence in individuals with autism; relatively few studies have explored their conversational repair mechanisms in their conversational interactions (Keen, 2005; Volden, 2004). Conversational repair behaviors are one of the early emerging pragmatic behaviors that enable speakers to effectively monitor and identify breakdowns, and accordingly adjust their ongoing discourse to accommodate the needs of their listeners (Brinton, Fujiki, Loeb, & Winkler, 1986a). This ability is primarily dependent on the development of three significant behaviors – all of which are reported to be impaired in autism: *communicative intentionality* – the ability to understand the intentional nature of language; *perspective taking* – the ability to identify the listener’s perspective; and *communicative means* – the ability to adopt conventional behaviors to communicate one’s intent effectively (Alexander, Wetherby, & Prizant, 1997).
Although individuals with ASD have socio-communicative deficits that may hinder their ability to identify and manage breakdowns, the review of the literature suggests that they do identify breakdowns and use repair behaviors (Alexander et al., 1997; Dobbinson, Perkins, & Boucher, 1998; Geller, 1998; Keen, 2005; Meadan, Halle, Watkins, & Chadsey, 2006; Paul & Cohen, 1984; Volden, 2004). What is different though is the type of repair responses adopted to resolve these breakdowns. The responses used were either unconventional (Keen, 2003, 2005; Dobbinson et al., 1998), qualitatively different from their language-impaired peers (Alexander et al., 1997; Paul & Cohen, 1984), or characteristic of repair behaviors seen in younger typically developing children (Philip & Hewitt, 2006). Further research is warranted to explore the sources of breakdowns, types of clarification requests posed by listeners to speakers with ASD, and the variety of repair responses used. No study to date has looked at these three elements together in describing the nature of repair responses seen in individuals with ASD. Furthermore, the existing coding systems may need to be revised to account for the subtle differences seen in this clinical population (Philip & Hewitt, 2006).

A careful review of the methods used to elicit conversational repair in the clinical population indicate problems with the ecological validity of the findings, and the methodological challenges encountered in conducting language research in autism. A preferred method of eliciting conversational repair in individuals with language impairments is the use of stacked or recursive requests for clarification, which enable examiners to elicit a wide variety of repair behaviors (Brinton & Fujiki, 1996; Brinton, Fujiki, Loeb, & Winkler, 1986a; Brinton, Fujiki, Winkler, & Loeb, 1986b; Most, 2002; Volden, 2004). Because clarification requests in verbal language are the only means of identifying communication breakdowns in conversations, they play an important role in describing the nature of contingent repair responses. Typically, stacked
requests are *temporally* sequenced in the conversation task by the examiner, and are not based on the content of the message. Researchers who use this method argue that individuals with language impairments do not suspect that the breakdowns are simulated (Volden, 2004). However, the elicited repair responses may be influenced by the unnaturalness associated with the simulated requests as versus to authentic clarification requests. Given the socio-communicative impairments reported in autism, analyzing spontaneous conversational samples, and identifying the breakdowns and repairs is a naturalistic alternative with greater external validity.

Parallel to the limitations of stacked clarification requests in conversational repair research; there are also unique methodological challenges in conducting language research in autism. Most studies have compared individuals with autism to either language-matched typically developing peers (Alexander et al., 1997; Volden, 2004) or mentally challenged individuals matched on non-verbal mental age (Paul & Cohen, 1984). Because of the wide heterogeneity that exists within autism, using measures of language or IQ matching pose particular difficulty in finding accurate comparison groups and generalizing the findings to the larger population (Tager-Flusberg, 2004). An alternative strategy would be to examine the repair behaviors within the disorder itself, with individuals with ASD serving as natural comparison groups. In addition, such a strategy will inform researchers and practitioners about the similarities and individual differences, if any, which exist in the repair behaviors in autism. Investigations of linguistic pragmatics in autism are needed because they will generate information essential in designing effective assessments, interventions and support.

The purpose of this research study is to explore the conversational repair responses of adolescents with autism spectrum disorder (ASD) to communication breakdowns that occur
naturally in conversations. Adolescents with ASD are at the threshold of entry into independent living in society where their ability to manage communication breakdowns is essential. Of equal interest to the purposes of this study is describing how individuals with ASD are similar or different from each other in their sources of communication breakdowns, types of clarification requests made by their listeners, and the repair responses used to resolve the breakdowns. In the next few chapters, I will describe the conceptual framework for the study (Chapter 2: Review of the literature), the methodology used (Chapter 3: Methods), the results obtained (Chapter 4: Results), and the discussion of the findings and its relevance to autism (Chapter 5: Discussion).
CHAPTER 2
Review of the Literature

Conversational Repair

A successful conversation is one in which the participants interact with each other, provide adequate and unambiguous information, and identify and resolve breakdowns as they occur in conversations. This ability to identify and repair breakdowns is defined as conversational repair. Schegloff, Jefferson, and Sacks (1977) broadly classified conversational repair mechanisms into self-initiated repairs and other-initiated repairs based on who initiated the repair sequence and who provided the clarification. In self-initiated repairs, the speaker identifies the source of breakdown and accordingly repairs it by modifying the content of the message. In other-initiated repairs, the listener requests for clarification and the speaker then repairs the breakdown.

Other-initiated repairs are of particular interest to researchers as they are identifiable by requests for clarification posed by the listener. In addition, they also provide an excellent resource to assess the nature of the interaction between the conversational partners and the subsequent breakdowns and repairs that occur within that conversational context. In contrast, self-initiated repairs are not preceded by an overt speech act, thereby making it difficult at times to examine the source of breakdown and the contingent repair behavior.

Corsaro (1977) identified clarification requests as serving different pragmatic functions in adult-child interactions. Primarily clarification requests made by the adults were used to indicate communicative failures that occurred due to inaudibility or a lack of comprehension of the child’s utterance. However, he also observed that they functioned as conversational fillers, or as markers to indicate incredulity or acknowledgment of the child’s utterance. In contrast, Garvey
Garvey (1977) in her study of contingent queries in preschoolers illustrated how different clarification requests elicited different kinds of repair responses. For example, nonspecific requests or neutral requests such as “huh?”, “what?” generally elicited a repetition of the original utterance by the speaker. Similar findings have also been reported in the literature (Anselmi, Tomasello, & Acunzo, 1986; Brinton & Fujiki, 1989; Corsaro, 1977; Gallagher, 1981; Konefal & Fokes, 1984). In contrast, specific requests (specific request for repetition, specific request for specification, specific request for confirmation) which queried a specific component of the speaker’s utterance usually elicited a repetition of a specific component in the speaker’s original utterance, or required the speaker to provide specific additional information, or a confirmatory response (“yes” or “no” response) to resolve the breakdowns. The findings indicate the interdependent relationship that exists between clarification requests and repair responses, and
how that relationship influences the emergence of certain repair behaviors. This information provides a rationale as to why certain types of clarification requests are employed in conversational repair research to elicit specific kinds of repair behaviors. Table 1 illustrates the different kinds of clarification requests and the contingent repair responses.
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<td>“Pardon,” “Say again.”</td>
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<td>2. Specific requests for repetition</td>
<td>Repetition of a specific component in the speaker’s original utterance,</td>
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<td>E.g. “He did what?”</td>
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<td>3. Specific requests for specification (similar to specific requests for repetition but said with a downward intonation)</td>
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<td>4. Requests for confirmation</td>
<td>Affirmation or negation, and may at times are accompanied by elaboration.</td>
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<td>E.g. “Did he?”</td>
<td></td>
</tr>
<tr>
<td>5. Direct requests (Exact definition of a component in a message). E.g. “What does endothermic mean?”</td>
<td>Elaboration or additional information.</td>
</tr>
<tr>
<td>6. Relevance requests</td>
<td>Elaboration or additional information.</td>
</tr>
<tr>
<td>E.g. “What relevance does that have to do with what you are saying now?”</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Adapted from Garvey, 1977; Brinton & Fujiki, 1989.
Over the past few decades, several researchers have provided operational definitions of the different kinds of repair responses they observed in typically developing children and in individuals with language impairments. In order to better understand these research findings, it becomes necessary to discuss these operational definitions. Table 2 illustrates the different repair response categories and their respective definitions.
Table 2

*Repair Response Categories and Operational Definitions*

<table>
<thead>
<tr>
<th>Repair response</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Repetition</td>
<td>Repeats all or part of original utterance (Gallagher, 1977; Brinton et al., 1986a)</td>
</tr>
</tbody>
</table>
| 2. Revision      | Use of alternate labels or syntactic structure without adding information or meaning. (Gallagher, 1977; Brinton et al., 1986a). Subcategories:  
  - Phonetic change: Phonetic form changed from original utterance.  
  - Constituent elaboration: Added morphemes in revised utterance  
  - Constituent reduction: Reduced morphemes in revised utterance.  
  - Constituent substitution: Substituted morphemes in revised utterance. (Gallagher, 1977) |
| 3. Addition      | Adds specific information to original utterance (Brinton et al., 1986a; Most 2002). |
| 4. Expansion     | Expands original sentence into two new sentences (Most, 2002). |
| 5. Cue           | Provides background information; formulations --talking about repairing the breakdown (Brinton et al., 1986a). |
| 6. Simplification| Simplifies sentence using simpler or more common words (Most, 2002). |
| 7. Keyword       | Emphasizes an important word in the utterance (Most, 2002). |
| 8. Explanation   | Explains specific terms in utterance (Most, 2002). |
| 9. Inappropriate | Provides unrelated utterances; no response; or discontinues discourse (Gallagher, 1977; Brinton et al., 1986b; Most 2002). |
Clarification requests place unique demands on the speaker when a communication breakdown occurs in the conversation (see Ora, 2003 for review). Neutral requests or non-specific requests for repetition are particularly difficult for speakers, as they require speakers to identify the source of breakdown and adopt appropriate repair behaviors to fix the breakdown. In contrast, requests for confirmation or specific requests for repetition are the least demanding on speakers as they necessitate only a repetition of the previous utterance. In addition, specific queries signal to speakers what information is required of them to resolve the breakdown. Spilton and Lee (1977), in their study examining the conversational repair responses of 4-year olds, reported that specific queries were significantly better at obtaining adaptive responses (repair responses that resolved breakdowns) than general or neutral queries. This interdependent nature of clarification requests and types of repair behaviors has been studied extensively in the developmental and clinical literature, each of which is described in detail below.

Conversational Repair in Typically Developing Children

Intentional communication parallels the emergence and development of conversational repair in typically developing children (Alexander et al., 1997). At the preverbal stage of development, children adopt non-verbal behaviors, such as gestures and vocalizations, to repair breakdowns (Alexander et al., 1997; Golinkoff, 1986). However, as they progress from preverbal communication to verbal communication, they start using more conventional symbolic behaviors to repair conversational breakdowns (Alexander et al., 1997).

Studies examining the developmental trajectory of conversational repair in typically developing children can be broadly classified into: studies examining the production of clarification requests, and those examining the repair responses to requests for clarification (Brinton & Fujiki, 1989). There is a paucity of research studies examining the production of
clarification requests primarily because they are harder to elicit in adult-child experimental contexts. Furthermore, children tend to ignore the communication breakdowns that occur in their interactions with adults, as they do not expect adults to produce errors (Brinton & Fujiki, 1989; Gallagher, 1981).

Johnson (as cited in Brinton & Fujiki, 1989) examined mother-child dyadic interactions to identify the presence of clarification requests in the speech produced by eight children from 18 months to 3 years. Of the different types of clarification requests produced, children at 2; 2 years (Brown’s stage I) were more likely to use neutral requests than other clarification request types. In contrast, Gallagher (1981) found that clarification requests were in general less frequently produced by children in Brown’s Stages I, II, and III. In addition, requests for confirmation were more frequently occurring than either neutral or specific requests. Ora (2003) also reported similar findings in her study examining the spontaneous bedtime conversations of children with their peers. Based on her findings, neutral requests and requests for confirmation were the most frequently occurring, followed by a limited use of specific requests or requests for elaboration. She also identified several sequences of recursive clarification requests produced by the children, which were not reported in the developmental literature before. These findings do illustrate the developing pragmatic competence of children in engaging and managing ongoing discourse with adults and their peers.

Unlike the limited findings of the production of clarification requests in children; studies investigating the nature of repair responses to clarification requests have been extensive. The majority of research findings indicate that children as young as 2 years are able to identify and repair breakdowns (Anselmi et al., 1986; Gallagher, 1977, 1981; Garvey, 1977; Konefal & Fokes, 1984; Levy, 1999; Shatz & O’Reilly, 1990). The findings also illustrate developmental
differences in the kinds of repair behaviors used, with older children adopting a wider range of repair responses to resolve the breakdowns. Some of the reported findings include: a higher preponderance of repetition responses in younger children than in older children (Alexander et al., 1997, Konefal & Fokes, 1984); specific differences in the types of revisions used, with older children (Stage III) using more constituent elaboration, constituent reduction, and constituent substitution types of revisions as opposed to phonetic revisions, which were more characteristic of Stage I younger children (Gallagher, 1977, 1981; Scherer & Coggins, 1982).

Differences were also noted in the manner in which younger children responded to different types of clarification requests. Peterson, Danner, and Flavell (1972) investigated the developmental changes in children’s response to three different types of cues indicating a communicative failure. The results revealed that both 4-year olds and 7-year olds had difficulty responding when facial cues indicated a breakdown. However, 4-year olds had more difficulty responding to implicit requests, such as “I don’t understand” than 7-year olds. The authors speculated that the inability of 4-year olds to respond to implicit requests did not indicate that they were unaware of the demands placed on them, but that they were unable to successfully identify what additional information had to be provided to fix the breakdown. The findings do illustrate that although conversational repair is an early emerging pragmatic skill, developmental differences exist in the manner in which breakdowns are resolved. In addition, older children may have had more communicative opportunities that enabled them to effectively identify their listeners’ needs and appropriately respond to implicit requests indicating breakdowns.

With reference to eliciting different types of repair responses, a preferred method adopted by researchers is the use of stacked or recursive clarification requests (Brinton et al., 1986a). These stacked requests (a sequence of three neutral requests – “uh,” “what?”; “I didn’t
understand.”) enable researchers to examine how children persist in conveying their intent over several clarification sequences, and how they adopt different repair responses to resolve the breakdowns. Brinton and her colleagues in their study examining the repair behaviors of children (aged 2; 7 to 9; 10 years) to stacked requests of clarification found that older children persist and attempt to respond to all three requests in a stacked sequence whereas younger children only respond to the first request for clarification. Differences were also noted in the types of repair strategies used. Older subjects (7 to 9 years) used additional information to repair the breakdowns. The use of cues (defining lexical items, providing background information, or discussing the source of communicative breakdown in the conversation) was characteristic of only 9-year old subjects. Despite the higher frequency of repetitions and inappropriate response behaviors in younger children, the study illustrated how children as young as 3 years were capable of identifying and repairing breakdowns.

Several research studies have also examined how conversational partners influence the type of repair responses used by typically developing children (Tomasello, Conti-Ramsden, & Ewert, 1990, Tomasello, Farrar, & Dines, 1984). Tomasello and his colleagues in their study examining conversations of mothers and fathers with their children identified differences in the frequency of breakdowns and the types of clarification requests made by the adult listener. A higher occurrence of breakdowns existed in the interactions of children with their fathers than with their mothers. In addition, fathers used more general queries such as neutral requests for clarification, unlike mothers who persisted in clarifying breakdowns by asking more specific queries. This in turn resulted in a higher occurrence of repetitions as a repair response to their father’s queries, and the occurrence of elaboration or additional information as a repair response to their mother’s queries. Prior research findings have indicated how different clarification

Tomasello and his colleagues also found differences in the way Brown’s Stage I children (MLU =1.7; mean age =24 months) and Brown’s Stage II children (MLU=2.8; mean age =25.9 months) revised their utterances for familiar and unfamiliar listeners (Tomasello et al., 1984). Stage I children’s revisions contained more partial repetitions of their original utterances (reductions) when responding to their mother’s requests for clarification (familiar listener); unlike the presence of substitution and elaboration of original utterances when responding to the experimenter’s requests for clarification (unfamiliar listener). These differences were not observed in Stage II children who provided the required information needed to fix the breakdown, irrespective of who requested the clarification.

The findings in the developmental literature illustrate that conversational repair is an early emerging pragmatic behavior that develops parallel to intentional communication and cognitive and linguistic development. The literature also reveals the developmental trajectory in the manifestation of this behavior in typically developing children. With the recent interest in pragmatics, practitioners and researchers are particularly interested in examining how individuals with communicative impairments identify and repair communication breakdowns, and how their strategies may be similar or different from their age, language, or IQ matched peers. Following is a brief description of the studies done in the clinical literature examining conversational repair mechanisms.

Conversational Repair in Individuals with Language Impairments

Review of the literature shows that there are differences in the ways individuals with communicative difficulties recognize and repair communicative breakdowns. A brief review of
the research studies done in individuals with language impairments, hearing impairment, mental retardation and autism are discussed below.

**Individuals with Language Impairment.** Gallagher and Darnton (1978) investigated the revision behaviors in 12 children with language impairments. The subjects of the study were at Brown’s stages I, II, and III at the time of the study. Neutral requests for clarification were temporally sequenced during the elicitation of spontaneous language samples. The results revealed that both typically developing children and children with language impairments identified and repaired breakdowns. However, there were differences in the types of repair behaviors used by the two groups.

Although both groups used revision behaviors more frequently, children with language impairments persisted in their use of phonetic revisions even in Stages II and Stage III. In contrast, typically developing children used phonetic revisions as a repair strategy only in Stage I, and adopted other kinds of revisions, such as constituent reduction, elaboration, and substitution at Stages II and Stages III. The authors concluded that the revision behaviors used by children with language impairments were qualitatively different from those seen in typically developing children.

Brinton and Fujiki (1982) compared the discourse skills of linguistically normal and language-disordered children aged 5 to 6 years. The study examined how both groups interacted in child-child discourse by pairing subjects of similar linguistic ability with each other. The results revealed that typically developing children were more likely to initiate repairs than children with language impairments. In addition, typically developing children used repetition and additional information as repair strategies to rectify communicative breakdowns. In contrast, children with language impairments used fewer repetitions and had only one instance of
additional information response. Inappropriate responses were more common among children with language impairments.

Brinton and her colleagues (Brinton et al., 1986b) compared the conversational repair mechanisms used by linguistically normal and language impaired children to stacked neutral requests for clarification. The subjects of the study were divided into three age groups: 4; 10 to 5; 10 years; 6; 10 to 7; 10 years; and 8; 10 to 9; 10 years. The subjects were asked to describe picture cards that were visible to them but not to the examiner. The examiner elicited repairs to stacked requests for clarification while the child described the picture. Both groups identified the communicative breakdowns and responded to the requests for clarification, but had trouble in using repairs as the requests progressed. As a result, inappropriate responses were observed for the third request for clarification across groups, with a higher frequency of occurrence in the language-impaired group.

Similar to the findings in the developmental literature, repetition was the most frequently occurring repair response, followed by additions, which was more characteristic of the 7- and 9-year olds in both groups. Although 7- and 9-year old children with language impairments used addition as a repair response type, they were less likely to provide adequate information to repair the breakdown. Only 9-year old linguistically normal subjects used cue as an alternative repair strategy for the third request for clarification in the stacked sequence. Brinton and her colleagues (Brinton, Fujiki, & Sonnenberg, 1988) replicated these findings in their study examining repair responses in older children, aged 7; 6 to 11; 2 years. The results of both studies further validated the utility of stacked requests as an innovative tool in examining qualitative differences between typically developing children and children with language impairments, both within and across groups.
Owing to the deficits in language and language development, children with language impairments may use non-verbal behaviors in conjunction with verbal behaviors to repair breakdowns. Porter and Conti-Ramsden (1987) reported this finding in their observation of a mother-child dyadic interaction across pre-therapy and post-therapy sessions. The data also revealed that the child with language impairment not only responded to clarification requests posed by his mother, but also initiated 44% of clarification episodes. This is in contrast to the findings reported by Gallagher (1981) and Brinton and Fujiki (1989) who reported that children were less likely to initiate clarification episodes with adults. However, the familiarity that exists between the child and the adult may have influenced the frequency of occurrence of child-initiated clarification episodes. Furthermore, the clarification requests used by the child were neutral requests and confirmation requests, which are relatively low-level request types, as opposed to the use of sophisticated requests, such as specific requests that require him to identify the error source in his mother’s message.

The literature review shows that individuals with language impairments do identify and repair breakdowns. Furthermore, children with language impairments use more repetitions as responses to requests for clarification than controls do. This may be attributed to the nature of the clarification requests used in these studies, which were primarily neutral requests that necessitate a repetition repair response. However, the consistent and interesting finding is the lack of use of a variety of repair responses when faced with single or stacked clarification requests.

*Individuals with Mental Retardation.* Brinton and Fujiki (1991) compared the conversational repair mechanisms used by 22 community-based and 22 institutionalized adults with mental retardation to stacked neutral requests for clarification. The findings revealed that adults with mental retardation in both groups were able to recognize the request for clarification
and the need to repair the communicative breakdowns. The frequency of response decreased as the sequence of requests progressed. The authors reported that the decrease was due to a lack of sensitivity to listener’s feedback rather than linguistic limitations. The repair mechanisms used by both groups of subjects included repetition, revision, or addition of information to original utterance. However, community-based individuals used additional information as a repair response type more frequently than institutionalized subjects. In addition, they were better than the institutionalized individuals in adopting different repair mechanisms to accommodate the needs of their listeners. Based on speculation, the higher sensitivity of community-based individuals to listener’s needs may be attributed to the higher frequency of opportunities that they have within the community to practice their repair behaviors. In contrast, institutionalized individuals may be restricted by their residential placement to have meaningful social interactions and opportunities for repair.

Brinton and Fujiki (1996) compared the conversational repair mechanisms of young adults (age range: 20 to 36 years) and older adults (55 to 77 years) with mild to moderate mental retardation, to stacked neutral requests for clarification. The results demonstrated that both groups of subjects responded to the first request for clarification. However, their responses decreased as the sequence of requests progressed. The study also revealed differences between the two groups in the type of repair strategies used. The results indicated that the younger adults with mental retardation used significantly more repetitions to the first request in the stacked sequence than the older adults.

Performance on revision repair responses was similar for both groups. The older subjects with mental retardation employed more addition responses (not significant) than younger adults. In contrast, younger adults used more cue responses (not significant) than older adults with
mental retardation. The uses of inappropriate responses as repair strategies were similar across the two groups. Though the study showed few significant differences between the two groups, it did indicate the difficulty of subjects in responding to recursive or stacked requests for clarification. This indicates the difficulty that individuals with even mild to moderate degree of mental retardation may have in adapting to listener feedback (Brinton & Fujiki, 1996).

To sum up, individuals with mental retardation recognized communicative breakdowns and were able to respond to requests for clarification. This is similar to the findings of repair responses of language-impaired children.

*Individuals with Hearing Impairment.* Most (2002) compared the conversational repair mechanisms of individuals with hearing impairments and different levels of speech intelligibility to subjects with normal hearing. The subjects of the study were in the age range of 11 to 16 years and had similar levels of age-appropriate expressive language. The subjects were asked to describe a set of picture cards. The examiner provided a stacked sequence of requests for clarification after the subject completed the description of the picture card. Most (2002) included two new repair types in the coding schema. These included expansion to two sentences (expands sentences into two new sentences) and key word emphasis (provides an important context word in the utterance). In addition to the original definition of a cue response, Most (2002) also identified the speaker’s use of cues to supplement background information as a cue response. Explanation or definition of terms within a message were coded as explanation response and not as a cue response as originally defined by Brinton and Fujiki (1982).

The results revealed that repetition was the preferred repair response type to the first request of stacked requests for clarification. Repetition responses decreased as the sequence of requests progressed. This is consistent with the findings in literature (Brinton & Fujiki, 1982,
Inappropriate responses and cueing were the characteristic repair responses to second and third requests for clarification. Individuals with normal hearing used addition and cue more than the other two groups. They also used expansion response more frequently than the individuals with hearing impairment and poor speech intelligibility. The study demonstrates that in spite of having similar age-appropriate expressive language skills, children with hearing impairment differed in the types of repair mechanisms they adopted to repair communicative breakdowns.

*Individuals with Autism Spectrum Disorder.* There is evidence to suggest that communication breakdowns are more common in speakers with autism spectrum disorders (ASDs) than other clinical groups, owing to the nature of their socio-communicative deficits (Keen, 2003). It is important to understand the nature of these deficits as they may explain the sources of communication breakdowns and the kinds of repair responses reported in autism.

The deficits in social interaction result in a marked difficulty in engaging in joint attention tasks (Carpenter & Tomasello, 2000; Mundy & Stella, 2000). As a result, individuals with autism have difficulty sharing interest with others for purposes other than requesting (Baron-Cohen, 1989; Wetherby & Prutting, 1984), taking the perspective of others (Tager-Flusberg, 1996) or attributing mental states or intentionality to others (Baron-Cohen, 2000; Tager-Flusberg, 1999), and orienting to socially relevant stimuli (Klin, 1991; Osterling & Dawson, 1994). They also have difficulty in social reciprocity – appropriately initiating and responding to bids of interactions and taking turns appropriately (Wetherby et al., 2000). These deficits hinder their ability to modify and adapt their messages to meet the needs of their listeners.
In addition to their socio-cognitive deficits, individuals with ASD also have a marked difficulty in their pragmatic competence in conversations and narratives. Their deficits in conversation include and are not limited to an inability to initiate conversations (Stone & Caro-Martinez, 1990), manage ongoing discourse (Baltaxe, 1977), use clear referencing (Fine, Bartoclucci, Szatmari, & Ginsberg, 1994; Tager-Flusberg & Anderson, 1991), and respond appropriately to others’ initiations and take turns appropriately (Wetherby et al., 2000). Their deficits in narratives include inadequate use of referencing, cohesive devices, mental state or emotional terms, and making appropriate inferences of the goal-directed behaviors of the protagonists (Tager-Flusberg & Sullivan, 1995).

Given the extensive research done in examining the pragmatic competence in individuals with autism, relatively few studies have explored their conversational repair responses in the social interactions with their conversational partners (Keen, 2005; Volden, 2004). One would assume that given the wide range of deficits reported, speakers with ASD may be incapable of identifying conversational breakdowns and using appropriate repair behaviors. However, review of the literature suggests that speakers with ASD do indeed identify breakdowns and use repair behaviors (Alexander et al., 1997; Dobbinson, et al., 1998; Geller, 1998; Paul & Cohen, 1984; Volden, 2004). What is different though is the type of repair responses adopted to resolve these breakdowns.

Baltaxe (1977), in her description of the pragmatic skills of adolescents with autism, reported that revision behaviors, which were a common finding in the developmental literature (Gallagher, 1977), were less frequently used by speakers with ASD. Paul and Cohen (1984) confirmed this finding in their comparative study of adults with ASD and mentally challenged
adults matched on non-verbal IQ. They also reported that participants with ASD provided either inadequate or less specific information to repair the breakdowns.

Geller (1998) reported the use of repetitions and additional information as repair responses in her study exploring repairs in school-aged children with ASD. Volden (2004) reported similar findings, but also expanded the findings to include the differences seen when children with ASD were presented with a stacked sequence of clarification requests. She compared the repair responses of high-functioning children with ASD to language-matched typically developing peers. The results demonstrated that speakers with ASD performed similar to their language-matched peers. They also used a wide range of repair responses. Repetition responses were more characteristic of the first request for clarification, whereas cues (providing background information, defining terms), gestures, and suprasegmental elements (increased emphasis, slowed speech) were more characteristic responses of the second and third requests for clarification. The author speculated that the high functioning of the speakers with ASD may have attributed to the wide range of repair behaviors seen. Despite this evidence of pragmatic ability, speakers with ASD were more likely than their peers to respond to clarification requests with an inappropriate response.

Keen (2005) observed 6 mother-child dyadic interactions at home to explore the types of repairs used by children with ASD, aged 3 to 5 years. The results indicated that children used both conventional and problematic behaviors to repair breakdowns. The conventional repair responses used were repetitions, augmentations, and substitutions. When some of their attempts to repair breakdowns failed, children used challenging or problematic behaviors to communicate their intent. The presence of non-verbal behaviors, such as challenging or problematic behaviors, may also explain why such behaviors occur more frequently in autism – serving either
communicative functions or as an alternate or less sophisticated repair response. One of the limitations of this study is that the author did not describe the types of clarification requests used by the mother to initiate clarification episodes. This information may have explained the reason for the occurrence of the three types of repair responses.

Philip and Hewitt (2006) investigated the repair responses of 6 young adults, aged 18 to 21 years, to clarification requests that occurred in their spontaneous conversations with the second author. The second author played the role of a listener unfamiliar to the events described by the participants. The primary author then identified communication breakdowns in the transcripts, based on the presence of a clarification request made by the second author to any of the 6 participants. A coding system was developed based on the existing codes in the literature (Brinton & Fujiki, 1989; Brinton et al., 1986a; Gallagher, 1977; Garvey 1977; Most, 2002; Yont, et al., 2000) and those that emerged from the data analysis. Findings indicated the need for revising the existing coding systems of repair responses, examining the qualitative differences in the requests for clarification posed by listeners to individuals with autism, and a preponderance of repair responses characteristic of typically developing children, aged 7 to 9 years.

To sum up, the ability to identify and repair communication breakdowns is an essential pragmatic behavior that influences the conversational roles played by speakers and listeners. Review of the literature indicates that individuals with autism are able to identify and repair breakdowns, but use less sophisticated repair strategies. Our understanding of their repair responses are limited to a few studies, and given the wide heterogeneity within the disorder, qualitative differences exist in the reported data. The pilot work also supports the need for revising the existing coding systems to account for subtle differences seen in this population.
The ability to use appropriate repair responses and manage ongoing discourse is indicative of the pragmatic competence of speakers and influences the manner in which listeners perceive them. The inadequacy of repair responses in speakers with ASD may affect the manner in which they develop peer relationships or engage in social interactions (Jackson, Fein, Wolf, Jones, Hauck, Waterhouse, & Feinstein, 2003; Knott, Dunlop, Mackay, 2006). These in turn may affect their ability to live independently in society. In addition, information about their repairs is essential in designing effective assessments, interventions and support.

Purpose of the Study

The purpose of this research study is to explore the conversational repair responses of adolescents with autism spectrum disorder (ASD) to communication breakdowns that occur naturally in conversations. Adolescents with ASD are at the threshold of entry into independent living in society where their ability to manage communicative breakdowns is essential. Of equal interest to the purposes of this study is describing how individuals with ASD are similar or different from each other in their sources of communication breakdowns, types of clarification requests used, and repair responses used.

Research Questions

The following research questions are of interest for this study:

(1) What are the sources of communication breakdowns in the conversations of adolescents with ASD and their listeners?

(2) What are the types of clarification requests made by the listener?

(3) What are the types of repair response behaviors adolescents with ASD use to repair the breakdowns?
(4) How are the adolescents with ASD similar or different from each other in their sources of communication breakdowns, the types of clarification requests used, and their contingent repair responses used?
CHAPTER 3
Methods

Qualitative Research Paradigm

This study adopted a qualitative research paradigm to explore the process of conversational repair in adolescents with autism spectrum disorders (ASDs). Creswell (1998) defines qualitative research as an inquiry process aimed at describing a problem or issue in all of its complexity. Identifying and analyzing conversational repair strategies often requires a detailed analysis of the context. These analyses include, but are not limited to, identifying the sources of breakdowns, the types of clarification requests used, and the potential influence of the conversational partner on the types of repair responses used. Furthermore, due to the wide heterogeneity seen in individuals with ASD, quantitative measures alone may not accurately describe the unique language profiles that exist in autism, which in turn may influence the types of repair strategies used. A qualitative research design thus offered the present study an opportunity to describe conversational repair in all of its complexity. Of the five traditions of inquiry in qualitative research (biography, phenomenology, grounded theory, ethnography, case study), the case study approach was best suited to answer the complex research questions of this study.

Case Study Design

Case study is defined as an in-depth description of a case (single or multiple) involving multiple sources of information (Creswell, 1998). An integral part of case study designs is identifying the unit of analysis or the case of the study about which the data is collected (DeVaus, 2001; Yin, 2003). Yin suggests using the primary research questions of the study in determining the unit of analysis. Based on both these criteria – data source and research
questions; *individuals with ASD* served as the *case* or unit of analysis in the present study. In addition, as one of the research purposes of the study was to examine how individuals with ASD resembled or differed from each other in their conversational repair mechanisms, each individual participant served as a separate case in the present study. This design fits the model of a multiple-case study design, wherein the primary goal is to replicate the contexts to examine whether one gets similar or different results across each of the individual cases (Yin, 2003).

Due to the complex nature of conversational repair, and its interdependent relationship with clarification requests, a single unit of analysis was not sufficient in providing a full description about this behavior in autism. Hence, dividing the case into sub-units or embedded units (DeVaus, 2001; Yin, 2003) was a better alternative in describing the nature of conversational repair in autism. These embedded units not only provide qualitatively different pieces of information, but become vital in providing an in-depth understanding of the case (DeVaus, 2001). For the purposes of the present study, the embedded units included sources of breakdowns, clarification requests, types of repair responses, and conversational contexts involving different conversational partners. Thus, the research study design used for the present study is an *embedded multiple-case study* design (Type 4; Yin, 2003).

*Participant Selection*

The participants in this study were selected using a *criterion-based* purposeful sampling strategy (Miles & Huberman, 1994). They had to meet the following criteria to be included in this study: an adolescent (aged 12 to 17 years) with a current diagnosis of ASD, a verbal IQ of at least 70, and the ability to converse in at least simple sentences. Based on these criteria, 4 participants were recruited from a non-profit educational and vocational school in Virginia. The primary investigator contacted the director of the school for assistance in the recruitment process.
Based on the recruitment criteria, the director initially identified potential participants from the school, and mailed consent forms to caregivers requesting their child’s participation in the study (see Appendix A). The researcher then reviewed the psychological and speech-language pathology records of consenting participants to evaluate if any recent assessments confirmed the eligibility of the participants for the study. The initial screening of the records indicated that all participants required further eligibility testing to confirm their candidacy because the assessment results were outdated (older than 6 months), currently ongoing, or contained inadequate information. A detailed description of the eligibility testing is described in the study protocol discussed later. A summary report of the data obtained from the record review and the researcher’s initial impressions of the participants were used to describe each individual case in the final report. Table 3 represents the demographic information of the 4 participants. Pseudonyms were used to protect the anonymity of the participants.

Table 3

Demographic Information of Study Participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Age (years; months)</th>
<th>Gender</th>
<th>Grade Level</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will</td>
<td>12;11</td>
<td>M</td>
<td>7</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Whitney</td>
<td>14; 3</td>
<td>F</td>
<td>9</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Peter</td>
<td>14; 7</td>
<td>M</td>
<td>8</td>
<td>Caucasian</td>
</tr>
<tr>
<td>Lionel</td>
<td>13; 10</td>
<td>M</td>
<td>8</td>
<td>African American</td>
</tr>
</tbody>
</table>
Procedures

*Environmental context.* The school specializes in individuals with ASD who have severe behavioral problems that affect their integration into mainstream schools. Due to this, a behavioral specialist or a facilitator was always present in the room with the investigator during the testing to protect her from any physical harm. A minimum of four 50-minute visits for each participant was required to complete all the study tasks. The testing was always conducted in the morning at a time that was reported to be successful for each participant. If a particular participant had a tough morning, the testing was rescheduled for another day. The researcher worked with the curriculum specialist at the school to schedule a break activity (either snack time or play time) after each testing session.

In order to avoid undue disruption in the participants’ curricular activities, the curriculum specialist worked closely with the classroom teachers to identify appropriate testing days and times. The curriculum specialist also provided the participants with a revised visual routine schedule to indicate the days of testing. This was done primarily to reduce the stress levels of the participants due to a change in their regular schedules. The literature indicates that individuals with ASD have difficulty in adjusting to sudden changes in their routines (American Psychiatric Association, 1994). Using visual schedules to indicate an upcoming event or an unfamiliar activity are reported to be an “emerging and effective” (Odom, Brown, Frey, Karasu, Smith-Canter, & Strain, 2003, p.172) treatment option. In addition, to reduce the stress levels of participants in meeting an unfamiliar adult the researcher met the participants informally on a different day prior to the beginning of the study. The curriculum specialist accompanied the researcher during these informal visits.
Eligibility testing. The following tests were administered in the first three visits to confirm whether participants met the eligibility criteria for the study:

Visit #1 (Administration of IQ test): Prior to administering the standardized tests, the researcher briefed the study participant about the study and his or her rights as a research participant (see Appendix B). This was done to ensure that the study participants had all their questions answered before testing. The participants were also encouraged to inform the researcher if they felt tired at any time during the testing. Appropriate breaks were offered during the testing, without affecting the standardized administration protocol of the formal tests.

The *Wechsler Abbreviated Scale of Intelligence* (WASI, Wechsler, 1999) was used to assess the verbal, performance, and full IQ of the participants. The test allowed the researcher to exclude any intellectual deficits (a full scale IQ of less than 85 and a verbal IQ of less than 70) as contributing to the participants’ socio-communicative deficits. Note that during testing, it was found that all 4 participants were tired after the administration of the WASI, thereby requiring another visit for the syntactic comprehension testing at a later date.

Visit #2 (Administration of Language Test): Participants were then administered the sentence comprehension subtest of the *Comprehensive Assessment of Spoken Language* (CASL, Carrow-Woolfolk, 1999) to assess their language comprehension. The subtest contains sentences of varying complexity, thereby making it a useful tool for assessing syntactic comprehension. This subtest also allowed the researcher to examine whether the participants were able to comprehend complex sentences, thereby providing evidence that the directions for completing the study were within their general linguistic competence.

Visit #3 (Administration of ADOS): Module 3 or Module 4 of the *Autism Diagnostic Observation Schedule* (ADOS, Lord, Rutter, DiLavore, & Risi, 2002) was administered based on
the verbal language skills and age of the participants. The ADOS is considered the “gold standard” for identifying and diagnosing individuals with autism (Lord et al., 2002; Sikora, Hall, Hartley, Gerrard-Morris, & Cagle, 2008). The conversational elicitation tasks within the test also enabled the assessment of their verbal language skills. The primary investigator attended a week long training workshop held by the pioneers of the ADOS instrument, prior to the start of the study, for obtaining accuracy and reliability in the administration and scoring of the ADOS instrument. The researcher also consulted with the primary advisor throughout the testing to discuss any challenges encountered while testing or scoring the instrument.

Using multiple sources of evidence or data is a characteristic feature of case study designs (Yin, 2003). In order to accurately and fully describe conversational repair in autism; spontaneous conversation samples were elicited across two different conversational contexts: an Adult-Client context; and a Peer with ASD context.

Visit # 4 (Adult-Client Context): A language sample of 40 to 50 minutes was elicited by the researcher from each of the participants with ASD. Language sample elicitation focused on two topics: favorite hobby/television/movie show, and a previous social outing, such as a family vacation or attendance at a sporting event, concert, or play (see Appendix C). In addition to these topics, the researcher also followed up on topics introduced by the participant. This was primarily done for two reasons: to make the participant feel more comfortable in conversing with the researcher, and to obtain as close to a naturalistic sample as possible. However, if the participants obsessively talked about their favorite topics at an extensive length (a reported finding in individuals with ASD), the researcher gradually shifted the topic accordingly. The researcher used her clinical judgment at those instances to make judgments regarding topic transitions.
Visit # 5 (Peer with ASD Context): Adolescents with language impairments are known to have difficulties in peer interactions (Brinton, Robinson, & Fujiki, 2004). In order to examine how individuals with ASD manage breakdowns with their peers, a conversational task involving a peer with ASD was used. The individual with autism engaged in an interactive “get to know you” game that was age-appropriate with his or her peer with ASD. The primary investigator provided the interview questions and both participants took turns in interviewing each other (see Appendix D). A language sample of at least 30-minutes was elicited for this study task. At the end of the interview, they were quizzed by the researcher about what they learnt about each other during that time (see Appendix E). The participants were offered a small prize for completing the task, in order to maintain motivation and ensure that sufficient conversational exchanges occurred to fulfill the needs of the study. The researcher was in the room during this task to facilitate the conversation (for example, suggest a topic change or encourage further conversational exchange), answer any questions the participants had regarding the interview questions, or to manage challenging behaviors that arose owing to differences in opinion about certain topics.

Eligibility testing results. Language samples were elicited and analyzed only from those participants who passed the eligibility criteria (a diagnosis of ASD, a verbal IQ of at least 70, and the ability to speak in at least simple sentences). The 4 participants were administered the following standardized tests to determine candidacy:

- *Wechsler Abbreviated Scale of Intelligence (WASI, Wechsler, 1999)* to determine the verbal IQ.

- Sentence comprehension subtest of the *Comprehensive Assessment of Spoken Language (CASL, Carrow-Woolfolk, 1999)* to determine syntactic comprehension, which was
essential in understanding the task instructions and completing the study tasks. In addition, due to difficulties encountered during testing, the paragraph comprehension subtest of the CASL was administered to get a more accurate representation of the participants’ comprehension abilities. Details of the testing are discussed below in light of the test findings.

- Module 3 or Module 4 of the *Autism Diagnostic Observation Schedule (ADOS, Lord et al., 2002)* to confirm the diagnosis of autism, and to assess the participants’ verbal language skills. Participants who scored a score of 3 or above on the communication domain, a score of 6 or above on the social interaction domain, and a score of 10 or above on the combined communication and social interaction domain received a diagnosis of autism. Those participants who scored a score of 2 and below on the communication domain, a score of 4 and below on the social interaction domain, and a score of 7 and below on the combined communication and social interaction domain received a diagnosis of autism spectrum disorder.

Table 4 illustrates the results of the eligibility testing of the 4 participants.
Table 4

*Eligibility Testing Results*

<table>
<thead>
<tr>
<th>Name</th>
<th>WASI (Verbal IQ)</th>
<th>CASL (Sentence Comprehension)</th>
<th>ADOS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SS: 100 SD: 15</td>
<td>SS: 100 SD: 15</td>
<td></td>
</tr>
<tr>
<td>Will</td>
<td>105</td>
<td>97</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Whitney</td>
<td>110</td>
<td>98</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Peter</td>
<td>97</td>
<td>69</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Lionel</td>
<td>67</td>
<td>75</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

*Note.* WASI = Wechsler Abbreviated Scale of Intelligence; CASL = Comprehensive Assessment of Spoken Language; ADOS = Autism Diagnostic Observation Schedule; SS = Standard Scores; SD = Standard Deviation; Com = Communication Total; SI = Social Interaction Total; Com & SI = Communication & Social Interaction Total.

Based on the test results, only Will and Whitney passed the eligibility criteria for all the 3 standardized tests. Both Peter and Lionel scored 3 standard deviations below the mean for the sentence comprehension subtest of the CASL. The task required them to judge whether the two pairs of sentences they heard had the same meaning or not. Based on the researcher’s field notes and audio journals, some factors might have contributed to the participants’ poor performance on the subtest. For instance, Lionel was unusually tired during the testing and seemed easily distracted. He also had a tendency to perseverate on responses (repeating the response “different” for consecutive test items), or responding even before the researcher completed reading the sentence pairs. Though several steps were taken to overcome these difficulties during testing (such as offering him breaks, instructing him to respond only after the test item was read out, and providing an alternative response – saying “yes” or “no” instead of responding “same” or
“different”) his performance did not improve. The researcher also discussed these findings with the curriculum specialist at the school, who informed her that Lionel had attention deficits that hindered his ability to complete formal testing, and he had only recently been able to participate in formal tests successfully. Due to these reasons, it appears unlikely that formal testing was adequate to gauge Lionel’s syntactic comprehension skills at this point in time.

In the case of Peter, he had mood swings that may have influenced the types of responses he provided during testing. To be more specific, he was in a good mood at the beginning of the task, but his mood fluctuated during the testing, which might have affected his responses. Peter also found it particularly difficult to move ahead to the next test item whenever he encountered a difficult task item, and usually seemed frustrated or depressed at those times, as evidenced by behaviors such as putting his head down on the table due to frustration, change in demeanor (mood swings), presence of frustrated sighs, an obsessive tendency to complete the difficult item in spite of numerous attempts by the researcher to move to the next item, and a decrease in overall energy and enthusiasm in completing the task. This behavior was also noted when the researcher had administered the Wechsler Abbreviated Scale of Intelligence (WASI) test.

Although Peter performed poorly on the subtest, informal conversations with him indicated that he did not have difficulty understanding instructions or sentences. One of the main purposes of administering the subtest was to identify whether participants had difficulty following task instructions, and thereby might be unable to complete the study tasks. As this was not true for either one of the participants (based on informal interactions, teacher and therapist verbal and written reports, and record review), the researcher assumed that they both would be able to complete the study tasks successfully. The researcher then discussed these findings with the primary advisor, and decided to administer the paragraph comprehension subtest on the
CASL to determine the comprehension ability of these two participants. The paragraph
comprehension subtest assesses the syntactic comprehension of participants through a series of
spoken narratives and subsequent questions. The participants respond by pointing to one of the
four pictures that best represents the correct answer. This ensures that the responses are not
contaminated by poor verbal expressive skills (Carrow-Woolfolk, 1999). In addition, this subtest
is mainly geared for children aged 7 to 12 years, and so the researcher predicted that the
participants would have little difficulty with the task.

The decision to use this particular subtest to further probe the previous comprehension
testing results was complicated by the age range for the subtest falling below the chronological
ages of the participants. The decision to use the test was made on the basis that it was intended as
a screening tool to establish minimal receptive language competence. The standard scores were
computed and compared to the scores of children aged 12; 8 to 12; 11 years (the highest age
range for this subtest). The results indicated that Lionel’s performance (aged 13; 10 years) fell
well outside normal limits on this test (standard score of 53, >3 S.D. below the mean), whereas
Peter (aged 14; 7 years) showed performance within normal limits (standard score of 98), relative
to 12 year olds. These measures are intended to be descriptive in nature, as normative data is not
available for the age group of the participants. Furthermore, this subtest was done mainly to
obtain an informal assessment of the participants’ syntactic comprehension abilities.

Based on Lionel’s performance on the paragraph and sentence comprehension subtest of
the CASL, and the poor verbal IQ scores (standard score of 67) on the WASI, he was dropped
from the study. The concern was that his ability to understand questions and other discourse
addressed to him would be inadequate for meaningful participation in a conversation. As Peter
was able to demonstrate paragraph-level comprehension skills, in addition to scoring within
normal limits for his age on the WASI, he was considered to meet the minimum criteria for remaining a candidate for the study.

While Peter met other criteria, he did not meet the criteria for a diagnosis of autism or autism spectrum disorder on the combined communication and social interaction total on the ADOS. The ADOS instrument requires that individuals meet the cut-offs for all three domains (communication, social interaction, combined communication and social interaction) to receive a diagnosis of ASD or autism on the ADOS (Lord et al., 2002). So although Peter met the criteria for a diagnosis of ASD on two domains (communication and social interaction); he did not receive a diagnosis of ASD on the ADOS based on its conservative scoring and interpretation rules.

Peter’s scores on the ADOS have to be interpreted cautiously because Peter’s diagnosis of a bipolar disorder adds another layer of complexity in accurately assessing him. Peter’s performance in testing is usually influenced by his mood fluctuations, as reported by teachers and behavioral specialists who provided background information, and as evidenced during formal testing. On the day of the ADOS testing, Peter was in an exceptionally good mood and enthusiastically participated in the tasks. This could have explained why Peter scored better on certain task items (for example, \textit{quality of social overtures, conversation, quality of social response}), because he was genuinely interested in talking to the examiner about a variety of his favorite topics. However, his mood fluctuated for the \textit{socio-emotional} questions which targeted areas such as teasing, feeling sad, and being bullied, which in turn may have explained the poor scores on those items.

Furthermore, based on the scoring criteria of the ADOS, scores obtained for the domain of stereotyped behaviors or restricted interests are not calculated for the final algorithm score.
Hence, an individual who has significant abnormalities in the domain of social interaction, exhibits stereotyped behaviors or has restricted interests, with an absence of a communicative dysfunction would not receive a diagnosis of ASD on the ADOS; but would however, receive a *clinical* diagnosis of ASD (Lord et al., 2002). This holds true for Peter who has difficulties in the social-interaction domain, exhibits stereotyped behaviors, and has restricted interests. In addition, an individual receives a full-scale diagnosis of ASD based on the scores obtained on the ADOS in conjunction with parent interviews, and clinical judgment (Lord et al., 2002; Sikora et al., 2008). Based on the record review, Peter had received a clinical diagnosis of mild to moderate degree of autism on the *Childhood Autism Rating Scale* (*CARS*, Schopler, Reichler, & Renner, 1986). Taking into consideration all these factors, Peter received a *clinical* diagnosis of ASD. Thus, the 3 participants who passed the eligibility testing were Will, Whitney, and Peter, who then qualified for participation in the conversational tasks for the *Adult-Client* context and the *Peer with ASD* context.

**Data Analysis**

The elicited language samples were audio and video recorded for transcription and data analysis. Language samples were transcribed using the software *Systematic Analysis of Language Transcripts* (*SALT*, Miller & Iglesias, 2008). Communication breakdowns were identified from the transcripts by the presence of a clarification request made by the listener to the speaker with ASD (Corsaro, 1977; Garvey, 1977; Gallagher, 1981; Sacks, Schegloff, & Jefferson, 1974). A compiled coding system based on the *Breakdown Coding system* (Yont et al., 2000), existing literature (Brinton & Fujiki, 1989; Brinton et al., 1986a; Garvey, 1977; Gallagher 1977; Most 2002), and the pilot study findings (Philip & Hewitt, 2006) were used to code sources of communication breakdowns, types of clarification requests, and the types of repair
responses elicited (see Table 5, Table 6, and Table 7, and Appendix F for examples). In addition, the data were examined for any shortcomings of those systems, and additional codes developed as necessary.
<table>
<thead>
<tr>
<th>Breakdown Types</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Content rejection [CR]</td>
<td>Listener questions the content or the accuracy of the speaker’s utterance (Yont et al., 2000).</td>
</tr>
<tr>
<td>3. Inadequate information [InInfo]</td>
<td>Speaker’s utterance contains inadequate information for the message to be understood by listener (Philip &amp; Hewitt, 2006).</td>
</tr>
<tr>
<td>4. Irrelevant information [IrrInfo]</td>
<td>Speaker’s utterance contains irrelevant information pertaining to the discussed topic (Philip &amp; Hewitt, 2006).</td>
</tr>
<tr>
<td>5. Inaudibility [InA]</td>
<td>Speaker either speaks too softly (Yont et al., 2000), or the overlapping speech of the listener affects the audibility of the speaker’s utterance (Philip &amp; Hewitt, 2008).</td>
</tr>
<tr>
<td>7. Phonological errors [PE]</td>
<td>Speaker’s utterance contains speech sound errors (i.e. sound substitution, omission, addition, or distortion) (Yont et al., 2000).</td>
</tr>
<tr>
<td>8. Idiosyncratic [IS]</td>
<td>Speaker’s odd use of words or phrases confuses the listener (Philip &amp; Hewitt, 2008).</td>
</tr>
<tr>
<td>9. Non-verbal [NV]</td>
<td>Speaker uses a gesture that is not understood by the listener (Yont at al., 2000).</td>
</tr>
</tbody>
</table>
Table 6

*Types of Clarification Requests*

<table>
<thead>
<tr>
<th>Clarification requests</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Non-specific requests for repetition</td>
<td>Neutral requests such as “Huh?”, “What?”, “I didn’t understand.”, “Pardon,” “Say again.”</td>
</tr>
<tr>
<td>Neutral requests [NeuR]</td>
<td></td>
</tr>
<tr>
<td>2. Specific requests for repetition</td>
<td>Requests in which a wh-question replaces a part of the original utterance of the speaker. For example, “He did what?”</td>
</tr>
<tr>
<td>[SRR]</td>
<td></td>
</tr>
<tr>
<td>3. Specific requests for specification</td>
<td>Listener indicates what specific additional information is required to fix the breakdown.</td>
</tr>
<tr>
<td>[SRS]</td>
<td></td>
</tr>
<tr>
<td>4. Requests for confirmation</td>
<td>Repetitions with rising intonation, repetitions with reductions, and repetitions with elaboration. For example, “Did he?”</td>
</tr>
<tr>
<td>[CONFR]</td>
<td></td>
</tr>
<tr>
<td>5. Direct requests [DR]</td>
<td>Requests for the exact definition of a component in a message. For example, “Can you explain that to me?” or “What does <em>endothermic</em> mean?”</td>
</tr>
<tr>
<td>6. Relevance requests [RR]</td>
<td>Requests that question the relevance of what the speaker says. For example, “What relevance does that have to do with what you are saying now?”</td>
</tr>
<tr>
<td>7. Cloze requests [CIR]</td>
<td>Requests that contained two choices for the participant to choose from (Philip &amp; Hewitt, 2006). E.g. “You did or did not?”</td>
</tr>
</tbody>
</table>

*Note.* Categories 1 to 6 based on existing coding systems in literature (Garvey, 1977; Gallagher, 1981; Brinton & Fujiki, 1989, Yont et al., 2000).
<table>
<thead>
<tr>
<th>Repair response</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Repetition [Rep]</td>
<td>Repeats all or part of original utterance (Gallagher, 1977; Brinton et al., 1986a). Sub-categories (Philip &amp; Hewitt, 2006).&lt;br&gt;(a) <em>Repetition-appropriate</em> [Rep-a]: Repetition is appropriate and meets the need of the listener.&lt;br&gt;(b) <em>Repetition-inappropriate</em> [Rep-i.a.]: Repeats all or part of original utterance, but the repetition is inappropriate to the request for clarification.</td>
</tr>
<tr>
<td>2. Revision [Rev]</td>
<td>Use of alternate labels or syntactic structure without adding information or meaning (Gallagher, 1977; Brinton et al., 1986a).</td>
</tr>
<tr>
<td>3. Addition [Add]</td>
<td>Adds specific information to original utterance (Brinton et al., 1986a; Most 2002), or provides additional information.</td>
</tr>
<tr>
<td>4. Cue [Cue]</td>
<td>Provides background information; formulations --talking about repairing the breakdown (Brinton et al., 1986a).</td>
</tr>
<tr>
<td>5. Keyword [Kw]</td>
<td>Emphasizes an important word in the utterance (Most, 2002)</td>
</tr>
<tr>
<td>7. Inappropriate [IA]</td>
<td>Provides unrelated utterances; no response; or discontinues discourse (Gallagher, 1977; Brinton et al., 1986b; Most 2002).</td>
</tr>
<tr>
<td>8. Cloze response [Clz]</td>
<td>Speaker picks one of the choices presented in the cloze request (Philip &amp; Hewitt, 2006).</td>
</tr>
<tr>
<td>10. Unintelligible [UResp]</td>
<td>Repair response is coded as unintelligible if the utterance was unintelligible due to technical difficulties, background noise, or poor speech intelligibility of the speaker (Philip &amp; Hewitt, 2006).</td>
</tr>
<tr>
<td>11. Interrupted [IntpResp]</td>
<td>Response is coded as interrupted if any kind of interruption took place while the speaker was responding to a clarification request (Philip &amp; Hewitt, 2006).</td>
</tr>
<tr>
<td>12. Related Response [RelResp]</td>
<td>Speaker responds or acknowledges listener’s requests for clarification with a response that relates to the topic discussed, but does not necessarily fix the breakdown (Philip &amp; Hewitt, 2008).</td>
</tr>
</tbody>
</table>
Based on the transcription rules of the SALT software, the language samples were segmented into communication units -- an independent clause with all its modifiers (Miller & Iglesias, 2008). Because of this segmentation, some of the participants’ repair responses or the listener’s clarification requests were split between consecutive communication units. When assigning codes for these instances, the researcher assigned the appropriate code to the final communication unit of the clarification request or repair response. Furthermore, the researcher also made a note within the transcript indicating which communication units were parts of that specific clarification request or repair response. However, if successive communication units indicated the assignment of separate or new codes, these codes were accordingly used for each communication unit.

In case study designs, use of quantitative and qualitative data may be essential in describing a case completely. In this study, a frequency count of the sources of communication breakdowns, types of clarification requests used, and the types of elicited repair responses were calculated to describe the conversational repair mechanisms used by participants across the two conversational contexts. In addition, examples from the transcripts of each participant were used to further illustrate the breakdowns, clarification requests and repair responses. When transcribing and analyzing the data, the researcher wrote memos and narrative analysis reports to capture her insights about the data coding and data interpretation. Both these methods are standard tools used for data analysis in qualitative research (Maxwell, 2005; Miles & Huberman, 1994).
Credibility

Based on the guidelines existing in the literature regarding the credibility of qualitative data (Creswell, 1998; Maxwell, 2005; Miles & Huberman, 1994; Yin, 2003); the following procedures were instituted:

1. Researcher bias: In qualitative research, researchers are an integral part of the research process – data collection, data analysis, and data interpretation. Data is viewed through the “lenses” of the researcher, and hence a careful examination of the assumptions and biases of the researcher is paramount for adding credibility to the data. In this study, the primary investigator maintained an auditory journal and field notes to document her experiences, thoughts, assumptions, and biases as they emerged during the research process. As Glesne (2005) rightfully stated, “Writing gives form to the researcher’s clumps of carefully categorized and organized data. It links together thoughts that have been developing throughout the research process. The act of writing also stimulates new thoughts, new connections” (p. 173). The researcher also conducted several phone discussions with the primary advisor to carefully monitor thoughts, assumptions and biases that emerged during the data collection, data analysis, and data interpretation phases.

2. Triangulation of data sources: Multiple sources of data were collected so as to provide corroborative evidence. In the present study, conversational repair was studied across two different conversational contexts. In addition, collecting data from 3 different participants with ASD also served to assist in data triangulation, by means of comparing and contrasting the performance of the 3 individuals across the contexts.
3. Negative case analysis: Negative cases or conflicting themes (such as problems with the findings of the eligibility testing; definitions of pre-existing codes in the literature, or the emergence of new codes based on data analysis) were identified, explained, or revised by the researcher in consultation with the primary advisor.

4. External audits: Creswell (1998) defined an external auditor as one who examines “the process and the product of the account, assessing their accuracy” (p. 203). The primary advisor conducted several external audits during the development, coding, analysis, and interpretation of the data.

Reliability

The primary advisor also trained a graduate and undergraduate student in speech-language pathology to identify communication breakdowns in the transcripts. The students were instructed to identify breakdowns based on the presence of a clarification request. In order to ensure that the students correctly identified breakdowns, few examples from a language transcript were randomly selected for practice purposes. The inter-rater reliability was calculated using the following formula: Total number of agreements over total number of agreements and disagreements, with the quotient then multiplied by 100. The two independent coders then analyzed the remainder of the transcript by identifying the sources of breakdowns, types of clarification requests made by the listener, and the types of repair responses used. Table 8 illustrates the inter-rater reliability between the primary investigator and the two coders for the total number of breakdowns identified and the code to code reliability for the contingent query sequence categories. The code to code reliability for the sources of breakdowns, types of clarification requests, and the type of repair responses was calculated only for agreed breakdowns.
Table 8

*Inter-Rater Reliability between Primary investigator and Independent Coders*

<table>
<thead>
<tr>
<th>Name</th>
<th>Total number of breakdowns identified</th>
<th>Code to Code Reliability for agreed breakdowns</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Sources of communication breakdowns Types of clarification requests Types of repair responses</td>
</tr>
<tr>
<td>Coder #1</td>
<td>85%</td>
<td>49% 73% 55%</td>
</tr>
<tr>
<td>Coder #2</td>
<td>88%</td>
<td>41% 72% 49%</td>
</tr>
</tbody>
</table>

Some of the reasons for the disagreements between the two coders and the primary investigator for the total number of breakdowns identified arose because the coders either over-identified breakdowns (coded requests for information as clarification requests), or missed identifying breakdowns that occurred consecutively. These disagreements may be attributed to the fact that the coders had identified breakdowns based on written transcripts (due to time constraints) rather than directly viewing the videotapes. As a result, prosodic information indicating confusion in the listener may have been lost. The low percentage of agreement in the code to code reliability also indicated that the coders had difficulty accurately distinguishing the subtle, yet important differences between *ambiguous referents* and *inadequate information*, *inaudibility* and *unintelligible segments*, *direct requests* and *specific requests for specification*, *explanation* and *addition* responses. In addition, as part of the rules for language transcription include segmenting utterances based on communication units (an independent clause with all its modifiers), some of the researcher’s and participants’ responses were segmented as two separate
communication units. As a result, the researcher’s consecutive clarification requests and the participants’ repair responses were at times undetected by the coders probably because these requests or responses were considered to be a part of the earlier occurring utterance. These findings illustrate how conversational repair analyses often require coders to be competent in pragmatic language analysis and require either direct observations or viewing of videos to accurately identify breakdowns. However, there may also be instances wherein breakdowns recognized by the conversational partner may be viewed differently by an individual removed from the contextual experience. That is, the embodied experience of the conversational partner, in this case the researcher, may have resulted in the identification of certain breakdowns that may go undetected by individuals who are not directly involved in the conversational exchange.
CHAPTER 4

Results

The purpose of this case study was to explore the conversational repair responses of adolescents with autism spectrum disorders (ASDs) to communication breakdowns that occurred naturally in conversations. For this purpose, the following research questions were of interest to the study:

(1) What are the sources of communication breakdowns in the conversations of adolescents with ASD and their listeners?

(2) What are the types of clarification requests made by the listener?

(3) What are the types of repair response behaviors adolescents with ASD use to repair the breakdowns?

(4) How are the adolescents with ASD similar or different from each other in their sources of communication breakdowns, the types of clarification requests used, and their contingent repair responses used?

Language samples were only elicited from Will, Whitney, and Peter, the 3 participants who passed the eligibility testing. The findings for these 3 individuals are discussed below.

Adult-Client Context

A language sample of 40 to 50 minutes was elicited by the researcher from each of the participants with ASD. Language sample elicitation focused on two topics: favorite hobby/television/movie show and a previous social outing, such as a family vacation or attendance at a sporting event, concert, or play (see Appendix C). In addition to these topics, the researcher also followed up on topics introduced by the participant. Language samples were then transcribed using the software Systematic Analysis of Language Transcripts (SALT, Miller &
Iglesias, 2008). Communication breakdowns were identified from the transcripts by the presence of a clarification request made by the listener to the speaker with ASD (Corsaro, 1977; Garvey, 1977; Gallagher, 1981; Sacks, Schegloff, & Jefferson, 1974). A compiled coding system based on the existing literature and the pilot study findings were used to code the sources of communication breakdowns, the types of clarification requests, and the types of repair responses elicited (see Appendix F). In addition, the data were examined for any shortcomings of those systems, and additional codes developed as necessary. Following are the findings for each of the individual participants.

**Will**

Will is a 13-year-old student with autism, who receives 30-minutes of speech-language services per week. He was transferred to the present school because of the increase in his aggressive behaviors. However, he did not exhibit any aggressive behaviors during the study, and participated compliantly in all the tasks. Based on the record review and the eligibility testing, Will’s receptive and expressive skills were age-appropriate. However, his pragmatic language skills (how he uses language in social contexts) were weak for his age-level. He had difficulty participating in conversational topics that were not of his interest. However, there were several instances when he initiated conversations, but these were restricted to his favorite topics. His intonation patterns varied during the testing. During the initial phase of each testing session, he would often use a formal and reserved tone while talking. As the testing progressed and when he felt more comfortable, he would talk in an appropriate tone and engage more readily in the tasks.

During the eligibility testing, Will was more enthusiastic in participating in the non-verbal activities, such as the block and matrix design on the WASI, and the block puzzle activity
on the ADOS, than in the verbal activities. For instance, when the researcher engaged him in conversational activities on the ADOS, he talked for some time, and then usually said any one of the following to indicate that he was done talking: “I don’t want to talk,” “I’m tired of talking,” “I’m getting tired here,” “Let’s just get to the next question.”

He also exhibited idiosyncratic language, which is the odd use of words and phrases to convey specific meanings (Volden & Lord, 1991). For instance, in the following discussion where Will described his workload at home, he introduced the term *turble nerd* (probably referring to *turbo* nerd), to refer to an individual whom he defined as, “someone that’s not very strong with physical capabilities, but they’re actually very, very, very, very, very, smart.” He then focused on the part of his definition which indicated that *turble nerds* were not physically strong to probably convey the message that they could do the kind of workload he had, which was getting food by himself.

**Will:** Well there is one, there’s a little workload for me. That’s only just getting the food, some of the food by myself. That’s the only kind of workload I get [underlined for emphasis]. So I kind of like [abandons utterance]. So, I am not very good with my [abandons utterance]. I don’t have a very big workload, in fact my workload is so small, it’s hardly anything for no one. Even if you were like umm, uh how do I say this uh [appears to be thinking] a *turble nerd* [italicized for emphasis].

**Researcher:** What’s that?

**Will:** uh someone with uh [laughs, and then abandons utterance]. Let’s just say that it’s someone that’s not very strong with physical capabilities, but they’re actually very, very, very, very, smart. Although even a nerd can do the workload I got, although I am not a *turble nerd*, I am strong enough to do some workloads, more workloads than a nerd can
but I’d have pretty much the same kind of workload that a nerd has. Normally, I just
[abandons utterance]. And when I get home sometimes I drink a root beer, something that
really actually is sweet [shifted topic to then describe the quantity of root beer he
normally drank].

In another instance during the break activity on the ADOS, he made a comment stating “I
was hoping to do the M things.” When the researcher queried him on what he wanted, he said
that he was hoping to do the block activity, which he referred to as the “M things.” The use of
idiosyncratic language is an often reported and characteristic feature of autism (American
Psychiatric Association, 1994; Kanner, 1943).

For the conversation task with the researcher for the Adult-Client context, Will seemed
disengaged initially, but became more interested in talking when the discussion centered on his
favorite hobby, which is videogames. He had difficulty making appropriate topic transitions and
concluding conversations accordingly. He also had a tendency to constantly interrupt the
researcher while she was talking. Due to the several monologues about his favorite topics, the
researcher had to interrupt Will to request for more information, to get a turn in speaking, or to
change the topic gradually. At times these instances prevented the researcher from continuing her
conversational exchange or asking clarification requests because Will would often start a
monologue of another topic altogether. In general, the conversational exchange with Will was
more focused on what he wanted to say than engaging in a purely conversational dialogue with
the researcher.

Will also focused on the literal meaning of words instead of their functional or pragmatic
uses. For example, when describing one of his tallest Lego models called the Bionicle, he
described it as being capable of literally causing death. The researcher assumed that probably
what Will meant was that in a videogame, it would be difficult to move to the next level if one
got hit by a Bionicle. But Will further emphasized how there was no way out if one got hit by the
Bionicle. In another instance when the researcher talked to Will about how the visual effects in
the movie *Transformers* were realistic; he started a monologue about gear pieces and how it
would be if one saw a *real* transformer. Figure 1 illustrates these conversational exchanges.
Figure 1. Transcripts describing Will’s comprehension of the literal meaning of words

Will is describing the Bionicle models he has.

W Yeah, (like) but my tallest one has the best weapon.
E Okay.
W Like if you get hit by it once < > he/’s dead.
E <Uhhuh>.
E Oh okay.
W Because if you get hit by its attack once < > you/’re dead.
E <Mhm>.
E Okay.
W I mean you/’re dead (said to re-emphasize to the examiner that there’s no way out after you have been hit).
E There/’s no way you can go to the next level you mean.
W Well, basically all you could do to just try to>
W No matter what kind of armor you have, (he he) you/’re just gonna get desonate/ed [EW:detonated].
E Mhm.
W What you need is speed.
E Okay.
W Because if you have speed, you might (have) be able to survive.
W Although, if you get hit by it even once < > {makes a sound of a weapon firing}, you/’re dead.
E <Mhm>.
E Okay.

Will is responding to the researcher’s comment about the visual effects of the movie Transformers being realistic.

W In the movie it may look like a real life thing.
W But you also get to see your gear piece/s.
W If it was real life, you would see some piece/s from the inside of it when it was transform/ed.
W Like gear piece/s and stuff like that.
W (but uh but if you were to see um) but if you were to see something like (um) ((I don’t know)) maybe (clicking noise) (um) (clicking noise followed by exasperated sigh) (um)>
W Where was I?
= W appears to have lost his train of thought here.
E You were talk/ing about if you were to see real gear piece/s.
E Is that what you were say/ing?
W Yeah if you were to see a real transformer, you would see some of their gear piece/s.
W (and uh when you do that) and when you see that, that/’s what it would like in real life.

Note. E = examiner; W = Will.
The breakdowns that occurred in the conversational exchange with Will are described below with respect to the three research questions pertaining to the sources of breakdowns, types of clarification requests made by the researcher, and the types of repair responses Will used to resolve those breakdowns. Graphs summarizing the data are presented for each individual research question followed by examples from the conversational transcript.

Research Question #1: What are the sources of communication breakdowns in the conversations of adolescents with ASD and their listeners?

Communication breakdowns were identified from the transcript by the presence of a clarification request made by the researcher to Will. The conversational exchange preceding the breakdown was then examined to identify the source of the breakdown. Following this, the researcher coded the breakdown based on the compiled coding system (Appendix F). In some conversational exchanges the presence of two sources of breakdowns were identified as resulting in the breakdown. These instances were coded using the two codes that best described the source of breakdown. Figure 2 illustrates the types of breakdowns and its frequency of occurrence seen in Will’s conversational exchange. The total number of breakdowns seen in Will’s conversational transcript was 22.
The results indicated that the main sources of breakdown in Will’s conversational exchange were the use of ambiguous referents (10/22), presence of content rejection errors (7/22), and providing inadequate information (5/22) or irrelevant information (3/22). As discussed earlier, Will had more instances of monologues describing his areas of interest than engaging in a purely conversational exchange with the researcher. In addition, some of these monologues consisted of sudden topic shifts or the introduction of new referents, which in turn may have resulted in the higher occurrence of breakdowns due to the use of ambiguous referents. At some instances, inadequate explanation or information about these ambiguous referents resulted in the consecutive breakdown occurring due to inadequate information. Figure 3 illustrates an example of the introduction of an ambiguous referent and inadequate information.
as being the sources of breakdown. In this conversational exchange, Will is discussing with the researcher about the breath test done to identify if one is drunk.

**Figure 3.** Breakdowns occurring due to ambiguous referents and inadequate information (Will, Adult-Client context).

Will is discussing the breath test.

W There/'s actually no flaw/s to the breath test.
W Because on MythBusters one time, they were actually (utterance abandoned).
W (The myth uh Jadie)Jamie and Adam actually (uh) were gonna^ (introduction of ambiguous referents)
E (who) Who are Jamie and Adam [REQCLAR] [AR]? W (uh) They were in the Mythbusters (inadequate information).
E Okay.
W And they had 30 year/s^
E It/'s a TV show [REQCLAR][InInfo]?
W Yes.

*Note.* W = Will; E = Examiner; [REQCLAR] = Clarification request; [AR] = Ambiguous referent; [InInfo] = Inadequate information.

*Content rejection errors* occur when the listener questions the accuracy of the information provided by the speaker. Figure 4 illustrates examples from Will’s transcript indicating content rejection errors and breakdowns occurring due to irrelevant information provided by Will.
Will was discussing a play he attended at school and about an illusion presented by a magician in the play. The following conversational exchange follows up on that discussion.

E Have you seen Chris Angel?
E Like have you heard of him?
W (Um) maybe that was his name {referring to the magician in the play}.
W But I just can't seem to remember.
E Alright.
E You said that this was a play in your fourth grade right [REQCLR] [CR]?
E So did you have {interrupted by Will}.
W Third or fourth probably second or.
E So (who) were/n't the people who were in the play part of the school[REQCLR] [CR]?
W (um) no he was actually a real magician <and>.
E <Oh> it was really a real magician so {interrupted by Will}.

= E is interrupted here and W starts a different topic about how he doesn't believe in magic and so the breakdown is not fully fixed. E then returns back to this breakdown later on in the conversation.

Will is discussing his favorite characters in videogames.

E Do you like have an all time favorite character that you like to play in the videogame?
W Really, I actually like most of them.
E Okay.
W And I don't really care about most of them.
E Okay.
W I don't like (uh) Pikmin very much because it's kind of pathetic.
W And and I hardly have any time to actually like do something.
E Pikmin is a videogame?
E Or is a <character> in a [REQCLR] [AR] {interrupted by Will}.
W <Pikmin> {said again probably to emphasize the name, or to correct the examiner}.
W Pikmin is actually (uh) a very (uh) very (uh) >
W Pikmin is just basically some creature that's mainly bury/ed.
W And he has this little stem.
W And then there/’s a little leaf.
W But then the leaf will turn into a bud or a flower and ^
{Last few utterances are part of the irrelevant information provided by Will}.
E So he is part of the character/s in like which videogame [REQCLR] [IrrInfo]?
W (uh)Pikmin {breakdown fixed}.

Note. E = examiner; W = Will; [REQCLR] = Clarification request; [CR] = Content Rejection; [IrrInfo] = Irrelevant information.
The sources of breakdowns occurring in Will’s conversational exchanges indicated that Will had trouble providing unambiguous, adequate, and accurate information for his listener to understand his message. Based on this information, one would predict that the requests for clarification made by the listener would be requests for additional information, or defining ambiguous referents, or confirming the accuracy of the information provided by Will. The following section describes the types of clarification requests made by the listener to Will.

Research Question #2: What are the types of clarification requests made by the listener?

Communication breakdowns were identified based on the clarification request made by the researcher to Will. Figure 5 illustrates the different types of clarification requests made by the listener during the conversational exchange.
The results indicated that the main types of clarification requests made by the researcher to Will were requests for confirmation (12/22), specific requests for specification (5/22), and direct requests (4/22). This could have resulted due to the presence of ambiguous, inadequate, or inaccurate information in Will’s conversational exchanges. Requests for confirmation usually occur when the listener wants to confirm or clarify some element of the speaker’s message. An example of this type of request from Will’s transcript is described below. In this particular conversational exchange, Will had introduced the ambiguous referent Bionicles for which a breakdown had occurred earlier. In his attempts to explain what a Bionicle meant and how he made the model; the researcher asked this particular type of clarification request.

Will: I made something like that has feet, legs, arms, and uh.
**Researcher:** Is that what you called as a Bionicle or? *(Request for confirmation)*

**Will:** No, not all those kinds of models with legs and arms are not all Bionicles.

*Specific requests for specification* usually occur when the listener indicates what specific additional information is required to fix the breakdown. An example of this is presented below in Will’s description of how Bionicles are different from Legos. Prior to this conversational exchange, he had defined Legos as being smaller in size than a Bionicle. But when the researcher queried him about size being the distinguishing factor, he disagreed, but then continued to define Bionicles based on size again, thereby confusing the researcher. The researcher then requested for specific information to distinguish between a Bionicle and a Lego, and the breakdown was finally fixed.

**Will:** But a Bionicle is like [utterance abandoned]. My tallest one is like this high [describing size as a defining feature].

**Researcher:** And it and it depends on how tall you want it to be, or how big you want it to be right?

**Will:** Well it’s not that. It’s just how the model is. I mean a couple are customized. Most of them are like this tall [gestures how tall; disagrees with researcher initially, but continues to describe Bionicle based on size again].

**Researcher:** Mhm.

**Will:** There’s one this tall [gestures different sizes of the Bionicles]. But then there’s also one this tall [gestures a size bigger than the previous one].

**Researcher:** So what do they do? Like you know, do they have any special features or *(Specific request for specification)*?

**Will:** Well, one thing for certain that all of them have is weapons *(breakdown fixed)*.
Direct requests are made by the listener to request the exact definition of a component in a message. As discussed earlier, Will tends to use idiosyncratic words to refer to things or concepts (such as “M” things for blocks, and “turble nerd” to describe an intelligent individual). When such instances occurred in the conversational exchange, the researcher made a clarification request to identify if Will and the researcher had the same reference, or whether Will meant something different with respect to the term. In the following example, Will described to the researcher how he first got interested in videogames by playing T-games, the request that follows is an example of a direct clarification request, requesting the explanation of the term T-games.

Researcher: So when did you first start getting interested in videogames?

Will: I don’t really know. I am guessing ever since I like, I don’t know.

Will: Ever since I played some T-games, T-rated games that were not so fun.

Researcher: T-rated games!

Researcher: What do you mean by that {Direct request}?

The review of the literature indicates that different types of clarification requests elicit different types of repair responses (Garvey, 1977; Brinton & Fujiki, 1989). This inter-dependent nature of clarification requests and repair responses may in turn determine if the breakdown is resolved or not. For instance, specific requests for specification and direct requests require the speaker to provide additional information to resolve the breakdowns. If the speaker does not provide adequate information, it may result in a consecutive breakdown. Understanding this relationship is important to analyze the types of repair strategies used by speakers to fix breakdowns. The following section describes the different types of repair strategies used by Will to fix the breakdowns that occurred in his conversational exchange with the researcher.
Research Question #3: What are the types of repair response behaviors adolescents with ASD use to repair the breakdowns?

A total of 22 breakdowns occurred in Will’s conversational exchange with the researcher. Figure 6 illustrates the different types of repair strategies Will used to resolve these breakdowns.

Figure 6. Types of repair responses used by Will (Adult-Client context).

Note. Total number of contexts = 22.

The results indicated that the most frequently occurring types of repair responses used by Will were addition responses (15/22), close-ended responses (9/22), cue responses (6/22), and explanation responses (4/22). Some of Will’s repair responses were characteristic of two or more repair response types. Hence, such repair responses were coded to indicate both types of repair. In addition, a new code was developed to identify one of Will’s repair strategies. This code was
defined as a “Related response” code, in which the speaker acknowledges the clarification request made by the listener with a response that relates to the topic discussed, but does not necessarily fix the breakdown. An example of this type of repair response is presented below. In this conversational exchange, Will was talking to the researcher about how he has many grandparents.

Will: Yeah, I got a couple grandma and grandpas.

Will: I got Grandma Grandpa Robertson, Grandma Grandpa Miller, Grandma Grandpa Phillips.

Researcher: How do you have so many grandpas and grandmas {Clarification request}?

Will: Well, I don’t really know exactly {Related response}.

Following the above response, Will then provided additional information to finally meet the need of the listener by saying “I mean we do, I am actually from a bunch of different families I guess.” Although Will used Related response only once in the entire conversational context, it did indicate the need for an additional code to identify his acknowledgement of the breakdown and his attempt at resolving the breakdown.

The higher occurrence of requests for confirmation made by the researcher may have resulted in the higher occurrence of addition and close-ended responses. Requests for confirmation usually elicit an affirmative or negative response from the speaker, or at times may be accompanied by additional information (Garvey, 1977; Brinton & Fujiki, 1989). Close-ended repair responses are defined as responses in which the speaker uses affirmation or negation in response to the listener’s clarification request (Philip & Hewitt, 2006).

Cue responses are responses in which the speaker provides background information, or provides formulations-- talking about repairing the breakdown (Brinton et al., 1986a). A cue
response is different from an additional information response because it does not provide any specific additional information, but rather provides a framework or a background context in which the preceding utterance can be understood (Brinton et al., 1986a). Examples of these different types of repair strategies used by Will are illustrated in Figure 7.

Figure 7. Examples of repair responses used by Will (Adult-Client context).

<table>
<thead>
<tr>
<th>Will is explaining to the researcher what a Bionicle is, and how he made one.</th>
</tr>
</thead>
<tbody>
<tr>
<td>W I made something like {clicking noise} like that has feet, leg/s, arm/s and (uh).</td>
</tr>
<tr>
<td>E Is that what you call/ed as a bionicle or [REQCLR]?</td>
</tr>
<tr>
<td>W No, not all those kinds of model/s with leg/s and arm/s are not all bionicle/s [ClResp].</td>
</tr>
<tr>
<td>W There are some that are Knight/z_Kingdom/s [Add].</td>
</tr>
<tr>
<td>W And (uh) some are actually little lego people [Add].</td>
</tr>
<tr>
<td>W You know with just little arm/s [Cue].</td>
</tr>
<tr>
<td>W And compare/ed to a Knight/z_Kingdom or a bionicle they/'re just compare/ed very very small [Cue].</td>
</tr>
</tbody>
</table>


Explanation responses explain specific terms in an utterance (Most, 2002). In the following example, Will was talking to the researcher about when he first got interested in videogames by playing T-games. The researcher then requests Will to define what he meant by T-games. The response that follows is an example of an explanation response as it defines the specific term in the utterance.

Researcher: So when did you first start getting interested in videogames?
Will: I don’t really know. I am guessing ever since I like, I don’t know.
Will: Ever since I played some T-games, T-rated games that were not so fun.
Researcher: T-rated games!
Researcher: What do you mean by that {request for clarification}?

Will: uh T for teen {Explanation response}.

To sum up, the conversational breakdowns that occurred in Will’s conversational exchange with the researcher were mainly due to the use of ambiguous referents and providing inaccurate, inadequate, or irrelevant information. This in turn resulted in clarification requests that primarily focused on confirming the content of the message (requests for confirmation), and obtaining additional information (specific request for specification, direct requests). In response to these clarification requests, Will used repair responses that primarily provided additional information (addition, cue, explanation), or confirmed the content of the message or the listener’s query (close-ended responses).

Whitney

Whitney is a 14-year-old student with autism, who receives two hours of speech therapy services per week. She also has a diagnosis of attention-deficit-hyperactivity disorder (ADHD). During seventh grade, she was placed on a homebound Individualized Education Plan (IEP) after an aggressive outburst involving her classroom teacher. She was then transferred to the present school at the beginning of her eighth grade. Whitney usually listens to music with the use of headphones as a strategy to calm herself during challenging situations. For this reason, she had brought her headphones for the first eligibility testing session with the researcher. However, she did not bring her headphones for the remaining sessions.

Based on the record review and eligibility testing, Whitney’s receptive and expressive skills were age-appropriate. However, she had difficulty with the social use of language (pragmatics), and her therapy goals focused on those specific skills. She had difficulty in appropriately initiating and maintaining topics. She often used a formal tone while speaking to
the researcher, and had difficulty speaking in an appropriate volume (such as using a reduced volume). During the eligibility testing, she provided detailed definitions of the vocabulary items on the *WASI*, almost resembling a memory card containing every single detail of the word. For example, she defined the word *calendar* as “used by the Aztecs; counts dates and special events; tells what month it is, and helps you make special appointments.” Often these descriptions were accompanied by odd intonation patterns.

Whitney had difficulty maintaining appropriate eye contact for the testing sessions. She either had limited eye contact or at times had periods of long stares. For the *ADOS* testing, Whitney had occasional echoing, most often echoing the last word of the researcher’s question. She also exhibited a stereotypical intonation quality to some of the phrases she used. These included phrases such as “We prayed to the Lord,” “What’s that,” “What we bring and why we bring,” “I think so,” “right.” She also used a sing-song intonation pattern when listing things. One of Whitney’s strengths was her ability to appropriately respond to the researcher’s comments, and follow the conversational leads made by the researcher.

For the conversation task with the researcher in the Adult-Client context, Whitney had difficulty in initiating and maintaining topics. She required constant prompts to engage successfully in the conversational task. This resulted in the researcher asking several questions to continue the conversational discourse and obtain a representative sample. Whitney’s responses were usually brief and did not contain adequate information for the message to be understood. At times, her responses were irrelevant or inappropriate to the topic discussed. For example, when Whitney was discussing the baseball game she had recently attended with her cousin Jeremy (pseudonym), her response to the researcher’s query was as follows:

**Researcher:** Why is that your favorite game?
Whitney: um my cousin Jeremy has tickets.

Another one of Whitney’s inappropriate and frequently occurring response was “I think so.” In the following example Whitney also focused on providing factual details when describing or responding to the researcher’s query. Figure 8 illustrates two examples of Whitney providing factual details instead of providing a more global response.

Figure 8. Whitney’s use of factual details in her responses (Adult-Client context).

Whitney was discussing the recent vacation she had in North Carolina. E queried her about what was different about being in North Carolina than in Virginia.

E And then (uh) what was different about North Carolina and Virginia?
W Like North Carolina is (the South x ss*) in the South.
E Mhm.
W And Virginia is up in the North {providing factual details}.
E But what about the place?
E (like why) I mean yeah I understand that it/’s in the South.
E And this is you know in the North.
E But what about the place was different?
W There were palm tree/s {providing factual details again}.

Whitney was discussing the Rock n Roll music she likes.

E (what/’s) What/’s your favorite band?
W The KidsClub CD.
E Oh okay.
E Why do you like them so much?
W Because (yawns){I/’ve} I like the music.
E What/’s so special about the music?
W It has my favorite song/s.
E Okay.

= In the above conversational exchange, Whitney’s difficulty in expressing why exactly she likes a particular kind of music is emphasized. Whitney concentrates on the literal or factual information of why a person likes a particular type of music, instead of explaining why that music differs from other kinds of music.

Note. E = Examiner; W = Whitney.
The conversational breakdowns that occurred in Whitney’s conversational exchange with the researcher are discussed below. The results are presented with respect to the three main research questions of the study with a frequency distribution chart and examples from Whitney’s language transcript.

Research Question #1: What are the sources of communication breakdowns in the conversations of adolescents with ASD and their listeners? Communication breakdowns were identified based on the presence of a clarification request made by the researcher to Whitney. A total of 57 communication breakdowns were identified from Whitney’s language transcript. Figure 9 illustrates the sources of breakdowns that occurred in Whitney’s language transcript.
The results indicated that the main sources of breakdowns occurring in Whitney’s conversational exchange with the researcher were the use of ambiguous referents (23/57), presence of content rejection errors (15/57), and providing inadequate (6/57) or irrelevant information (5/57). Based on the language sample, there were several instances when the sources of breakdowns (ambiguous referents, inadequate or irrelevant information) followed a consecutive sequence. For example, Whitney introduced ambiguous referents which usually triggered a clarification request from the researcher, and her responses which were either inadequate or irrelevant triggered the next clarification request. Figure 10 illustrates an example of Whitney introducing multiple referents in a short segment of the sample resulting in
consecutive breakdowns. Whitney does not realize that a breakdown has occurred and the
caregiver intervenes to facilitate the conversation.

Figure 10. Use of ambiguous referents, inadequate and irrelevant information (Whitney, Adult-
Client context).

Whitney was discussing how her favorite character Nathaniel in the movie
Enchanted ended up in a well and in New York. This had resulted in the
first breakdown occurring due to irrelevant information.

E And how does he end up in the well [REQCLR][IrrInfo]?
E Did someone throw him in?
W No Narissa sent him {introduction of new referent}.
E Who who/’s that [REQCLR][AR]?
W She/’s the evil [EU].
= W omits the noun in this sentence; however, the message is understood
based on the context.

E Oh!
E She/’s the evil character throughout the whole movie or-
W Yes.
E Okay, and why does she throw him into that well?
W No (he): he [EW: she] told him to go after Grazelle {introduction of new
referent}.
E Grazelle is the good person or [REQCLR][AR]~
W Yes.
E Okay.
E I/’ve no clue about this movie.
E That/’s why (I/’ve) I/’ve no idea about the character/s.
E I/’m probably am a bit back about that.
E (so)So Nathaniel go/3s out to look out for Grazelle.
E And (uh) the evil one, what was her name again?
W Narissa.
E Narissa, and so why is she try/ing to stop him?
W No, the Prince go/3s after Grazelle {introduction of new referent}.
E Okay.
W And Nathaniel go/3s with the Prince.
E Okay.
W And so {utterance abandoned}>
W And Pip too {introduction of new referent}.
E Oh okay.
W He/’s a chipmunk.
E Oh okay so {utterance interrupted}^
C Whitney, tell her how the movie start/3s?
C What is it at first when it start/3s?
E Yeah, what is it about [REQCLR] [InInfo]?
E I/’m still try/ing to figure out what the movie is about.

Note. E = Examiner; W = Whitney; C = Caregiver; [REQCLR] = Clarification request;
[AR] = Ambiguous referent; [InInfo] = Inadequate information; [IrrInfo] = Irrelevant information;
[EU] = Utterance error.
As discussed earlier, Whitney had difficulty using an appropriate volume while talking. This may have resulted in breakdowns occurring due to *inaudibility* (2/57), and the presence of *unintelligible segments* within communication units (3/57). In addition, some of her sources of breakdowns occurred due to the presence of phonological errors. These errors included backing to velars (saying Connie instead of Bonnie), nasalization of liquids (saying Mushun instead of Lucian), stops replacing liquids (saying Jake Gong instead of saying Jake Long), and strident fricatives replacing non-strident fricatives (saying Nazaniel instead of Nathaniel). Furthermore, although Whitney had only a single instance of a breakdown occurring due to the *idiosyncratic use of language*, it did illustrate how sometimes inadequate information coupled with the idiosyncratic use of language might result in communication breakdowns. Figure 11 illustrates an example of a communication breakdown occurring due to the idiosyncratic use of language.
Figure 11. Idiosyncratic use of language (Whitney, Adult-Client context).

<table>
<thead>
<tr>
<th>E</th>
<th>W</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you watch the Simpsons movie?</td>
<td>Yes, and I manage/ed it.</td>
<td>Whitney probably means something very specific when she refers to &quot;managed it&quot;.</td>
</tr>
<tr>
<td>Oh, manage/ed it meaning [REQCLR][InInfo]?</td>
<td>Mean/3s that I can watch Simpsons episode anytime I want (odd tone).</td>
<td>Whitney probably means something very specific when she refers to &quot;managed it&quot;.</td>
</tr>
<tr>
<td>(Without) with manage/ing it.</td>
<td>E assumes that Whitney meant she probably downloaded the movie or had a personal copy, so that she could watch the movie any time.</td>
<td></td>
</tr>
<tr>
<td>Oh okay.</td>
<td>That/'s so cool.</td>
<td>(Without) with manage/ing it.</td>
</tr>
<tr>
<td>And (uh what) did you go and watch the movie you said right?</td>
<td>Right (continues to laugh).</td>
<td></td>
</tr>
<tr>
<td>Did you go and see it with your family or~</td>
<td>I went to see it with my sister.</td>
<td></td>
</tr>
<tr>
<td>Okay, she like/3s the Simpsons too?</td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>But she put me on a test.</td>
<td>Put you on a test [REQCLR][CR]?</td>
<td></td>
</tr>
<tr>
<td>Why?</td>
<td>Manage the movie [REQCLR][CR]?</td>
<td></td>
</tr>
<tr>
<td>To see if I could manage it, the movie.</td>
<td>Yes.</td>
<td></td>
</tr>
<tr>
<td>I still don't get that [REQCLR][InInfo]?</td>
<td>Like how [REQCLR][IS]?</td>
<td></td>
</tr>
<tr>
<td>Like you go to watch the movie in the theater right?</td>
<td>Right.</td>
<td></td>
</tr>
<tr>
<td>Without even laugh/ing.</td>
<td>Finally the breakdown is repaired. What Whitney meant regarding the word &quot;managing&quot; is that she could watch the entire movie without even laughing.</td>
<td></td>
</tr>
</tbody>
</table>

Note. E = Examiner; W = Whitney; [REQCLR] = Clarification request; [InInfo] = Inadequate information; [CR] = Content rejection; [IS] = Idiosyncratic errors.
Research Question #2: What are the types of clarification requests made by the listener?

Figure 12 illustrates the clarification requests made by the researcher to Whitney during the conversational exchange. At times two different types of clarification requests were made by the researcher for a single communication breakdown context.

Figure 12. Types of clarification requests made by listener to Whitney (Adult-Client context).

![Types of Clarification Requests](chart)

Note. Total number of contexts = 57.

The results indicated that the main types of clarification requests made by the researcher to Whitney were specific requests for specification (23/57), requests for confirmation (22/57), and direct requests (5/57). This could have resulted either due to the presence of a large number of ambiguous referents, or due to the brief and often inadequate or irrelevant information offered by Whitney to the researcher’s queries. Neutral requests were also another commonly occurring
clarification request made by the researcher. *Neutral requests* or *Nonspecific requests for repetition* are requests such as “huh,” “what,” “I didn’t understand.” They do not usually indicate to the speaker what information is missing in the speaker’s utterance to fix the breakdown. For instance, in the following example, Whitney was talking about her two favorite TV shows – *The Simpsons*, and *The Family Guy*. Due to the presence of unintelligible segments in her utterance, the examiner used a *neutral request* to request for clarification.

*Whitney:* I’d combine the x [unintelligible segment] Family Guy and the Simpsons episode [utterance said when Whitney was laughing uncontrollably].

*Researcher:* What, what? I didn’t hear that {Clarification request; *Neutral request*).

*Whitney:* I’d combine Family Guy and Simpsons and turn it into one Simpsons episode {breakdown fixed}.

In the following example, Whitney was describing to the researcher about Kurgie and how its princess was captured by the Lord Balthazar. The example illustrates the *request for confirmation*, and the *specific request for specification* used by the researcher to request for clarification.

*Researcher:* Okay, and he’s the evil guy in that movie?

*Whitney:* In the book [Whitney had earlier only introduced the title *Princess in Kurgie* without indicating if it was a book or a movie. In addition, online research indicated that she had introduced the title incorrectly. The correct title of the book is *The Princess and Curdie*].

*Researcher:* Yeah, oh this is a book, okay.

*Whitney:* I’m trying to make it a movie.

*Researcher:* You’re trying to make it into a movie {Request for confirmation}. 
Whitney: Yes.

Researcher: How \{Specific request for specification\}?

Whitney: By asking directors of animation studios \{breakdown fixed\}.

Whitney’s language sample also contained a few instances of \textit{specific requests for repetition} (3/57). \textit{Specific requests for repetition} are requests in which a wh-question replaces a part of the original utterance of the speaker to indicate to the speaker what the source of breakdown is. In the example given below, Whitney was discussing with the researcher about the TV show she liked and its main character, who was a dragon.

Researcher: Okay, and what’s the whole story about? What does he do in the \{interrupted by Whitney\}.

Whitney: He debates the Hunt’s clan.

Researcher: He debates, he \textit{what}? I didn’t hear that \{Content rejection; \textit{Specific request for repetition}\}.

Whitney: He fights the Hunt’s clan.

Although the occurrence of \textit{relevance requests} (1/57) and \textit{cloze requests} (1/57) were relatively rare in Whitney’s language sample; they did indicate a different type of clarification request made by the researcher to Whitney. \textit{Relevance requests} are requests that question the relevance of what the speaker says.

Context: Whitney was discussing the story of the book \textit{The Arkadians} that she had read.

Researcher: And does it have a happy ending?

Whitney: Yes.

Researcher: Okay, that’s \{interrupted by Whitney\}.

Whitney: when it was only three weddings.
Researcher: It was only three weddings {Request for confirmation}?

Whitney: Three weddings. One was Oudeis and Mirina, one was Lucian and Joy in the Dance, one was Laurel Crown and Ops.

Researcher: What do the weddings have to do about what you are saying right now {Relevance request}?

Whitney: I mean the Lady of Wild Things will [utterance abandoned].

Whitney: It’s part of the ending {breakdown fixed}.

**Cloze requests** are requests that contained two choices for the speaker to choose from, in order to fix the breakdown. In the following example, Whitney was discussing how she wanted to play the character Meg in the TV show *The Family Guy*. The breakdown had occurred due to the introduction of the ambiguous referent Meg.

Researcher: And if you had a chance to play in Family Guy, whose character would you play?

Whitney: Meg.

Researcher: Meg is the wife or is the daughter {Cloze request}?

Whitney: No the daughter {breakdown fixed}.

**Research Question #3: What are the types of repair response behaviors adolescents with ASD use to repair the breakdowns?** Figure 13 illustrates the different types of repair responses used by Whitney to resolve the breakdowns that were encountered in the conversation. Some of Whitney’s responses required the assignment of two different repair response codes to identify the type of repair, and these were accordingly assigned.
The main types of repair responses used by Whitney included addition responses (24/57), close-ended responses (15/57), and explanation responses (5/57). In addition to these responses, she also used a variety of other types of responses, such as: repetition-appropriate responses (5/57), keyword emphasis responses (4/57), inappropriate responses (4/57), and revision responses (3/57).

Repetition responses are defined as responses that contain all or part of the original utterance of the speaker. These may be repetition-appropriate responses (fixes the breakdown) or repetition-inappropriate responses (fails to resolve the breakdown). Whitney used both types of repetition responses in her conversational exchange with the researcher. Inappropriate responses usually occur when the speaker provides unrelated utterances, discontinues discourse,
or does not respond to the listener’s request for clarification. *Inappropriate responses* are different from *repetition-inappropriate responses* as the speaker does not repeat all or part of the original utterance. In the following example, Whitney was describing to the researcher about Lina, a character in the book *The Princess and Curdie*, and why she was referred to as the ugly monster. A breakdown had occurred earlier as Whitney had provided irrelevant information regarding why Lina was called the ugly monster. The example illustrates Whitney’s use of *inappropriate responses*, *repetition-inappropriate responses*, and *addition responses* as repair responses to fix the original breakdown and the consecutive breakdowns.

**Researcher**: And so why is she [referring to Lina] called the ugly monster too

{Clarification request; Irrelevant information provided earlier}?

**Researcher**: You [interrupted by Whitney].

**Whitney**: She was sent by Irene’s great great great grandmother {Inappropriate response; introduction of new referent}.

**Researcher**: Who’s that {Clarification request}?

**Whitney**: Irene’s great great great grandmother {Repetition-inappropriate}.

**Researcher**: Who’s Irene {Clarification request}?

**Whitney**: The Princess {Addition response; breakdown due to ambiguous referent fixed}.

*Keyword emphasis responses* emphasize a particular word in an utterance that aids in fixing the communication breakdown.

**Context**: Whitney was describing the Pupanunu people in her favorite videogame. She introduced the referent inaudibly, which was the cause of the breakdown.

**Researcher**: And they’re called the Pupanay people. Is that what you said {Clarification request}?
Whitney: No {Close-ended response}.

Researcher: What was the name of the people you said {Clarification request}.

Whitney: The Pupanunu {Keyword emphasis response}.

*Revision responses* are repair responses whereby the speaker uses an alternate label or syntactic structure without adding information or meaning to the original utterance. In the following example, Whitney was describing the role of the main character, a boy turned dragon, in the TV show *American Dragon: Jake Long*.

Researcher: Okay and what’s the whole story about? What does he do in the [interrupted by Whitney].

Whitney: He debates the Hunt’s clan.

Researcher: He debates, he what? I didn’t hear that {Clarification request}.

Whitney: He fights the Hunt’s clan {Revision response}.

To sum up, the conversational breakdowns that occurred in Whitney’s conversational sample were due to the presence of ambiguous referents, inaccurate, inadequate or irrelevant information. These in turn resulted in clarification requests that focused on obtaining specific additional information (*specific requests for specification*), and confirming the content of Whitney’s message (*requests for confirmation*). In response to these requests for clarification, Whitney used a variety of repair responses, some of which were appropriate and fixed the breakdowns (*addition, close-ended, explanation, keyword emphasis, revision, repetition-appropriate*), and some of which were inappropriate (*repetition-inappropriate, inappropriate*).
Peter

Peter is a 14-year-old student with autism, who had only recently been transferred to the present school. Based on the record review, Peter had received a provisional diagnosis of bipolar disorder and the possibility of an obsessive compulsive disorder in December of 1998. In 2005, he received a diagnosis of mild to moderate degree of autism on the Childhood Autism Rating Scale (CARS, Schopler, Reichler, & Renner, 1986). The current school records indicated that he still had a diagnosis of autism and bipolar disorder, for which he was receiving intervention. The reports also revealed that Peter’s emotional outbursts had increased over the past few years, although no reasons have been reported for his transfer to the present school. He was currently undergoing evaluations at the school at the time of the study.

Based on the eligibility testing, Peter’s receptive and expressive skills were age-appropriate. However, his mood fluctuations determined how well he participated in the task items. In his attempts to do well on the standardized tests, he would persist in solving the test item until he was satisfied that he had the right answer. These instances usually drained him emotionally, and he required breaks to be able to continue to the next task. In most of the testing sessions, he was enthusiastic and full of energy at the beginning of the task, but because of his mood fluctuations, his energy levels would drop at the middle or end of the task activity.

Peter was the most enthusiastic in completing the tasks on the ADOS. He displayed a significant amount of creativity in his approach to the ADOS tasks, such as describing his innovative ideas (baking a volcano cake, designing a holographic videogame system) for the conversational task, and his vivid narrative for the story task (use of different intonation patterns to distinguish the different characters, describing characters in the story as interacting with each other, and use of humor to indicate unusual events). However, he also exhibited occasional
stereotypical or idiosyncratic language in addition to his spontaneous language. Some examples of his stereotypical language included phrases such as “old country side ee-hoh,” “Evil Mass Coyote,” “the county has arrived,” “Open sesame” (when opening the box of sketch pens), “super-cows,” “cows with bat wings—bat-cow-man.” These phrases were usually accompanied with a stereotypical voice quality. Some of his other stereotypical and compulsion behaviors included his insistence on listing items, working on a task till he was satisfied, and body rocking. Peter’s ability to use different intonation patterns and repeat different lines from the movies enabled him to provide a very descriptive story for the story task. He used different intonation patterns to indicate the different characters in the story. However, at times his odd intonation patterns and fast rate of speech affected his speech intelligibility.

For the conversational task with the researcher in the Adult-Client context, Peter’s energy levels were low at the beginning of the testing session. The researcher confirmed with the behavioral specialist whether Peter was having a good day prior to starting the task. The specialist informed the researcher that it was one of Peter’s good days and that he had just woken up from his nap time. Once the researcher queried him on what he liked to do in his spare time, Peter was enthusiastic and energized to engage in a conversation with the researcher.

Some of Peter’s difficulties with the social use of language (pragmatics) were identified during the conversational exchange. He had difficulty waiting for his turn to speak, and constantly interrupted the researcher. Although he tried to answer some of the researcher’s queries at times, he was more interested in continuing what he had to say. This resulted at times in sudden topic shifts without orienting the researcher to what he was saying. His odd intonation patterns and the tendency to imitate characters and repeat lines from the movies affected his ability to continue discourse effectively. When he had difficulty explaining what he had to say,
he looked toward the behavioral specialist for aid in responding to the researcher’s queries. He had to be reminded not to ask for help from the specialist.

Peter’s rate of speech and intelligibility of speech was usually influenced by his moods. If he was excited talking about a particular topic, his rate of speech increased and his intelligibility was affected. In addition, his use of odd intonation patterns accompanied with the stereotypical use of language affected the ability of the researcher to understand what he was saying. He also exhibited certain repetitive behaviors such as rocking his body and turning around in his swivel chair, potentially related to a need for sensory stimulation. These in turn affected the ability of the researcher to hear and understand what he was saying. Peter had to be reminded not to turn in his chair, and the chair was replaced with a stationary chair for this purpose. He also had a compulsion to list items and did not like to be interrupted while he was listing. He also had an odd way of describing his family (brothers and sisters) from a third person’s perspective.

Peter: There’s Chris, Nick, and [utterance abandoned].

Peter: Chris and Nick are both boys and brothers.

The conversational breakdowns that were encountered in the conversational exchange with Peter are discussed below with respect to the three research questions. The results are presented visually using frequency distribution charts, and examples taken from the language transcript.

Research Question #1: What are the sources of communication breakdowns in the conversations of adolescents with ASD and their listeners? A total of 35 communication breakdowns were identified in Peter’s language transcript. In some conversational exchanges the presence of two sources of breakdowns were identified as resulting in the breakdown. These
instances were coded using the two codes that best described the source of breakdown. Figure 14 illustrates the different sources of breakdowns.

*Figure 14. Sources of communication breakdowns in Peter (Adult-Client context).*

The results indicated that the main sources of breakdowns in Peter’s language transcript were the presence of *unintelligible segments* (12/35), *content rejection errors* (8/35), *inaudibility* (5/35), and the use of *ambiguous referents* (5/35). In addition to these types of breakdowns, Peter also had communication breakdowns that occurred due the presence of *inadequate information*, *irrelevant information*, and the use of *non-verbal* behaviors. *Non-verbal* sources of breakdown occur when the speaker uses a gesture that is not understood by the listener. Figure 15 illustrates
an example in which non-verbal behaviors and inadequate information are the sources of breakdown in Peter’s description of ice-cream pizza at Chuck E Cheese.

Figure 15. Non-verbal and inadequate information as sources of breakdown (Peter, Adult-Client context).

Peter was talking about the ice cream pizza he had at Chuck E Cheese. He was not sure if they still had it.

P So, I’m not sure if they still have it.
P If they x {unintelligible word} out on it.
P If not, I’d like to make some money out of it {laughs}.
E Do you try to make some of those {interrupted by Peter}^P %chichink {associated with a gesture indicating putting something into a slot or box}.
E What’s that?
E What did you just do now [REQCLAR][NV]{use of a gesture}?%P %chichink.
E What’s that [REQCLAR][InInfo]?%P It’s the money sound.
= Breakdown regarding the gesture is finally fixed.

E Oh!
E So (you’re) you’re try/ing to imitate to me like how you’re buy/ing a pizza?
E Is that what you’re try/ing to do [REQCLAR][InInfo]{interrupted by Peter}^E

= Last 2 utterances are part of the E's REQCLAR. NOTE: Although the breakdown regarding the gesture associated with the sound (%chichink) was fixed, the repair response does not clearly indicate what Peter is referring to. In order to confirm whether Peter referred to the cash register and the process of buying a pizza at the restaurant, the examiner asks the confirmatory REQCLAR. Thus, the source of the breakdown is the inadequate information as provided by Peter. Also note that E’s REQCLAR was interrupted by Peter’s response.

P Yeah %chichink.
P Cash register open/ing sound.
P It’s the (catch cash register/z wh* cash regis*) cash register open/ing sound.
E Uhhuh.
P Like when you press the button <> it go/3s %chichink.

= The utterance "cash register opening sound and the utterance "Like when you press the button, it goes %chichink are both part of the repair response. The breakdown is now completely fixed.

Note. E = Examiner; P = Peter; [REQCLAR] = Clarification request; [NV] = Non-verbal; [InInfo] = Inadequate information.
The majority of Peter’s sources of breakdowns occurred due to the presence of \textit{unintelligible segments}. For instance, in the following example, Peter was talking about the people who came over to his house for Thanksgiving. As discussed earlier, Peter’s rate of speech increases when he gets excited talking about something he likes. Rate difficulties, in addition to underarticulated segments were the source of breakdown in the example.

\textbf{Peter}: And did you know 15 more people would turn x [x denotes unintelligible word] family came over xx [unintelligible segment] Thanksgiving. [underarticulated speech accompanied with a fast rate of speech].

\textbf{Peter}: So all the other x [unintelligible word] was [interrupted by researcher].

\textbf{Researcher}: What, what, (I) I didn’t hear that \{Clarification request\}? 

\textbf{Peter}: On Thanksgiving, 15 more people from my family came over; so that would be 15 plus 8 \{said more clearly; breakdown is fixed\}.

\textit{Research Question \#2: What are the types of clarification requests made by the listener?}

Figure 16 illustrates the different types of clarification requests made by the researcher to Peter. During some instances Peter used two different types of repair responses to resolve the breakdown. In such instances, two codes were assigned to the clarification request.
Based on the results illustrated in Figure 16, the main types of clarification requests made by the researcher to Peter were *requests for confirmation* (14/35), *neutral requests* or *nonspecific requests for repetition* (9/35), and *specific requests for repetition* (6/35). In the example that follows, Peter was commenting about the picture book he had read during the *ADOS* about flying frogs. Due to his excitement and fast rate of speech, a communication breakdown had occurred, and the researcher’s request for clarification is an example of a *neutral request* or *nonspecific request for repetition*.

**Researcher:** So that’s why you liked the picture book that I gave you yesterday right? The one about the flying frogs.
Peter: Alien frogs attack from xx [unintelligible segment; said in an excited tone and with a fast rate of speech].

Researcher: What’s that? What did you say? {Clarification request; neutral request}.

Peter: Alien frogs attacking Earth from Planet Mars! {breakdown fixed}.

In the following example, Peter was discussing with the researcher about the fun things he does at the present school.

Researcher: Like what kind of fun things do you do here?

Peter: I like the parachute.

Researcher: You what {Clarification request; content rejection error; specific request for repetition}?

Peter: I like the parachute.

Researcher: Parachute {Clarification request; content rejection error; request for confirmation}?

Peter: Yeah, parachute.

Research Question #3: What are the types of repair response behaviors adolescents with ASD use to repair the breakdowns? Figure 17 illustrates the different types of repair responses used by Peter to fix the communication breakdowns.
The results indicated that the main types of repair responses used by Peter included addition responses (13/35), repetition-appropriate responses (9/35), close-ended responses (9/35), and keyword emphasis responses (5/35). Close-ended responses are defined as responses in which the speaker uses affirmation or negation in response to the listener’s clarification request. In the following example, Peter was describing about the activity he did with the occupational therapist using a parachute. In describing the activity, he got excited and started talking about how one passed the ball in a circle. This confused the researcher as she was not sure whether he was talking about the activity with the parachute or talking about a different game he had played.
Peter: And then there’s the other one like what I just said where the other people will go around {repeating an utterance he had said earlier, which was unclear}.

Peter: And the person who goes around the middle passes the ball while the others go around in circles.

Researcher: Is this a type of game?

Peter: And then [interrupted by researcher before he started the next topic].

Researcher: Is this a type of game Peter {Clarification request}? 

Peter: Yes {Close-ended response}.

Peter: They’re all types of games {Addition response}.

The code Related response was used to indicate the speaker’s acknowledgment of the listener’s clarification request with a related response to the topic discussed. Although this occurred only once in Peter’s transcript, it did indicate a different type of repair strategy used by Peter in response to the researcher’s clarification request. In the following example, Peter had difficulty in expressing what he had baked at school during one of the cooking sessions. He had looked at the specialist for help in obtaining that information. The researcher had to remind him not to ask for help and his response to the researcher’s comment was unintelligible because he had turned his head toward the specialist. The repair response that follows the researcher’s clarification request is an example of the Related response code.

Researcher: I told you we don’t know she’s [referring to the specialist] here.

Peter: I will take the parts out of my brain [Utterance was unintelligible to the examiner based on the utterances that follow. However, transcription was made possible because of the audiofile].

Researcher: What? I didn’t hear that? {Clarification request}.
Researcher: Can you tell me that again? You turned your head and so I couldn’t hear what you said.

Peter: Never mind {Related response}.

In sum, the main sources of breakdowns in Peter’s language transcript were due to the presence of unintelligible segments, content rejection errors, inaudibility, and the use of ambiguous referents. These in turn resulted in clarification requests such as requests for confirmation, neutral requests, and specific requests for repetition. Peter’s main repair response strategies included the use of addition responses, close-ended responses, and repetition-appropriate responses to fix the breakdowns.

Research Question #4: How are the adolescents with ASD similar or different from each other in their sources of communication breakdowns, the types of clarification requests used, and their contingent repair responses used?

Given the wide heterogeneity that exists within autism, comparing individuals with ASD with each other allows for an in-depth investigation of the variability among individuals with this label. Thus, one of the purposes of this study was to examine how the participants compared with each other in their sources of breakdowns, types of clarification requests used, and the types of repair responses used. The results are presented with respect to these three categories (sources of breakdowns, clarification requests, and repair responses). Furthermore, similarities or differences, if any, that exist between the 3 participants are accordingly described.

Sources of Breakdowns. As the total number of breakdowns varied across the 3 participants (Will: 22; Whitney: 57; Peter: 35); the scores were converted into percentage scores
to allow comparison. Figure 18 illustrates the different sources of breakdowns that occurred across the 3 participants.

Figure 18. Sources of breakdowns across the three participants (Adult-Client Context).

![Graph showing sources of breakdowns across participants]

Note. Will (532-utterance sample); Whitney (424-utterance sample); Peter (453-utterance sample).

The results indicated that Will and Whitney were more similar to each other in their sources of breakdowns than with Peter. Will’s three main sources of breakdowns were the presence of ambiguous referents (45%), content rejection errors (32%), and inadequate information (23%). Whitney’s three main sources of breakdowns were similar to those seen in Will: ambiguous referents (40%), content rejection errors (26%), and inadequate information (12%). In contrast, Peter’s main source of breakdown was due to the presence of unintelligible segments (34%). However, he did have breakdowns occurring due to the presence of content rejection errors (23%), and ambiguous referents (14%), which were similar to those seen in Will.
and Whitney. Thus, based on the visual display, the main sources of breakdowns that were comparable across the three participants were the presence of *content rejection errors*, and *ambiguous referents*. Breakdowns occurring due to *inadequate information* and *irrelevant information* were also seen in all 3 participants, but in varying degrees.

In addition to the main sources of breakdowns, Whitney had breakdowns occurring due to *unintelligible segments*, and *inaudibility*. In this aspect, she resembled the pattern of breakdowns seen in Peter. However, she was the only participant who had breakdowns occurring due to *phonological errors*. Similarly, Peter was the only participant who had breakdowns occurring due to the use of *non-verbal* behaviors. In the case of Will, his breakdowns were more due to language problems (*irrelevant information, idiosyncratic language*) than due to speech intelligibility or inaudibility.

*Types of Clarification Requests.* Clarification requests are the only means through which communication breakdowns in a language sample are able to be identified (and therefore, by definition, breakdowns not generating clarification requests cannot be studied). Figure 19 illustrates the different types of clarification requests made by the researcher to the 3 participants. The results are described based on the percentages of occurrence across the 3 participants.
Figure 19. Types of clarification requests made by the researcher to the three participants (Adult-Client context).

The results indicated that the two main types of clarification requests commonly occurring across the 3 participants were requests for confirmation and specific requests for specification; with Will having the highest occurrence of requests for confirmation (55%), and Whitney having the highest occurrence of specific requests for specification (40%). However, in the case of Peter, specific requests for repetition occurred more frequently (17%) than specific requests for specification (14%). Relevance requests and neutral requests were seen more in Whitney and Peter; whereas, cloze requests were more characteristic of Will and Whitney.
Types of Repair Responses. The participants used a variety of repair response strategies to resolve the communication breakdowns they encountered with the researcher. Figure 20 illustrates the different types of repair responses used by the 3 participants.

Figure 20. Types of repair responses used by the participants (Adult-Client context).

The results indicated that addition responses and close-ended responses were the two most preferred strategies used by the 3 participants to resolve breakdowns. However, Peter’s use of repetition-appropriate responses (26%) was comparable to his use of close-ended responses (26%). Cue responses (27%) were used only by Will; revision responses, though minimal (5%) were used only by Whitney. In addition, cloze responses were more commonly seen in Will and Whitney; whereas, Related Response was used only by Peter and Will. Although the presence of
repair strategies that failed to resolve the communication breakdowns were minimal, all 3 participants used repetition-inappropriate and inappropriate responses to fix breakdowns.

*Peer with ASD Context*

The participants engaged in an interactive “get to know you” game with their peer with ASD. An interview script was provided to them for facilitating the conversation (Appendix D). A 30-minute language sample was elicited for this study task. Communication breakdowns were identified based on the clarification request made by the listener to the speaker. The data were analyzed to identify the sources of breakdowns, types of clarification requests, and types of repair responses used by each of the two pair groups. The results are presented in the following section with respect to these three categories (sources of breakdowns, types of clarification requests, and types of repair responses).

As there were only 3 participants in this study, one of the participants had to repeat the *Peer with ASD* task again with another peer. Will and Whitney’s conversational sample was the sample that was elicited first. Based on both their interactions, the researcher decided to include Will as the peer with ASD for Peter’s conversational sample with a peer. This was done because Will appeared to be more engaged in the task than Whitney, and his expressive language skills indicated that he was more verbal and able to sustain a conversation better than Whitney. The task was scheduled a week after Will’s initial conversational task with Whitney.

*Will and Whitney*

Prior to beginning the conversational activity, the researcher discussed the instructions of the task, and what was expected from the participants for the task. They were informed during that time that they would receive a prize at the end of the activity, if they did well on the task. This was mainly done to motivate them and to obtain a representative sample. Will listened
intently to the researcher’s directions, and appropriately nodded or verbally acknowledged his understanding of what the researcher was saying. Whitney was quiet during this time and did not ask any questions of the researcher regarding the task. The interview questions were then placed in front of them on two separate clipboards and they were asked to start the activity.

Will turned his chair toward Whitney and looked at her while he directed the questions. In contrast to this, Whitney remained in the same position, and focused on the clipboard, instead of initiating or maintaining eye contact with Will. Both of them used odd intonation patterns at the beginning of the task – using a more reserved, extremely formal and stereotypical tone in directing questions and responding to each other. Their responses also seemed rehearsed or brief with respect to the questions asked. In the following conversational exchange, Will’s extremely formal tone is exemplified.

**Will:** um what’s your favorite place to go and hang out?

**Whitney:** I like to hang out at the library.

**Will:** um you like to hang out at the library mmm.

**Whitney:** Because I like to read books.

**Will:** Well, I don’t like to read books that much.

**Will:** Sorry if I offended you {extremely formal tone}.

**Whitney:** It’s okay.

Will offered more elaborate responses, but Whitney did not respond to his comments accordingly for the conversation to be sustained. As a result, the conversation task appeared to be more of a strict interview format, with both participants being more interested in completing the questions on the interview script, rather than actually getting to know each other better. The researcher intervened during certain instances to facilitate the conversation, and to remind them
that they could ask their own questions in addition to the questions on the interview script. In the following example, Will made a witty comment, but Whitney did not respond and Will proceeded to the next question.

**Context:** Will was responding to Whitney’s question about where he liked to hang out.

**Will:** um I don’t really go and hang out. I just rather stay at home. I basically just wanna stay home.

**Whitney:** I think {think said inaudibly} about hanging out at the library.

**Will:** um no actually what I said was that I rather just stay back at home than you know.

**Whitney:** Oh I see {odd stereotypical tone}.

**Will:** I just rather stay at home because I kind of feel comfortable where it’s just uh it kind of makes me feel right at home.

**Will:** {laughs} get it {laughs}?

Whitney does not respond, and so Will asked the next question on the interview script.

There was only one instance of a communication breakdown in Will and Whitney’s conversational exchange. The source of the breakdown was the presence of a *content rejection error*, the clarification request was a *request for confirmation*, and the repair responses used by Whitney to fix the breakdown were *close-ended response* and *addition response*. The following example illustrates this breakdown:

**Will:** If you were given a chance to change something in your school, what would it be and why?

**Whitney:** I would go on field trips.

**Will:** Field trips? Like every single day? {Clarification request; *content rejection*; *request for confirmation*}.
Whitney: No, just on special events \{Close-ended response; Addition response\}.

The reasons for only one instance of breakdown in Will and Whitney’s conversational sample will be discussed in detail in Chapter 5 (Discussion).

**Will and Peter**

As discussed earlier, Will was chosen to be the peer in the conversational task with Peter because he was a more engaged listener, and was more verbal and better able to sustain conversations. This was evident based on his conversation with Whitney. In addition, choosing him as the peer with Peter was important for the purposes of the study, which was to obtain a representative language sample for the *Peer with ASD* task. In order to control for practice effects in Will, the conversational task with Peter was scheduled a week after Will’s conversation with Whitney.

Peter appeared to be in a good mood at the beginning of the task, and engaged readily in the conversational task with Will. At the beginning of the task, both participants did not look at each other and asked the questions from the interview script by looking at the clipboard. But when they discovered a common interest—playing videogames, Will looked at Peter while talking, and shifted his body to Peter’s side to listen to what Peter had to say. As the conversational task continued, there were several instances when either breakdowns or differences in opinion caused a difficulty in sustaining the conversation. Both of them showed their signs of frustration either verbally or non-verbally. The researcher and the behavioral specialist intervened at these instances to either avoid the participants from causing any physical harm, or to facilitate the conversation.

In Figure 21, Will’s reference of a videogame was different from Peter’s reference of the videogame. This had resulted in a communication breakdown. Will referred to the videogame as
*Oracle of Seasons*, and Peter referred to it as *Ocarina of Time*. As both felt they were correct, the conversation led to frustrated sighs from Will and Peter. The researcher had to intervene to avoid the situation from getting too frustrating for both participants.
Figure 21. Breakdowns resulting in frustration in Peter and Will (Peer with ASD context).

P You must have mispell/ed it.
W No (I I said) it/’s not that I mispell/ed it.
W I said I mispell/ed it. {Will seems to be getting irritated}^ {interrupted by Peter}
P I’/ve mispell/ed it a couple of time/s when I said that.
W I did/n’ t say it right.
W It/’s the Zelda the Oracle_of_Time.
W That/’s how you say it.
P Probably not.
P (it/’s it/’s) That/’s probably how you pronounce it as Oracle.
P But Ocarina is how you say it.
W No, no, actually the way I say it is the right way.
W And not to be offend/ing^ {interrupted by Peter}
P Well I say it a little bit different.
P So it sound/s a little bit better.
W {clicking noise}.
P Ocarina_of_Time.
W That/’s not how you say it.
P Because Ocarina is what it/’s call/ed.
W It/’s Oracle.
P xxx{Peter says something, but because of overlapping and interrupted speech, the utterance is unintelligible}.
W It/’s Oracle, not Ocara.
W It/’s Oracle.
P Well, it/’s Ocarina {Peter emphasizes on the last syllable probably to indicate to Will that he had mispronounced it}.
W No it/’s Oracle.
= Peter laughs at this instance, and Will clearly seems irritated and keen on proving his point.
W You are pronounce/ing it wrong.
P No, you are.
= Will shakes his head in frustration, so the examiner intervenes.
E Okay, so that/’s just one game so^ 
P Yeah, I have it.
E Okay, what else?
W It/’s pronounce/ed Oracle.
P Well there/’s Oracle_of_Sequences.
P Well there/’s Oracle_of_Sequences.
W {clicking noise} Yes, but there/’s also one Oracle_of_Time {emphasizing on the word Time}.

= Peter does not respond, and sighs at the end and Will seems clearly irritated. E intervenes again to facilitate the conversation.
E Okay, it look/3s like both of you have those version/s.
E Maybe you know> 
E Let’s move to the next question.
P <Well anyways>. 
E <Let’s (talk about)> get to know each other a little bit better.
E Okay you knew now something about his videogame/s.
E Go ahead. 
= Will sighs and seems irritated.

Note. P = Peter; W = Will; E = Examiner.
Due to the constant differences in opinion coupled with the breakdowns, Peter’s mood fluctuated throughout the testing. He expressed frustration at what he perceived as Will’s lack of support and/or actively negative responses: “You always ruin me and my good ideas”. In another instance, Peter moved his chair away from the table and finally got up from his seat to indicate that he was done talking to Will. Will also noticed that it was getting a bit difficult to handle the situation and verbally expressed that to the researcher – “I don’t think this is going out too well”. After this, the researcher intervened and terminated the task to avoid frustration in both participants.

The sources of breakdowns, types of clarification requests, and types of repair responses encountered in the language sample are described in the following section.

Sources of Breakdowns. A total of 10 communication breakdowns occurred in Will and 9 communication breakdowns occurred in Peter during their conversation with each other. The breakdowns were identified based on the clarification request made by either Will or Peter. Figure 22 illustrates the frequency of occurrence of the different sources of breakdowns in both Will and Peter in the language sample.
Figure 22. Sources of breakdowns in Will and Peter (Peer with ASD context).

The results indicated that Will’s main sources of breakdowns were the presence of *inadequate information* (4/10), *ambiguous referents* (3/10), and *content rejection errors* (3/10). Peter’s sources of breakdowns also followed a similar pattern, with *inadequate information* (3/9), and *content rejection errors* (3/9) as being the two main sources of breakdowns. In addition to these sources, Peter’s sources of breakdowns also included breakdowns due to the presence of *inaudibility*, and *unintelligible segments*. Figure 23 illustrates *inadequate information* and *ambiguous referents* as being the sources of breakdown in Will’s conversational exchange with Peter. Will was discussing how he preferred another game over the Nintendo DS.
Figure 23. Inadequate information and ambiguous referents as sources of breakdowns in Will (Peer with ASD context).

P I have DS.
P It's nice.
W {clicking noise} I prefer (the game) the biggest game in the big game system/s because it's easier to not get lost.
W You know it's not as hard (to get) because it's kind of harder to get lost.
W (You can al*) because it's easier to find your way around, where
you're going or stuff like that.
W It's kind of easier to do it.
P The GameSource [REQCLAR][AR]?
= The source of the breakdown is AR because Peter wanted to know what
type of Game systems Will was referring to.
W (ye*)No like the game, you know the game system/s like XBox360.
W When you play the XBox360 or Nintendo64, it's harder to get lost and^
{interrupted by Peter}
P In the game [REQCLAR][AR]?
= The source of the breakdown is AR because Peter wants to make sure he
understands what exactly Will means by "getting lost". Based on the
conversational sample before, Peter thought that Will referred to
GameSource which is a game that is larger in size than the NintendoDS, so
he probably wanted to know if Will was referring to getting lost in the
game or physically losing the gaming device. It's easier to lose the
NintendoDS because it is smaller as versus to the GameSource which is
larger in size. This can be inferred based on the conversation that
follows and when Peter actually mentions regarding the size of the
Nintendo.
W Yeah, in the game, it's harder to get lost.
W But when you play a DS, it kind of :
P Ease/3s your way through it.
W No, no, it's kind of hard to get around when you^P So they're both hard [REQCLAR][InInfo]?
W Well, no, no, the game^ {interrupted by Peter}
= The source for the above breakdown is inadequate information because
Will does not clearly define what he means by getting lost in the game.
In addition, Will's repair response does not fix the breakdown because
Peter interrupts him while he is responding to the REQCLAR.
P Which one's easier?
W Well it's easier to get lost in DS, which is a bad thing.
W But it's harder to get lost in the game system/s which would mean it
would be^ {Interrupted by Peter}
P What are you try/ing to say [REQCLAR][InInfo][AR]?
P Put it into word/s.

Note. W = Will; P = Peter; [REQCLAR] = Clarification request; [InInfo] = Inadequate information; [AR] = Ambiguous referents.
The following example illustrates how unintelligible segments in Peter’s utterance were responsible for the breakdown. Peter was discussing his favorite videogames.

Peter: I like videogames too.

Will: [yawns].

Peter: And my favorite one is x [x denotes an unintelligible word] games.

Will: Hmm? What did you say? {Clarification request; unintelligible segments}.

Types of Clarification Requests. Figure 24 illustrates the different types of clarification requests made by Peter and Will to each other during their conversational exchange. At some instances there were two different clarification requests made by one participant to the other for a single breakdown. These requests were accordingly coded twice.
Figure 24. Types of clarification requests made by Peter and Will (Peer with ASD context).

The main types of clarification requests made by Peter to Will included requests for confirmation (6/10), and neutral requests (3/10). In addition to requests for confirmation (4/9), Will’s requests for clarification to Peter included specific request for specification (3/9), and neutral requests (3/9). In the following example, Peter was conversing with Will about the Zelda videogames he had. A breakdown occurred due to the introduction of an ambiguous referent, and Will requested for clarification.

Peter: I’ve got the collector’s edition, Wind Waker, Ocarina of Time.

Will: mmm.

Peter: I’ve all of them except for the newest one {introduction of ambiguous referent}. 

Note. Total number of contexts Will=10, Peter = 9.
Will: Oh you mean that uh the Phantom Hourglass? \{Request for confirmation made by Will to Peter\}.

Peter: Mhm [to indicate affirmation] (breakdown fixed).

In the following example Will was discussing the game he had called the Zelda *Oracle of Time*. A breakdown occurred due to a content rejection error, because the real name of the game was *Ocarina of Time*. Peter used a neutral request to request for clarification from Will.

Will: You know I think I actually got Zelda Oracle of Time. Do you have that one?

Peter: What \{Content rejection error; Clarification request; Neutral request\}.

Will: Zelda Oracle of Time. Do you have that one?

*Types of Repair Responses.* Figure 25 illustrates the different types of repair responses used by Will and Peter to resolve the breakdowns.
The results indicated that the main types of repair responses used by Will were close-ended responses (6/10), and addition responses (6/10). Peter’s use of repair responses followed a similar pattern to that of Will; however, his use of addition responses (7/9) was more than his use of close-ended responses (2/9). Both participants constantly interrupted each other during a repair, and this resulted in a higher occurrence of interrupted responses for each of them. In the following example, Peter was discussing with Will about the three wishes he would wish for. A breakdown occurred due to a content rejection error, and Peter used an inappropriate response as a repair response, but was also interrupted by Will during his repair.

Peter: Alright then for my second wish I would instead of the toys, I mean, instead of the games, I would wish for a gold mine.
Will: A gold mine? {Clarification request; content rejection error because Peter had already wished for infinite money; request for confirmation}.  

Peter: Next is [interrupted by Will] {Inappropriate response; Interrupted response}.  

Will: Actually even if you didn’t wish for a gold mine, you would still have an infinite amount of money.  

In the following example, Will was talking about the game Oracle of Time; a breakdown had occurred because of a content rejection error as the name of the game was Ocarina of Time. Peter thought Will had meant a different game based on Will’s earlier repair response, and therefore, asked for clarification. The repair response Will used was a close-ended response and addition response.  

Peter: No, I think you must mean the Game Boy one right? {Clarification request; content rejection error; request for confirmation}.  

Will: No, actually it is on Nintendo 64. {Close-ended response; Addition response}.  

In sum, Peter’s and Will’s conversational sample provided a unique opportunity for the researcher to identify the different types of breakdowns, clarification requests, and repair responses. Although Peter and Will used different strategies to resolve the breakdowns, their patterns of breakdowns and contingent repair responses were similar to each other.  

Conclusions  

Based on the findings of the present study, communication breakdowns do occur in individuals with ASD in naturalistic contexts. The conversational tasks were designed to capture the unique profiles of each of the three participants as they resolved breakdowns encountered in the conversations with their conversational partners. The findings also indicated that the coding system was able to identify these breakdowns, clarification requests, and repair responses, and
accordingly develop new codes to capture unique aspects of each participant. Chapter 5 will
discuss the unique findings of this study in relation to prior research, and its clinical and research
implications.
CHAPTER 5

Discussion

The purpose of this study was to explore the conversational repair responses of adolescents with autism spectrum disorders (ASDs) to communication breakdowns that occurred naturally in conversations. The study used an embedded multiple-case study design to identify the sources of breakdowns, types of clarification requests made by the listener, and the types of repair responses used by three adolescents with ASD, across the two conversational contexts (an Adult-Client context and a Peer with ASD context). The results revealed that although similarities existed between the three participants in their repair responses; they differed from each other in the variety of repair strategies used and the frequency of occurrence. This chapter will discuss the findings of this study by examining the conversational repair responses of the three participants based on: the sources of breakdowns; the types of clarification requests made by the listener leading to the repair; and the types of repair responses used to resolve the breakdowns. In addition, the findings will be discussed with respect to prior theory and research, and its implications for the clinical and research fields.

Sources of Breakdowns

The first step in analyzing the conversational repair response sequence in a language sample is identifying the source of the breakdown that necessitates the clarification request (Brinton & Fujiki, 1989; Yont et al., 2000, 2002). Prior research has shown that a variety of factors may contribute to communication breakdowns in a conversation. These include background noise that affects the intelligibility of the speaker’s utterance (Brinton & Fujiki, 1989; Corsaro, 1977; Volden, 2004); an inappropriate volume used by the speaker (Yont et al., 2000, 2002), the presence of phonological, lexical, and pragmatic errors in the speaker’s message
(Yont et al., 2000, 2002); inadequate information provided by the speaker to the listener (Corsaro, 1977; Garvey, 1977; Volden, 2004); the presence of inaccurate or often questionable information provided by the speaker (Yont et al., 2000, 2002); and the use of unfamiliar nonverbal gestures (Yont et al., 2000, 2002). A compiled coding system based on the Breakdown Coding System (Yont et al., 2000), existing literature, and the pilot study findings (Philip & Hewitt, 2006) was used to identify the sources of breakdowns that were encountered in this study (see Appendix F, Table 5). For the purposes of this study, some codes in the Breakdown Coding System had to be redefined to account for subtleties identified in the three participants.

Yont and her colleagues had defined the source of breakdown in a child’s utterance as phonological when the utterance was unintelligible or contained phonological errors, such as sound omission, substitution, addition, or distortion (Yont et al., 2000, 2002). Because of the ambiguity present in using the code phonological to denote both breakdowns occurring due to speech sound inaccuracies, and breakdowns occurring due to unintelligibility; the code was renamed as unintelligible segments based on the pilot study findings (Philip & Hewitt, 2006). For this study, a distinction had to be made to differentiate these two sources of breakdowns—phonological errors, and unintelligible segments (arising due to factors other than phonological errors) to identify the subtleties seen in the breakdowns in Whitney and Peter.

Whitney was the only participant among the three who had communication breakdowns occurring due to phonological errors (speech sound errors). However, both Whitney and Peter had breakdowns occurring due to the presence of unintelligible segments in their utterances. These segments were rendered unintelligible either because of unclear speech (as in the case of Whitney and Peter) or due to a fast rate of speech, use of odd intonation patterns, and constant body rocking or self-stimulatory behaviors that affected speech intelligibility (as in the case of
Peter). Based on the distinction between the two codes, we were able to identify that Peter’s main source of breakdown was solely due to the presence of unintelligible segments and not due to phonological errors. This has clinical implications in terms of intervention because stereotypical behaviors (such as odd intonation patterns, body rocking or self-stimulatory behaviors), which are a characteristic feature of individuals with autism (American Psychiatric Association, 1994) may affect their ability to be effective communicators. Therefore, targeting these unique sources of breakdowns in intervention may in turn aid these speakers to be effective conversationalists.

Similarly, breakdowns were classified as pragmatic in the Breakdown Coding System when the child used underspecified pronouns, ambiguous utterances, or had unmarked topic changes (Yont et al., 2000). As individuals with ASD are known to have significant deficits in the domain of pragmatics (Baltaxe, 1977; Fine et al., 1994; Loveland, Landry, Hughes, Hall, McEvoy, 1988, Stone & Caro-Martinez, 1990; Tager-Flusberg & Anderson, 1991; Wetherby et al., 2000), it was important to differentiate the different pragmatic errors for a more precise identification of the patterns of breakdowns in individuals with ASD. For this purpose, the pilot study findings had differentiated the code pragmatic into three categories: ambiguous referents, inadequate information, and irrelevant information to identify the main sources of breakdowns in individuals with ASD (Philip & Hewitt, 2006).

Based on the findings of this study, all three participants had breakdowns occurring due to the presence of ambiguous referents, inadequate information, and irrelevant information. Lack of referential clarity and abrupt topic shifts have been reported as sources of breakdowns in individuals with ASD (Geller, 1998). These breakdowns could potentially be attributed at least in part to difficulties in inferring the mental states of others (a theory of mind deficit; Baron-Cohen,
The literature has shown that individuals with ASD have difficulty in perceiving the communicative intentions of others, understanding the non-literal aspects of language (idioms, metaphors, jokes, riddles), and understanding the informational needs of their listeners (Baron-Cohen, 2000; Carpenter & Tomasello, 2000; Mundy & Stella, 2000), which in turn would affect the ability to provide adequate, relevant, and unambiguous information to their listeners. One would predict these same difficulties in conversations individuals with ASD have with their peers with ASD. The findings of this study revealed that Will and Whitney’s main sources of breakdowns in the Adult-Client context arose due to the presence of ambiguous referents and inadequate information. In addition, these sources of breakdowns were also responsible for the breakdowns Will encountered in his conversational exchange with Peter in the Peer with ASD context.

For the Adult-Client context, Will’s difficulties in making appropriate topic transitions and concluding conversations resulted in the introduction of multiple ambiguous referents, thereby confusing the listener. In addition, Will also used multiple referents to refer to a single item when describing it to the researcher. For example, in his description of an object he created with his dad using snow, he introduced the object as “similar to an igloo…and you’re protected from getting hit from snowballs” to then describing it as comprising of a “bunker” and a “fort”, and then later describing the whole object as the “bunker” following a clarification request made by the listener. Furthermore, his constant introduction of new topics and often lengthy monologues on his favorite topics prevented the researcher from interjecting and requesting for clarification because he would often start a monologue on another topic altogether. This difficulty in getting the conversational floor in order to make a request for clarification may explain the reason for only 22 breakdowns in Will’s conversational sample. That is, a strategy of
avoiding less familiar territory allows Will to control the discourse, somewhat to his advantage. Furthermore, an unfamiliar listener, not used to the conversational discourse style of Will, finds it difficult to constantly request for clarification, especially when Will does not give the listener an opportunity to ask him. As clarification requests are the only overt speech acts by which communication breakdowns are identified, an absence of such requests in a language sample may in turn result in an increase in undetectable breakdowns.

Will’s difficulty in providing adequate information resulted in consecutive breakdowns, thereby forcing the listener to ask multiple clarification requests to resolve the original and subsequent breakdowns. At times, these were frustrating to the listener and often resulted in the listener either ignoring the breakdown or gradually changing the topic without causing more frustration to the speaker and the listener. This had occurred during the researcher’s conversational exchange with Will, and also in the conversational exchange Peter had with Will. For the conversational exchange that transpired between Will and Peter regarding gaming systems for which consecutive breakdowns had occurred Will’s inadequate information coupled with Peter’s constant interruption resulted in Peter explicitly expressing his desire to change the topic (“Alright, let’s move onto a different topic.”).

Whitney’s use of ambiguous referents and inadequate information were the main sources of breakdowns in her conversational exchange with the researcher. One of the striking characteristics of her breakdowns was the introduction of multiple topics and multiple referents within a short span of time (see Figure 10). At certain instances, Whitney’s reintroduction of an earlier referent usually triggered confusion in the listener because of the long time interval that existed between the initial introduction of the referent and its reintroduction, along with the introduction of new referents in between that time interval. This could also be another example
wherein listeners who are constantly bombarded with different characters and topics within a short span may hesitate to ask for clarification owing to the large number of questions that would need to be asked in a short span of time, had they requested for clarification at each instance.

An increased number of clarification requests may also be equally frustrating for an individual with ASD who has difficulty understanding the intentions of listeners or inferring their mental states (theory of mind deficit). In the conversational exchange with the researcher, there were a few instances in which Whitney’s hand gestures and tone of voice indicated a slight frustration as she couldn’t understand why the researcher was asking the clarification requests, and not understanding the content of her message. During these instances, the researcher addressed the issue by explaining to Whitney that due to the discussion of different topics and different referents, the researcher was having difficulty in clearly understanding who or what Whitney was talking about.

One of the new codes that emerged as a source of breakdown from this study was _Idiosyncratic_, which referred to a breakdown occurring due to the idiosyncratic use of language by the speaker. This code was uniquely specific to individuals with ASD who are known to exhibit idiosyncrasies in their language use (American Psychiatric Association, 1994; Kanner, 1943, Volden & Lord, 1991). Will had a tendency to use idiosyncratic words and phrases such as referring to blocks as “M things”, and referring to his cousins in the following example as swarming everywhere.

**Researcher:** So what did you do for Thanksgiving at Grandpa and Grandma’s house?

**Will:** (uh) for the first day, well otherwise, first night we went there in the day, I had like all my cousins in Ohio were there.

**Researcher:** Oh!
Will: And they were like everywhere.

Will: They were like swarming and young and old.

Peter also had one instance of an idiosyncratic use of language in the Adult-Client context, by referring to meatballs as “Mama Mia meatballs”. However, the use of this term didn’t result in a breakdown. Based on the findings, the occurrence of idiosyncratic errors as being responsible for breakdowns was rare among the three participants; nevertheless, it did help in capturing a unique characteristic that individuals with ASD are known to have. Thus its inclusion in the coding system is justified, in that it could potentially capture atypical patterns that might aid in planning appropriate intervention programs for pragmatic deficits.

A breakdown was classified as Inaudibility when the speaker spoke too softly for the listener to hear. This was similar to the definition of the code Reduced volume in the Breakdown Coding System which identified breakdowns in the conversational exchanges with young children (Yont et al., 2000). Based on the findings of this study, the code had to be expanded to include inaudibility as occurring due to the presence of overlapping utterances. This occurred when the speaker’s utterance overlapped with that of the listener rendering the speaker’s utterance as inaudible. These may be attributed to their deficits in social reciprocity – appropriately initiating and responding to bids of interactions and taking turns appropriately (Wetherby et al., 2000). This code was different from unintelligible segments because the word, phrase, or sentence was intelligible to the listener, but lacked audibility for it to be understood clearly.

In sum, the sources of breakdowns that occurred in the conversational exchanges in the 3 participants across the two conversational contexts revealed unique difficulties specific to each
participant, and also the advantage in revising the existing coding systems to capture the subtleties seen in this clinical population.

Clarification Requests and Repair Responses

Clarification requests are unsolicited contingent queries made by the listener to the speaker to signal a communication breakdown in the speaker’s utterance and request repair (Garvey, 1977). These queries often provide valuable information in understanding the nature of the breakdown with respect to the contingent clarification request and its subsequent repair response (Garvey, 1977; Sacks, Schegloff, & Jefferson, 1974). Much research has been devoted to understanding the interdependent nature of clarification requests and repair responses (Anselmi et al., 1986; Brinton et al., 1986a; Corsaro, 1977; Garvey, 1977; Gallagher, 1981), but very few studies have examined the sources of breakdowns leading to the clarification requests and subsequent repairs (Yont et al., 2000, 2002). The present study differed from prior research by examining the three elements in the contingent query sequence (sources of breakdowns, types of clarification requests, and types of repair responses) to better understand the nature of conversational repair in individuals with ASD. This in turn enabled the researcher to identify the unique profile of each participant in appropriately identifying and resolving breakdowns. For instance, Will’s main sources of breakdowns in the Adult-Client context were due to the presence of ambiguous referents, content rejection errors, and inadequate information. This in turn would explain the higher occurrence of requests for confirmation, specific requests for specification, and direct requests made by the researcher to Will. In addition, these clarification requests elicited responses characteristic of such requests, which were addition responses, close-ended responses, cue responses, and explanation responses. Analyzing conversational breakdowns based on such a strategy would inform clinicians to better identify the key areas of difficulty
resulting in breakdowns, and develop the most appropriate target repair strategies to assist them in handling breakdowns more effectively.

In spite of their socio-communicative deficits, all 3 participants were able to respond to clarification requests posed by their listeners. This is similar to the findings reported in the literature (Alexander et al., 1997; Dobbinson et al., 1998; Geller, 1998; Paul & Cohen, 1984; Volden, 2004). The results also indicated that revision responses, which are an early emerging pragmatic skill in typically developing children (Gallagher 1977), were used as a repair response strategy only by Whitney, and that too only rarely. Findings in the literature indicate that individuals with ASD have difficulty using revision responses as appropriate repair strategies to resolve breakdowns (Baltaxe, 1977; Paul & Cohen, 1984). Furthermore, addition responses and close-ended responses were used by all 3 participants as a preferred repair strategy to fix the breakdowns. This could be attributed to the higher occurrence of confirmation requests, and specific requests of specification. In addition to close-ended responses, Peter also used repetition-appropriate responses to fix breakdowns he encountered in the conversational exchange with the researcher. Prior research findings have revealed addition responses and repetitions as being characteristic of repairs used by school-aged children with ASD (Geller, 1998; Volden, 2004).

Although the frequency of occurrence was relatively rare, there were a few examples of repair strategies that failed to resolve breakdowns. All 3 participants used repetition-inappropriate and inappropriate responses to fix the breakdowns. Furthermore, the use of a variety of repair strategies did not necessarily indicate pragmatic competence in the participants because in certain instances repair responses to the original breakdowns were followed by subsequent breakdowns (owing to the inadequacy of the original repair response), which in turn
elicited another repair response. This sequence of consecutive breakdowns and subsequent repair responses illustrated the difficulty participants had in identifying the source of the breakdown leading to the clarification request. This is exemplified in the case of Whitney, who had difficulty in identifying the source of the breakdown, and thereby failed to resolve it. In addition, although the caregiver facilitated the repair sequence, she still had difficulty in providing adequate information for her message to be understood by the researcher. Research findings have indicated that individuals with ASD have difficulty in adequately resolving breakdowns and meeting their listeners’ needs (Geller, 1998, Paul & Cohen, 1984).

The presence of communication breakdowns in the conversational samples, and the inability of the participants in adequately resolving breakdowns may be possible indicators of a theory of mind deficit— inability to comprehend the informational needs of the listener (Baron-Cohen, 2000), or an executive function deficit – lack of ability in planning and problem solving (Ozonoff, Rogers, & Pennigton, 1991), both of which have been used to explain the socio-communicative deficits reported in autism. These deficits could possibly explain why individuals with ASD have difficulty in identifying the source of the breakdown, and accordingly choosing an appropriate repair strategy to resolve the breakdown. In addition, cognitive deficits could be one explanation for the high occurrence of close-ended responses, a relatively low-level, cognitively undemanding response, as a preferred repair response strategy used by the 3 participants to resolve breakdowns.

The three participants in this study had highly restricted interests, such as videogames and Transformers in the case of Will, animation movies and fictional stories of magical creatures in the case of Whitney, and food and creative inventions in the case of Peter. These topics usually dominated their conversational discourse with the researcher. As the researcher was not
fully aware of the many topics introduced by the participants, breakdowns were considered resolved if they met the criteria of providing adequate information to the researcher for the message to be understood. However, during the time of data transcription and data analysis, the researcher browsed the web for information regarding the different topics introduced by the participant. These were done to obtain a better understanding of the participant’s perspective in conveying information about certain topics that were unfamiliar to the researcher. In addition, this strategy was important to gauge the cultural differences (shared experiences, cultural backgrounds) that existed between the researcher and the participant on certain unfamiliar topics.

Based on the findings from the web, it was observed that although breakdowns were resolved in the language sample, the information provided by the speakers with ASD were inaccurate. For example, the researcher had assumed that the main distinguishing element of Bionicles from Legos and Knight’s Kingdoms was the presence of weapons. This repair response had resolved the breakdown in the conversational sample. However, online research indicated that Bionicles and Knight’s Kingdoms were themes introduced by the Lego Company. In addition, Bionicles were differentiated from each other based on different colors to represent the different elements (earth, water, fire). In contrast, Knight’s Kingdoms represented knights at battle. Based on Will’s repair response, the researcher had assumed that the distinguishing feature of Bionicles was the use of weapons. However, both Knight’s Kingdoms and Bionicles had weapons.

Similarly, Whitney had a tendency to change the names of the characters she described (such as naming the character Lucian as Mushun, and Buckthorn as Bucksworn), owing to her phonological errors. These errors were not identified as sources of breakdowns in the language sample, because the researcher was unaware that these were errors. However, had a listener who
was familiar with the topic discussed been involved in the conversational exchange one would predict the occurrence of more breakdowns due to the discrepancies in the information provided by Whitney. The information obtained from the web was written as researcher’s comments within the participant’s transcript to preserve the unbiased analysis of the data.

Influence of the Conversational Partner

Prior research has shown that conversational repair may be influenced by the conversational partner (Tomasello et al., 1984; Tomasello, et al., 1990; see Meadan et al., 2006 for a review). As only 3 participants qualified for this study, one of the participants (Will) had to repeat the Peer with ASD task with another peer. Will engaged in the conversational task with Whitney prior to his conversational task with Peter. Both Will and Whitney were extremely formal to each other, and used a more reserved and stereotypical tone when directing questions and responding to each other. This may be attributed to the changes of adolescence and gender differences. There was only one instance of a communication breakdown in their language transcript. The presence of a clarification request is the only overt speech act that enables one to identify a breakdown in a conversation (Garvey, 1977; Schegloff et al., 1977). However, the transcript contained instances wherein the participants could have requested clarification, but either chose not to or were unaware of a breakdown, and continued with the task. For instance, in the following example, Will and Whitney were conversing about a movie being made about them; Whitney misunderstands the question, but Will does not correct her either.

**Will:** I mean if they made a movie about you, who would you want to play your character and why?

**Whitney:** I would play Lina, because she’s smart and brave.

**Will:** Smart and brave mhm.
Will: That’s interesting.

In the above example, Whitney had misunderstood the question assuming that the question meant whose character she would have wanted to play. Will did not clarify this with Whitney, either because Will did not realize it was an error or because he chose to move on from his question. In addition, Whitney had introduced an ambiguous referent Lina, but Will did not request clarification regarding who Lina referred to. Based on the Adult-Client context, the researcher knew that Lina was a character that Whitney liked in the book *The Princess and Curdie*. Will, who had admitted earlier in the conversational exchange with Whitney that he was not interested in reading books, probably would not have read the book to know who Lina was.

In contrast to the conversational exchange Will engaged in with Whitney, his conversational exchange with Peter revealed a different profile of breakdowns and repairs. This also provided the researcher another opportunity to observe how the same participant in a different context (with a different peer) would persist in clarifying breakdowns and repairing conversational breakdowns. Will was more engaged in the task, as evidenced by his use of a normal tone of voice unlike the formal and reserved tone used during his conversation with Whitney, and the presence of longer utterances and more follow-up questions in his conversational exchange with Peter. These differences in Will’s interaction with Peter could possibly be attributed to gender similarity, and most importantly, the common interest in videogames. In addition, Peter was more verbal and sustained conversations better than Whitney, which could have attributed to a larger language sample. As both participants were highly verbal and had strong and different viewpoints on certain topics, a higher frequency of breakdowns occurred in their language sample. Furthermore, they both constantly interrupted each other
which may have resulted in frustration and possibly aggressive behaviors if the behavioral specialist and the researcher had not intervened at that time.

A close examination of the conversational exchanges in the Adult-Client context also revealed the influence of the researcher on the types of repair strategies used by the participants. The researcher was a familiar adult to the participants (participants had met with the researcher during eligibility testing) and was also familiar with the communicative profiles of individuals with ASD. The discourse style used by the investigator was to persist in attempts to resolve the communication breakdowns. This is evidenced by the higher occurrence of specific requests for clarification (such as requests for confirmation and specific requests for specification) than neutral requests. Prior research findings have indicated that familiar listeners unlike unfamiliar listeners tend to persist in clarifying breakdowns and typically use specific queries to request further clarification (Tomasello et al., 1990). These specific requests usually elicit addition responses and close-ended responses, which were the more frequently occurring repair response strategies used by the participants. These findings also indicate how individuals with ASD depend on their listeners’ feedback, and can be passive in managing the communication flow.

Although the two contexts (Adult-Client context and Peer with ASD context) are not comparable owing to methodological differences in the elicitation of the language sample, the findings demonstrate differences in the interaction style of the conversational partners. For example, the researcher was more likely to request clarification, as evident by the higher occurrence of clarification requests, than a peer with ASD. One could assume that the researcher was aware of the purposes of the study and therefore had a tendency to request clarification. However, this was controlled by using different measures to check the authenticity of breakdowns (field notes, auditory journals, memoing, discussions with primary advisor,
independent coders). In addition, the researcher’s clinical experience in conversing with individuals with language impairments and her knowledge of the communicative profiles of individuals with ASD may have also resulted in a particular discourse style conducive to obtaining a representative language sample and simultaneously training individuals with ASD to become effective communicators. This may be inferred from the nature of the clarification requests made by the researcher to the 3 participants. That is, her requests for clarification indicated her persistent attempts at understanding the speaker’s message; and the nature of her clarification requests (a higher occurrence of specific queries, and a sequence of clarification requests) indicated her attempts at enabling the speaker to adequately resolve the communication breakdown. One would predict differences in the interaction style had a listener unaware of the discourse patterns of individuals with ASD been involved in the conversational tasks. This has clinical implications because it may not be sufficient just to train individuals with ASD to become effective communicators, but also to train listeners to be engaged participants in the conversational exchange thereby, providing individuals with ASD with more opportunities of having successful interactions.

Differences were also noted in the manner in which the individuals with ASD interacted with each other. Will appeared to exhibit two distinct communicative styles in his interaction with Whitney and Peter. That is, his interaction style with Whitney resembled that of an individual who did not want to upset or offend his peer, as versus to his interaction style with Peter where his main purpose was to get his viewpoint across, irrespective of what Peter felt. These communicative distinctions could also possibly explain the occurrence of only one breakdown in his conversational exchange with Whitney, as versus to nine breakdowns in his conversational exchange with Peter. One could not attribute the presence of breakdowns in the
language samples as arising solely due to differences in Will’s interaction style. There were also differences in the communicative styles of Whitney and Peter that may have influenced the occurrence of breakdowns. Whitney was disengaged from the conversational task as evident by her body language (she looked down at the clipboard on the table and avoided eye contact with Will throughout the conversation) and her inability to sustain conversations (fewer utterances). In contrast, Peter’s common interests with Will (which was videogames), his ability to sustain conversations (as evident by longer utterances and more follow-up questions), and his strong viewpoints on certain issues, could explain the reason for a larger language sample and consequently the likelihood of more breakdowns.

The 3 participants could also be differentiated from each other by Fey’s classification of categorizing interaction styles based on assertiveness (amount and type of talk) and responsiveness (manner of managing interaction) in their conversational interactions (Fey, 1986). Whitney’s interaction style could be likened to Fey’s classification of a passive conversationalist, one who is responsive but not assertive; because she had a tendency to respond to Will’s queries but did not attempt to solicit additional information so as to sustain the conversations. In contrast, the interaction styles of Peter and Will could be likened to Fey’s classification of a verbal non-communicator, one who is assertive, but not responsive; because although both participants solicited information from each other they failed at adequately managing the interaction style by constantly interrupting each other and disregarding their listener’s needs. In this manner, they resembled Fujiki and Brinton’s verbal non-communicator H’s interaction style with his language-matched and chronologically-matched peer (Fujiki & Brinton, 1991). That is, their goal was to convey the information they knew with no regard to the concept that a conversation was the healthy exchange of ideas with both participants as being equal
contributors to the conversation. The imbalance in their conversational style could possibly explain why the conversation ended as being negative for both participants, and would have resulted in aggressive behaviors had the behavioral specialist and the researcher not intervened. Thus, based on these findings, it is imperative to train individuals with ASD to become effective communicators by taking their listener’s perspective when engaging in conversations with different conversational partners.

Limitations and Strengths of Study

One of the limitations of this study was that the primary investigator was a familiar adult to the participant for the Adult-Client context. This may have resulted in fewer or more breakdowns. However, as the researcher was a familiar adult, less time was spent in familiarizing the participant with an unfamiliar adult. Also, the likelihood of obtaining a true representative sample was high as the individuals had become familiar with the researcher by the time of the collection of the conversational sample, thus decreasing the stress that might potentially occur from dealing with someone they had never met before.

Parallel to the familiarity issues, the researcher was also aware of the purposes of the study, which may have introduced bias into the identification of breakdowns. However, as the researcher was from a different cultural background than the participants, the cultural differences served as naturalistic encounters for some breakdowns. Field notes, auditory journals, memoing, and discussions with the primary advisor were used as measures for checking the authenticity of breakdowns. To further avoid bias in the identification and coding of breakdowns, two independent coders who were trained in the coding system coded one of the five language transcripts, selected at random.
In spite of the different measures used for checking the authenticity of breakdowns, there were instances in which the coders and the primary investigator disagreed in what was considered as a breakdown. Although clarification requests are the best indicators that a communication breakdown has occurred, there may be instances where clarification requests may appear as queries for additional information for individuals removed from the contextual experience. That is, as the researcher was an integral part of the conversational exchange, her experience with the individual with ASD at the moment of the communication breakdown and her interpretations of the meaning of such experiences might be different from an individual (such as a coder) removed from that contextual experience. Several factors such as supra-segmental features (prosody, pauses between utterances), non-verbal cues (facial expressions, body language), and the embodied experience of the researcher at the moment of the communication breakdown may contribute to differences in opinion of what is considered as a breakdown. As the purpose of qualitative research is examining the data through the lenses of the researcher (Maxwell, 2005), the goal was to reduce bias but at the same time preserve the subjectivity of the researcher (which is her interpretations of her experiences with the individuals with ASD).

A second limitation of the study was that the participants were from the same school and had similar behavioral problems (presence of aggressive behaviors), though varying in degree, which affected their integration into mainstream schools. Therefore, the pattern of breakdowns seen in this study may have been different had the participants been from a different school or cultural background. A third limitation of this study was that one of the participants had repeated the Peer with ASD task. The familiarity with the task may have affected the participant’s responses. However, it also provided another opportunity for the researcher to observe the
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participant in a different context with another peer. A fourth limitation in this study is the difficulty in identifying the sources of breakdowns in the Peer with ASD contexts. As individuals with ASD have difficulty interpreting others’ intentions, their clarification requests and preceding utterances may not contain the specific information that might link the source of the breakdown with the clarification request.

As clarification requests were the only means by which communication breakdowns were identified in this study, any implicit breakdowns such as listener non-acknowledgments (absence of verbal or non-verbal acknowledgments of the speaker’s utterance when one is seemingly called for) or topic shifts (changing topics due to a comprehension failure) were not identified as breakdowns in the data analysis. Prior research findings have indicated that explicit breakdowns such as those signaled by clarification requests demand a response from the speaker, whereas implicit breakdowns arising from non-acknowledgments or topic shifts do not (Tomasello et al., 1990). Thus the presence of unresolved and unacknowledged breakdowns is likely but not amenable to study using the methods employed here.

The main strength of this study was that it explored conversational repair mechanisms in individuals with ASD in a naturalistic context. There is a paucity of research studies examining conversational repair in naturalistic contexts in individuals with ASD. In addition, the conversational responses of the participants in this study were examined by identifying the three important pieces of a contingent query sequence (source of breakdown, clarification request, and repair response). Most studies have either looked at only sources of breakdowns and clarification requests (Yont et al., 2000, 2002) or clarification requests and contingent repair responses (Anselmi et al., 1986; Brinton et al., 1986a; Corsaro, 1977; Garvey, 1977; Gallagher, 1981). The information gleaned from analyzing the entire contingent query sequence enabled the
researcher to identify a pattern of strengths and weakness for each participant when faced with a communication breakdown. Furthermore, the use of a compiled coding system based on the existing literature, pilot study findings, and those that emerged from the data, enabled the researcher to identify unique aspects characteristic of this clinical population. This in turn resulted in a rich description of each case which helped to identify the similarities and differences that existed across each of the 3 participants. In addition, the findings of this study validated the existing and revised coding systems in identifying conversational repair strategies in individuals with ASD.

Information obtained from the coding systems is useful in planning effective assessments and interventions and thereby, enabling adolescents with ASD become effective communicators. For example, clinicians can train their clients with ASD about why breakdowns occur (sources of breakdowns) and what types of repair strategies can be used to resolve such breakdowns. Given that many individuals with ASD find visual cues more beneficial than auditory cues, providing them the available repair strategies written on a cue card, poster, or handout, may facilitate the use of these types of repair responses when they are faced with a breakdown. Clinicians can also remind their clients that they can access the Repair Response Strategy list whenever they are faced with a communication breakdown in situations other than the clinical setting. Knowing that a solution is readily available and accessible to them may in turn reduce the frequency of occurrence of challenging behaviors, which can arise out of communicative frustration.

Furthermore, clinicians may also provide different communicative opportunities for their clients to practice identifying and resolving breakdowns through video modeling, role-playing, and engaging in conversational exchanges with different conversational partners. In addition, early intervention programs may need to focus on training individuals with ASD in skills such as joint
attention and symbolic play that are known to influence later developing socio-communicative skills such as taking their listener’s perspective and managing conversations. Training in such skills are reported to have resulted in better child initiations and generalizations to multiple contexts (Kasari, Freeman, Paparella, 2006). This in turn may influence how these individuals manage communication breakdowns with more socially adaptive responses.

Future research in this area may include: (1) examining conversational repair of individuals with ASD when conversing with a typically developing peer or an unfamiliar adult (2) examining conversational repair mechanisms in individuals with low-functioning autism whose socio-cognitive and linguistic deficits may hinder their use of socially appropriate repair strategies, (3) effectiveness of the coding scheme in planning assessments and intervention, (4) using an experimental design with participants, coders, and caregivers blinded to study purpose to reduce potential for bias, and to compare individuals with ASD to typically-developing individuals.
REFERENCES


Appendix A

Informed consent form for parents of adolescents with ASD

Bowling Green State University

Department of Communication Disorders
Speech and Hearing Clinic
Bowling Green, Ohio 43403-0233
Phone: (419) 372-2515
Fax: (419) 372-8089

Informed Consent Form for Parents of Adolescents with ASD

Who is doing this study?
We are researchers at Bowling Green State University studying how adolescents with autism spectrum disorders (ASD) engage in conversations. Our names are Biji Philip (a doctoral student) and Lynne E. Hewitt (a professor in the department). We also have some undergraduate/graduate speech pathology students helping us with the study.

What is the study about?
We are studying what challenges or difficulties adolescents with ASD face when conversing with adults, their peers who do not have ASD, and their peers with ASD. Our findings will help us to develop ways to help people with this disorder become more independent in their lives.

What happens in the study?
The study will take place in a location such as a school in your community. If your child takes part in our study, he or she will be asked to do several things: take an IQ test, take a test of language ability, and the Autism Diagnostic Observation Schedule-Revised, talk briefly with one of us about a favorite hobby or recent outing or sport attended, and engage in a conversation with his or her peer with autism and a peer without autism. We will make an audiotape and videotape recording of your child while talking with us and with the peers. We also will be requesting information from your child’s records—see separate release form.

How long will it take?
The entire study will take about four hours to finish, spaced over a few days. If needed, we can complete study tasks on another day any time your child feels tired or does not wish to continue.

Can I get the results of my child’s tests?
If you would like to know your child’s scores on the tests, we will be happy to tell you about them.

Are there any risks?
Conversations can be difficult for teenagers with ASD. Because some kids with ASD may find conversations stressful or frustrating, we do our best to use topics that are of interest to them. If at any time, your child feels tired or frustrated, we will stop testing and continue on another day. You or your child may choose to withdraw from the study at any time.

Is this study required?
Taking part in this study is voluntary. That means you or your child may choose not to be in the study. If you decide to allow your child to be in it, you can change your mind any time and withdraw. If you do decide not to go on, we want you to know that this won’t have any effect on your child’s relationship with the teachers at school, or services he or she may be receiving.
What do people in the study get for taking part?
To increase your child’s motivation and engagement in the study, your child will be allowed to choose a prize from a selection of age-appropriate school supply items (such as notebooks, pens, and post-its) upon completion of the conversation tasks with their peers.

Who gets to see information about people in the study?
All information collected about your child during this study will be kept private. No information that identifies your child personally will be given to anyone other than the researchers and their assistants. The only other people who might see your records would be people who work for agencies whose job it is to check up on researchers, including members of the Bowling Green State University Human Subjects Review Board, and federal agencies.

The video and audiotapes we record will not be labeled with your child’s name, so that his/her identity will remain private. To keep them safe, the tapes will be stored in a locked cabinet in the researcher’s private residence, and thereafter transferred to a locked room in the Department of Communication Disorders here at BGSU, and used only for research purposes. NOTE: We are asking for separate permission to possibly use some of the tapes to teach students and speech pathologists about ASD. See below. If you do not agree to educational use, your child can still participate, and we will keep his or her tapes only for research purposes.

Who can answer questions about this study?
If you have any questions, you may contact Biji A. Philip (814) 574-1255 (Email: bijip@bgsu.edu) or Lynne Hewitt (419) 372-7181 (e-mail lhewitt@bgsu.edu). You may also contact the Chair, Human Subjects Review Board, Bowling Green State University, (419) 372-7716, (Email: hsrb@bgnet.bgsu.edu), if you have any problems or questions about your and your child’s rights as a research participant.

What does it mean to sign this form?
If you sign below, it means that you have read this entire letter, and have had all your questions answered, and that you agree to have your child participate in the study. Please also indicate if you agree or do not agree to have your child’s video or audiotape recording to be used for educational purposes. Please note that this will not affect your child’s participation in the study in any way. You will be given a copy of this consent form.

Signature of Parent or Guardian of Study Participant

Printed Name of Study Participant

Telephone/Email

Date

----------------------------------------------------------------------------------------------------------------

VIDEO/AUDIO CONSENT FOR EDUCATIONAL PURPOSES

I AGREE                      DO NOT AGREE

(Please circle one)

to have my child’s video and audio samples to also be used for educational purposes to teach college students and speech-language pathologists about ASD.

Signature:          Date:

----------------------------------------------------------------------------------------------------------------

Principal Researcher: Biji A. Philip, MS, Department of Communication Disorders, BGSU

Co-researcher: Lynne E. Hewitt, PhD, Department of Communication Disorders, BGSU
Appendix B

Assent form for adolescents with ASD

Bowling Green State University

Assent form for Adolescents with ASD

Who is doing this study?
We are researchers at Bowling Green State University studying how teenagers with autism spectrum disorders (ASD) carry out conversations. Our names are Biji Philip (a doctoral student), and Lynne Hewitt (a professor in the department). We also have some undergraduate/graduate speech pathology students helping us with the study.

What is the study about?
We are studying what difficulties teenagers with ASD face when talking with others. We hope to find out things that will tell us how better to help people with ASD become more independent in their lives.

What happens in the study?
The study will take place in a location such as a school in your community. If you take part in our study, you will be asked to do several things: take an IQ test, take a test of language ability, a test called the Autism Diagnostic Observation Schedule-Revised, talk briefly with one of us about your favorite hobby or a recent outing you had, and then talk with two other kids your age, one who has ASD, and one who doesn’t. We will make an audiotape and videotape recording of your conversations.

How long will it take?
The entire study will take about four hours to finish, spaced out over a few days.

Are there any risks?
Sometimes conversations are hard to do, and you may feel tired or frustrated at times. If you ask us to, we can stop and continue on another day. You may decide not to go on with the study at any time.

Is this study required?
Taking part in this study is voluntary. This means you don’t have to do it, and if you change your mind, you can quit at any time. If you do decide not to go on, we want you to know that this won’t have any effect on your relationship with your teachers at school, or services you may be receiving.

What do people in the study get for taking part?
When you finish the two conversations with people your age, you will get to choose a small prize from a collection of school supply items, such as notebooks, pens, and post-its.
Who gets to see my information?
Everything collected about you during this study will be kept private. In all our written records, you will be identified only with a false name. The only other people who might see your information will be people at Bowling Green State University whose job is to safeguard the rights of research participants. The audio and videotapes we record will not be labeled with your real name, so that your identity will be private and kept safely locked up. The only people who will see them are researchers, who are not allowed to talk about them.

One other group that might see your videotape would be students who are learning about people with ASD. If you say it is OK with you, we might show examples of your conversation to college students and speech pathologists who want to help people with ASD. Is that OK with you?

It is OK with me if my videotape is shown to students and speech pathologists who want to learn about ASD: CIRCLE ONE: YES NO

Who can answer questions about this study?
If you have any questions, you may contact Biji A. Philip (814) 574-1255 (Email: bijip@bgsu.edu) or Lynne Hewitt (419) 372-7181 (Email: lhewitt@bgsu.edu). You may also contact the Chair, Human Subjects Review Board, Bowling Green State University, (419) 372-7716, (Email: hsr@bgsu.edu), if you have any problems or questions about your rights as a research participant.

What does it mean to sign this form?
If you sign below, it means that you have read this entire letter, or someone has read it to you, and you have had all your questions answered, and that you agree to be a part of this study. You will be given a copy of this form.

____________________________________________
Signature of Study Participant

________________________________________                                            _______________
Printed Name of Study Participant                                                                           Date

Principal Researcher: Biji A. Philip, MS, Department of Communication Disorders, BGSU

Co-researcher: Lynne E. Hewitt, PhD, Department of Communication Disorders, BGSU
Appendix C

Conversation Elicitation Script

Directions

“I want to know you better and I thought today we could talk about some of your hobbies or interests.”

(1) What hobbies do you like to do in your spare time? (If child seems not to understand the word “hobbies”, say “What do you like to do in your free time?”)

If answer is “none”, go to question #2. If answer is “yes”, provide the following prompts to elicit a conversation:

- Can you tell me more about your hobby/interest?
- When did you start to have this as your hobby/first get interested in this?
- What made you choose this activity/hobby/interest?

(2) Do you have any favorite TV show or movie you like to watch?

If answer is “no”, go to question #3. If answer is “yes”, provide the following prompts to continue the conversation:

- What is your favorite TV show/movie?
- Can you tell me more about the show/movie?
- Why do you like the movie/show so much?
- What is your favorite part about the movie/show?
- Do you like a particular actor or character in the story the most? Why?
- If you had a chance to act in the show/movie, which character would you want to play and why?

(3) Have you been to a sporting event, concert, or play recently?

If answer is “no”, go to question #4. If answer is “yes”, provide the following prompts to continue the conversation:

- Can you tell me more about the event/concert/play?
- Was this a school activity or did you go with your family?
- Which one do you like the best: concerts, plays, or sports and why?
(4) Have you had a vacation or been on a trip that you can remember?

If answer is “no”, go to question #5. If answer is “yes”, provide the following prompts to continue the conversation:

- Where did you go?
- What was different about the place from your hometown?
- What kind of things did you do for your vacation/trip?
- Are there any special landmarks or interesting things in that place/country?
- What was your favorite part about the vacation/place?

(5) Continue the conversation, talking about any topic that is of interest to the child.

Note: Make the conversation as natural as possible and avoid adopting the question/answer format of an interview. Provide your own experiences to the child, so that the child feels as an equal partner in the conversation. Give enough opportunities for the child to speak.
Appendix D

Interview Script

General Instructions

“Thank you both for being here. I want you to get to know each other as well as you possibly can. On this paper, there are some questions to help you get started. Feel free to think of your own questions too. When you are done, I’m going to come back and quiz you about each other, so be sure to find out as much as you can!

One thing to remember is that you may find a friend today, and you want to make sure you know him or her really well by the end of this activity. Have fun!”

1. What’s your name?
2. Tell me about yourself.
3. What is your favorite place to go and hang out?
4. What kind of music do you listen to?
5. If they made a movie about you, who would you want to play your character and why?
6. What do you like to do for fun?
7. What job would you like to do after you are done with school and why?
8. What could be hard about doing that job?
9. What talents do you have that you think could make you successful in that job?
10. If you were given the chance to change something in your school, what would it be and why?
11. What do you think about video games? Are they good for kids? Why or why not?
Appendix E

Quiz Questions after Interview

This quiz is offered at the end of the interview task to ensure that the study participants maintain ongoing discourse.

1. “Tell me whatever you know about _________ (name of the individual).”

2. “If you had 2 minutes to introduce _________ (name of the individual) to your friend, what would you say about him/her.”
Appendix F
Coding Criteria

Table 9

*Sources of Communication Breakdowns, Operational Definitions, Examples*

<table>
<thead>
<tr>
<th>Breakdown Types</th>
<th>Definition</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Content rejection [CR]</td>
<td>Listener questions the content or the accuracy of the speaker’s utterance (Yont et al., 2000).</td>
<td>W: Yeah, I got a couple of grandpas and grandmas.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W: I got Grandma Grandpa Robertson, Grandma Grandpa Miller, Grandma Grandpa Phillips [CR].</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E: How do you have so many grandpas and grandmas?</td>
</tr>
<tr>
<td>2. Ambiguous referents</td>
<td>Speaker uses ambiguous referents or information (Philip &amp; Hewitt, 2006).</td>
<td>E: So who all went for the movie?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E: Who is Lizy?</td>
</tr>
<tr>
<td>3. Inadequate information</td>
<td>Speaker’s utterance contains inadequate information for the message to be understood by listener (Philip &amp; Hewitt, 2006).</td>
<td>W: If you were given the chance to change something in your school, what would it be and why?</td>
</tr>
<tr>
<td>[InInfo]</td>
<td></td>
<td>P: The rules [InInfo].</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W: The rules? Like how?</td>
</tr>
<tr>
<td>4. Irrelevant information</td>
<td>Speaker’s utterance contains irrelevant information pertaining to the discussed topic (Philip &amp; Hewitt, 2006).</td>
<td>E: So why is she called the ugly monster too?</td>
</tr>
<tr>
<td>[IrrInfo]</td>
<td></td>
<td>Wh: She was sent by Irene’s great great great grandmother [IrrInfo].</td>
</tr>
<tr>
<td>5. Inaudibility [InA]</td>
<td>Speaker either speaks too softly (Yont et al., 2000), or the overlapping speech of the listener affects the audibility of the speaker’s utterance (Philip &amp; Hewitt, 2008).</td>
<td>P: Oh and if you had your first wish {slightly distorted}, what would it be?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P: Your first 3 wishes from a Genie’s lamp [InA].</td>
</tr>
<tr>
<td></td>
<td></td>
<td>W: huh, what?</td>
</tr>
<tr>
<td>Breakdown Types</td>
<td>Definition</td>
<td>Examples</td>
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<td>-------------------------</td>
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<td>--------------------------------------------------------------------------</td>
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<tr>
<td>7. Phonological errors [PE]</td>
<td>Speaker’s utterance contains speech sound errors (i.e. sound substitution, omission, addition, or distortion) (Yont et al., 2000).</td>
<td>Wh: And guess what my favorite character is (Mesa* Me* Mena*) Nazaniel. E: Mesaniel (uh) I’m {interrupted by speaker}.</td>
</tr>
<tr>
<td>8. Idiosyncratic [IS]</td>
<td>Speaker’s odd use of words or phrases confuses the listener (Philip &amp; Hewitt, 2008).</td>
<td>E: Did you watch the Simpsons movie? Wh: Yes, and I managed it [IS]. E: Oh managed it meaning? Wh: Means that I can watch the Simpsons episode anytime I want.</td>
</tr>
<tr>
<td>9. Non-verbal [NV]</td>
<td>Speaker uses a gesture that is not understood by the listener (Yont at al., 2000).</td>
<td>P: %chichink {associated with a gesture indicating putting something into a slot or box} [NV]. E: What’s that? E: What did you do just now?</td>
</tr>
</tbody>
</table>

*Note. W=Will; Wh=Whitney; P=Peter; E=Examiner.*
Table 10

*Types of Clarification Requests and Operational Definitions*

<table>
<thead>
<tr>
<th>Clarification requests</th>
<th>Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Non-specific requests for repetition/</td>
<td>Neutral requests such as “Huh?”, “What!”, “I didn’t understand?” “Pardon”, “Say again”.</td>
</tr>
<tr>
<td>Neutral requests [NeuR]</td>
<td></td>
</tr>
<tr>
<td>2. Specific requests for repetition [SRR]</td>
<td>Requests in which a wh- question replaces a part of the original utterance of the speaker. For example, “He did what?”</td>
</tr>
<tr>
<td>3. Specific requests for specification [SRS]</td>
<td>Listener indicates what specific additional information is required to fix the breakdown.</td>
</tr>
<tr>
<td>4. Requests for confirmation [CONFR]</td>
<td>Repetitions with rising intonation, repetitions with reductions, and repetitions with elaboration. For example, “Did he?”</td>
</tr>
<tr>
<td>5. Direct requests [DR]</td>
<td>Requests for the exact definition of a component in a message. For example, “Can you explain that to me?” or “What does endothermic mean?”</td>
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<tr>
<td>6. Relevance requests [RR]</td>
<td>Requests that question the relevance of what the speaker says. For example, “What relevance does that have to do with what you are saying now?”</td>
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<tr>
<td>7. Cloze requests [CIR]</td>
<td>Requests that contained two choices for the participant to choose from (Philip &amp; Hewitt, 2006). E.g. “You did or did not?”</td>
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**Table 11**

*Repair Response Categories, Operational Definitions, Examples*

<table>
<thead>
<tr>
<th>Repair response</th>
<th>Definition</th>
<th>Examples</th>
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<tr>
<td>1. Repetition [Rep]</td>
<td>Repeats all or part of original utterance (Gallagher, 1977; Brinton et al., 1986a). Sub-categories (Philip &amp; Hewitt, 2006). (a) Repetition-appropriate [Rep-a]: Repetition is appropriate and meets the need of the listener. (b) Repetition-inappropriate [Rep-i.a.]: Repeats all or part of original utterance, but the repetition is inappropriate to the request for clarification.</td>
<td>E: Like what kind of fun things do you do here? P: I like the parachute [Content Rejection]. E: You what? P: I like the parachute [Rep-a]. E: And does it have a happy ending? Wh: Yes. E: Okay, that’s {interrupted by Whitney}. Wh: It was only three weddings [Content Rejection]. E: It was only three weddings? Wh: Three weddings [Rep-i.a.].</td>
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<tr>
<td>2. Revision [Rev]</td>
<td>Use of alternate labels or syntactic structure without adding information or meaning (Gallagher, 1977; Brinton et al., 1986a).</td>
<td>E: Okay, and what’s the whole story about? E: What does he do in the {interrupted by Whitney}. Wh: He debates the Hunt’s clan [Content Rejection]. E: (He debates) he what? I didn’t hear that. Wh: He fights the Hunt’s clan [Rev].</td>
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<tr>
<td>Repair Response</td>
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<td><strong>4. Cue [Cue]</strong></td>
<td>Provides background information; formulations --talking about repairing the breakdown (Brinton et al., 1986a).</td>
<td>E: Was he there in the movie? (Referring to ambiguous referent introduced earlier) W: Yeah he was in the movie during (the uh the uh) older the (uh) 20th anniversary one [Close-ended response, Add]. W: The one I was talking about just about the All Spark, that was just the new Transformers movie [Cue]. W: (I was just talking about) right now I was just talking about the 20th anniversary movie [Cue].</td>
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<td><strong>5. Keyword [Kw]</strong></td>
<td>Emphasizes an important word in the utterance (Most, 2002).</td>
<td>P: Actually, I entered a contest the soupstakes {unclear speech} [Unintelligible; Content Rejection]. E: &lt;The soupstakes&gt; what {interrupted by Peter}. P: &lt;I&gt; Sweepstakes [Keyword emphasis].</td>
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<tr>
<td><strong>6. Explanation [Expl]</strong></td>
<td>Explains specific terms in utterance (Most, 2002).</td>
<td>W: Ever since I played some (T games) T-rated games that were not so fun [Idiosyncratic]. E: T-rated games! E: What do you mean by that? W: (uh) T for teen [Expl].</td>
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<tr>
<td><strong>7. Inappropriate [IA]</strong></td>
<td>Provides unrelated utterances; no response; or discontinues discourse (Gallagher, 1977; Brinton et al., 1986b; Most, 2002).</td>
<td>P: Alright then for my second wish I would instead of the toys, I mean instead of the games I would wish for a gold mine [Content Rejection]. W: A gold mine? P: Next is {interrupted by Will} [IA].</td>
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<tr>
<td><strong>8. Cloze response [ClzResp]</strong></td>
<td>Speaker picks one of the choices presented in the cloze request (Philip &amp; Hewitt, 2006).</td>
<td>E: And if you had a chance to play in Family Guy (what would you) I mean whose character would you play? Wh: Meg [Ambiguous referent]. E: Meg is the wife? E: Or is the daughter? Wh: No, the daughter [ClzResp].</td>
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<tr>
<td>Repair Response</td>
<td>Definition</td>
<td>Examples</td>
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| 9. Close-ended response [ClResp] | Speaker uses affirmation or negation as a response to a clarification request of confirmation (Philip & Hewitt, 2006). | P: I like the parachute [Content rejection].  
E: Parachute?  
P: Yeah, parachute [ClResp]. |
| 10. Unintelligible [UResp] | Repair response is coded as unintelligible if the utterance was unintelligible due to technical difficulties, background noise, or poor speech intelligibility of the speaker (Philip & Hewitt, 2006). | C: We went to the zoo yesterday [Ambiguous referent].  
E: Who do you mean by “we”?  
C; xxx [UResp]. |
| 11. Interrupted [Intp] | Response is coded as interrupted if any kind of interruption took place while the speaker was responding to a clarification request (Philip & Hewitt, 2006). | W: Yeah in the game it’s harder to get lost.  
W: But when you play a DS, it’s kind of {long pause}.  
P: Eases your way through it {completes the utterance for Will}.  
W: No, no, it’s kind of hard to get around when you {interrupted by Peter} [Inadequate information].  
P: So they’re both hard?  
W: Well, no, no, the game {interrupted by Peter} [Intp]. |
| 12. Related Response [RelResp] | Speaker responds or acknowledges listener’s requests for clarification with a response that relates to the topic discussed, but does not necessarily fix the breakdown (Philip & Hewitt, 2008). | P: I will take the parts out of my brain {utterance unintelligible in videofile, but intelligible based on audio file} [Inaudible].  
E: (what what) What?  
E: I didn’t hear that.  
E: Can you tell me that again?  
E: You turned your head.  
E: And so I couldn’t hear what you said.  
P: Never mind [Resp]. |

Note. W=Will; Wh= Whitney; P= Peter; E= Examiner.
Appendix G

Language Transcripts (*Adult-Client Context*)

WILL AND EXAMINER

$ Will, Examiner
+ Language: English
+ SubjectId: E.W.
+ Name: Will
+ Gender: M
+ DOB: 11/13/1994
+ DOE: 11/30/2007
+ CA: 13;1
+ Grade: 7
+ Ethnicity: Caucasian
+ Context: Con
+ Subgroup: ASD
+ Location: V
+ Collect: 1
+ Examiner: Biji A. Philip
+ Transcriber: Biji A. Philip
+ Database: Conversation

- 0:00

E You're not feeling cold today?
W No no.
E Wow, I feel cold.
E I feel it's really chilly in this room itself.
W I used to be in this room.
E Oh!
E You used to have your classroom here?
W Mhm.
E Oh okay!
E Hey (I have) I didn't see you after Thanksgiving.
E How was your Thanksgiving?
W (ah um uh) it was pretty good.
W I just went to my (Grandma/z) and Grandma and Grandpa Miller/z house.
E Okay.
W Yeah, I got a couple Grandma and Grandpa/s.
W I got Grandma Grandpa Robertson, Grandma Grandpa Miller, Grandma Grandpa Phillips^ 
E (how) how do you have so many grandpa/s and grandma/s [REQCLAR] [CR] [CONFR]?
W Well (uh) {W laughs} I don't really know exactly {laughs} [RelResp].

=W responds to E’s REQCLAR with a response that relates to the topic discussed, but does not necessarily fix the breakdown.
E Okay.
W (I mean we do) I am actually from {laughs} a bunch of different family/s I guess [Add].
= This response is a more accurate response that fixes the breakdown.

E Oh okay.
W Some Graham family.
E Okay.
W (some I've) I have a couple others.
W But I can't seem to remember the name/s.
E Okay, and so, (uh) the Miller Grandpa and Grandma, (uh) do they live here in Virginia?
E Or did you have to travel?
W No, we had to travel to <Ohio> which is quite aways [EW: away].
E <Ah>!
E Yeah, (uh) where in Ohio?
W (Uh) don't really know {laughs} because I never actually, you know, ask where we are in a while.
W I know which state we are in.
E Okay.
W (We know) I know which state to go to.
W But just I don't know <where> in the state.
E <where>.
E Okay.
E So what did you do for Thanksgiving at Grandpa and Grandma/z house?
W (uh) for the first day, well otherwise, first night we went there in the day, (we actually had almost every single) I had like all my cousin/s in Ohio were there [EU].
E Oh!
W And they were (like) everywhere.
W They were (like) swarm/ing and young and old.
= Odd use of words.

E Swarm/ing!
E Okay, that mean/s, you had like a whole bunch of people maybe fifteen twenty people.
W (Uh) more like (um) probably 13 probably.
E Okay 13 okay.
E So have you met these cousin/s of yours before?
E Or <is this your> first time?
W <Most of them> most of them I've seen them before, although I can't remember (them) their name/s too well.
W And I'm not very, very good at remember/ing name/s too well.
W I heard there was^ E Even I'm not too good at remember/ing name/s sometimes, yeah.
W Yeah, there was just this one cousin of mine < > named Nathan.
E <Uhhuh>.
E Uhhuh.
W And (um) (I) it's the only one I remember easily because I know what he look/3s like.
W And I know his name.
E Mhm.
W And^.
E He's around your age or~
W (um mhm) He's only a year younger than me.
E Okay, so kind of like the same age range, okay.
W Yes, kind of the same age range, just a year, <just a year> younger < > just about a year younger.
E <just a year> <mhm>.
W (Um) Then there's two others.
E Mhm.
W They're both girl/s.
W But (um)>
W Their name/s are Andrea and Linda.
W But I can't tell them apart too easily.
W So I guess can't (um).
E Oh, (are they) (do they) are they twin/s?
E Is that why you can't tell them apart or~
W No, no.
W No, they aren't twin/s.
W They just look < > they just>
E <Look very alike>.
W Yeah, they just look very alike.
E Okay.
W Yeah.
E So, you went to Ohio when, on Wednesday or Thursday?
W (Uh) actually I can't remember that time either.
E Mhm.
W Now I can't remember it.
E So you drove to Ohio?
E Or you flew?
W (uh) We drew [EW:drove].
E Okay.
W We drive to Ohio.
W And it was very^.
E That's like almost an 8 hour drive I think.
E 8 to 12 hour/s I guess, depending on where in Ohio you're going to.
E (I'm actually in Oh*) I mean (I'm) I'm studying in Ohio.
E I just came here to do (the) you know a small study.
E And my husband is here.
E But I actually study in Ohio.
E So I kind of have a very fond (uh) thing towards Ohio.
E That's why when I heard you said you went to Ohio, I was like okay, "I wonder which place in Ohio".
E Have you been to Sandusky?
E The place where (uh) the great amusement park is, Cedar Point?
W No, I don't actually know the county/s in specific.
W I don't know any of the county/s.
E Yes, there's a great amusement park.
E People come all over the world just to be there.
E They've got like I think the fastest roller coaster ride or something, so^ 
W (uh) no, I never actually heard of the fastest roller coaster ride.
E Okay.
W If (I) there was, I'd surely know <> or heard.
E <Oh okay>.
W If there was, then I surely would have heard something about it.
E Mhm.
W I guess I didn't.
E That's okay.
E (um) today, I thought we can talk about thing/s you like to talk about, your hobby/s, your 
interest/s.
E I know that you love videogame/s.
E Do you do anything else in your free time?
W Hardly,(uh) I just rather prefer play/ing videogame/s.
W But there are a couple of thing/s that I'm like want/ing to want to do and stuff.
W Like watch the stuff on science channel/s like about technology and thing/s about planet/s and 
stuff.
E Okay, so you're^ 
W So there's always the (uh):03 bionicle/s I like to play with.
W (They are) they're Legos but (um).
E What are those [REQCLAR] [AR] [DR]?
= This is a DR as E specifically wants to know what bionicles are.

W Bionicle/s [Rep-i.a.].
E Okay,(wh*) what are those [REQCLR] [InInfo] [DR]?
= Last 2 utterances are part of the DR posed by E, because E wants Will to define what he means 
by the term Bionicles.

W (uh) a lego is basically something you use to build some model or something.
E Uhhuh.
W Like say like you have two 2 by 4 {clicking noise while searching for a word} little piece/s.
E Block/s {said when W was searching for a word}.
E Uhhuh.
W You put them together.
W And basically you just made something.
E Okay.
W But I made something a little more complex.
W I made something like {clicking noise} like that has feet, leg/s, arm/s and (uh) [Expl].

= W's last 6 responses are part of his repair response to E's REQCLR.
E Is that what you call/ed as a bionicle or [REQCLAR][CR][CONFR]?
W No, not all those kinds of model/s with leg/s and arm/s are not all bionicle/s [ClResp].
W There are some that are Knight/z_Kingdom/s [Add].
W And (uh) some are actually little lego people [Add].
W You know with just little arm/s [Cue].
W And compare/ed to a Knight/z_Kingdom or a bionicle they/'re just compare/ed very very small [Cue].
W They/'re like^ E So bionicle/s are (some) some character in your videogame that you kind of <create> or [REQCLAR][InInfo][AR][SRS]^

= W first starts out explaining about bionicles as being made of little pieces and as having feet, legs, and arms. E assumes that this definition is what a bionicle is. However, when W is questioned about this definition, he states that not all models with arms and legs are bionicles and then introduces the ambiguous referent Knights' Kingdom, without clearly explaining what the difference, if any, exists between a bionicle and a Knights' Kingdom. E assumes that Knights' Kingdom probably refers to a character in a videogame, as W is quite fond of videogames. Therefore, her REQCLAR specifically asks if bionicles refer to characters in a videogames, in order to get a more specific information of bionicles.

W <No>.
W In some of them yes [ClResp].
= Last 2 utterances part of the Close ended repair response.

W But (uh) but my bionicle/s are customize/ed [Add].
W In the videogame/s are actually the one/s that you usually buy in the store/s and get their piece/s and stuff [Cue].
E Okay.
W There/'s also the (uh) {clicking noise} (um)((let's see what um)) (there/'s always these um more smaller there/'s because) these small lego people are like about {shows how big they are} < > this high [Add].
E <That high, okay> {responds to W's gesture of the size of the lego people}.
W Like about {W gestures how high} just this high as ha* (my uh) my halfway fingerprint <> (from he* from uh}{clicking noise} from: head to <toe> (um) on the lego person.
= Last utterance part of the Add response to E's REQCLAR.

E <Okay> <toe>.
E Mhm.
W But but a bionicle is like>
W My tallest one is like {clicking noise} like this high [Expl].
E (And it) and it depend/3s on how tall you want it to be.
E Or how big you want it to be right [REQCLAR] [InInfo] [CONFR]?
= Last 2 utterances part of E's REQCLAR. This confusion occurred because W is trying to distinguish the difference between a bionicle and the small lego people based on size. So E's REQCLAR is to identify if size is what distinguishes the two.
W Well it's not that [CIResp].
W It's just how the model is [Add].
W I mean a couple are customize/ed [Cue].
W (Some) most of them are like this tall {W gestures how tall}.  
E Mhm.
W There's one this tall {gestures different sizes of the bionicles}.  
W But then there's also one this tall {gestures a size bigger than the previous one}[Add].
= Last 3 utterances are part of W's Add repair response to E's REQCLAR.

E So what do they do [REQCLAR] [InInfo] [SRS]?  
E Like (can you) you know, do they have any special feature/s or~
= Last utterance part of the SRS posed by E to W. The source of the breakdown is inadequate information as W's responses to E's previous REQCLAR indicated that size was not the distinguishing factor. E wants to know if there is any other feature that distinguishes bionicles from the lego people W is talking about.

W Well, one thing for certain that all of them have is weapon/s [Add].
E Okay.
= The breakdown is finally repaired. E assumes that the main distinguishing element is the presence of weapons for bionicles. However, research online indicated that Bionicles and Knights' Kingdoms are themes introduced by the Lego company. Bionicles are made up of elements such as water, fire, earth etc and each bionicle is differentiated based on different colors representing the different elements. For example, bionicles made from fire are represented by the color red. Knights' Kingdoms are part of the Lego Castle theme and represent knights at battle. Although W attempts to resolve the breakdown through distinct repair responses, his responses fail to clearly define a bionicle or provide an accurate description. Based on his repair, E assumes that the distinguishing feature is the use of weapons. However, both Knights' Kingdoms and bionicles carry weapons.

W Yeah, (like) but my tallest one has the best weapon.
E Okay.
W Like if you get hit by it once < > he/s dead.
E <Uhhuh>.
E Oh okay.
W Because if you get hit by its attack once < > you're dead.
E <Mhm>.
E Okay.
W I mean you're dead {said to re-emphasize to the examiner that there's no way out after you have been hit}.

= This utterance of W may also indicate the fact the W wants to emphasize to E that one is literally dead when hit by this particular bionicle, and that there's no other way out. It also indicates how W takes the meaning literally, which is a common characteristic reported in individuals with ASD. In order to clarify whether this is the issue, E follows up this utterance with a comment to indicate that W may have meant it to be a part of the game as versus to literally being dead.
E There's no way you can go to the next level you mean.
W Well, basically all you could do to just try to>
W No matter what kind of armor you have, (he he) you're just gonna get desonate/ed
[EW:detonated].
E Mhm.
W What you need is speed.
E Okay.
W Because if you have speed, you might (have) be able to survive.
W Although, if you get hit by it even once <> {makes a sound of a weapon firing}, you're dead.
E <Mhm>.
E Okay.
= E decides to change the topic of the bionicles at this point to avoid just talking about bionicles throughout the whole session.

E So what kind of (uh) videogame/s do you play, like one is the Empire Earth game, am I right?
W Oh yeah.
E Which you got for your birthday as your birthday gift.
W Yeah.
W We could/n't get it run/ing on my computer.
E Oh it/s still is/n't fix/ed because of the graphic/s.
E You said that it was/n't compatible <with your computer>.
W <Yeah basically>.
W Yeah.
W Yeah, we fix/ed one of the problem/s.
W But <> there were actually more than one problem that we could find.
E <Okay>.
E Okay.
W There/'s just this one problem we could/n't find [EW:fix].
W And that one problem was {clicking noise} the graphics card.
W I do have (uh)an accelerating little card.
E Mhm.
W (But it/'s just not gonna) (but it/'s not cut) but it/'s not enough to cut it.
W So (uh) basically we did/n't have all the graphic/s on it and^
E So you still have/n't start/ed playing the game as such.
W Yes.
E Okay.
W Basically the reason why is because we don't have the correct graphics card we're looking for.
E Okay.
W And the graphics card we are look/ing for cannot go in the computer hard drive because it's not the right kind.
E Yeah, I guess it's not compatible with the hard drive of your computer maybe.
W (it) It is/n't.
E Okay.
W And we're try/ing to find (a much uh older memory card)a much more older graphics card.
W: But work/s a lot better than (um) the (uh) one I currently have: basically.
E: Okay.
E: So when did you first start get/ing interest/ed in videogame/s?
W: I don't really know.
W: I am guess/ing ever since I like {clicking noise} I don't know >
W: Ever since I play/ed some (T game/s)T rated game/s that were not so fun.
E: T rated game/s!
E: What do you mean by that [REQCLR][IS][DR]?
=W's REQCLR is to identify what W means by T-rated games. W tends to use neologisms often (for example referring to blocks as M things during ADOS testing). Thus, E asks for clarification.
W: (uh) T for Teen [Expl].
E: Okay.
W: Mainly those are just for 13 year old/s [Cue].
E: Mhm.
W: But I got (it) a teen game a little earlier than 13.
W: I actually got my very first one (in) when I was like about 7 ((I/'m guess/ing)).
W: Then, there/'s always some M game/s, which is mature.
W: But it/'s very very very mature.
E: Mhm.
W: You have to be like^
E: So M stand/3s for mature.
E: Is that what it is?
W: Yes, basically you have to be (uh) either 17 or 18 depend/ing on the kind of mature it is.
E: Mhm.
W: And (uh) basically I thought it was (uh) 18.
W: But most is actually 17.
E: Okay.
E: So (like), what do you like so much about videogame/s?
E: Like, you know, people have different kinds of hobby/s.
E: Like, some people like to collect stamp/s.
E: Some people like to read.
E: Some people like to write.
E: What/'s fascinate/ing about videogame/s?
W: Well, (huh) I don't really know.
W: I just am so attract/ed to it.
W: It's just really fun.
W: And the videogame/s is just better than mainly just watch/ing TV.
W: You get to be the character that you play.
E: Do you like have an all time favorite character that you like to play in the videogame?
W: Really, I actually like most of them.
E: Okay.
W: And I don't really care about most of them.
E: Okay.
W: I don't like (uh) Pikmin very much because it/'s kind of pathetic.
W And and I hardly have any time to actually like do something.
E Pikmin is a videogame?
E Or is a <character> in a [REQCLAR] [AR] [CR]\^  
= Last 2 utterances are part of E's REQCLAR.

W <Pikmin> {said again probably to emphasize the name, or to correct the examiner} [Kw].
W Pikmin is actually (uh) a very (uh) very (uh)>
W Pikmin is just basically some : creature that/s mainly bury/ed.
W And he has this little stem.
W And then there/s a little leaf.
W But then the leaf will turn into a bud or a flower and [IA]\^  
= Last 3 utterances are part of the Inappropriate repair response to E's REQCLAR. The repair response is coded as Inappropriate because W provides information of the character, such as describing its main features, but does not answer E's direct question about whether it is a videogame or a character in a videogame. This results in E asking the next clarification request.

E So he is part of the character/s in like which videogame [REQCLAR] [IrrInfo] [SRS]?  
W (uh)Pikmin [Add].  
= Breakdown is finally repaired.

E Oh!
E That/s the name of the game also, okay.
E So you don't like his character very much.
W No no no|no.
W (Pick* you actually)y your main character is actually someone (that just got) that was in a little space shuttle.
W And then he was hit by a meteor.

= Here W talks about the main character in the game Pikmin, but his response is not relevant to E's comment about not liking the Pikmin character. Initially, when W responded saying "No", E assumed that he was going to correct E's interpretation that he didn't like Pikmin. However, what the client actually does is describe the main character in the game, even though E didn't ask about it in the first place.

E Mhm.
E Oh interesting!
W Then he crash/3s on this strange planet.
W And then he also find/3s these strange people, which is [EW:are] the Pikmin.
E Okay.
W (And their sprout) and the little leaf, they turn into a bud.
W And then it eventually turn/3s into a flower.
E Oh, that/s so cool!
W Yeah, if you give it the time.
E Okay.
W (But there/s also uh a bit of) there/s also some other thing/s.
W Like say if you found wild grass on the planet <> that he was in, if he did find some wild grass and if your Pikmin go into that grass, <> you'll find pollen that immediately turn/s them into flower.
E <Okay> <Mhm>.
E Oh that's so cool!
W But x are but the only^ E So are the Pikmin actually the good guy/s?
E Or are they the bad guy/s?
W They're the good guy/s.
E Okay.
W Basically.
E Okay.
W (uh) (because they're try/ing to get him back), because they're try/ing to get that space guy that was in the space <shuttle back home>.
E <shuttle back home>.
E Okay.
W (and uh) but the only (difference)< > big difference <> from change/ing (the flo* from bud) from leaf to bud to flower is that once a leaf get/3s to a bud, (they're a little fa*) the Pikmin/s faster.
E <Mhm>.
W And if the bud change/3s into a flower, they're so fast.
E Okay.
W They could be practically as fast as your guy.
W I mean if they have a flower in their head, that mean/3s they're (uh) just as fast as the (uh) captain.
W As when you're move/ing around, they're just as fast as (he's) he is.
E So the captain is part of their team or is he [REQCLAR][AR][SRS]^ W No <the captain> is actually the guy who want/3s to get back home [Expl].

= This breakdown occurs due to the introduction of an ambiguous referent (captain). W starts out by saying the Pikmin would be "as fast as your guy", but he follows this utterance with a revision starter "I mean..", and then introduces the ambiguous referent "the captain". This is what results in the breakdown. W fixes the breakdown by stating that the captain referred to the guy that was in the space shuttle.

E <The captain>.
E Okay, okay alright.
E Wow interesting.
W Well, it's not really that interest/ing to me because it's hard to play the game.
W And you have time limit.
W I don't like time limit/s.
E Okay.
W I'd like to like take my time and <just>^ E <Just> get (the) through the level/s.
W Yeah, I just rather take my time.
W I can do the level/s.
W It's just I just wanna take my time.
E Okay.
W That's all.
E Yeah.
E How about movie/s?
E Like do you have an all time favorite movie?
W (um) I don't like movie/s that much.
W But personally if I was old enough and if I had watch/ed the little bit of that movie call/ed (uh) live free and die or die hard (um I don't really actually se*) I had/n't actually seen the movie, I'd seen the commercial/s, but it seem/3s very interesting because^ E I guess you like it because (it's part) I mean you have a videogame also as a part of that, right?
W No no.
E Die hard?
= E making sure that W was talking about Die Hard, the movie.
W It mean/3s live free or die hard.
E Okay.
W (You just do) live free part mean/3s you just do whatever you want.
E Mhm.
W Run from cop/s and stuff like that.
W It's not a videogame but^ E I thought Die_Hard had a videogame.
E Was/n't that the one with (the) Bruce_Willis,yeah^ W No no.
W (um) Live free or Die hard that is/n't a videogame.
E Okay.
W And there/s also the die hard thing.
W If you don't want to live free < > and if you got (caugh*)caught by the cop/s, you die hard.
E <Mhm>.
E Okay.
W That mean/3s you just actually die very easily.
E (um)I remember I think when I (uh) saw you the first time around, you were talk/ing about Transformers, you said that you^ W Transformers yes.
W (Transformers is a)it/s a very good movie.
W And they also have videogame/s of it.
E Yeah.
W Yeah they/'re^ E So do you own a personal version of the Transformers videogame?
W Yes, I have the videogame and the movie.
E (ah) You know when we went to watch the movie ((I think it was like the second day after it was release/ed or something)) they gave us these cool thing/s at the (uh) counter.
E They gave us like a magazine with (uh) all of the Transformer character/s in it.
E And they also gave us like radar glass/s so that you can go through the magazine and you can actually see what are the hidden code/s in it.
W Oh yeah, the hidden code/s yeah.
E Did you get that (while) when you went to watch the movie or~
W (uh) No I was actually a little earlier than the second day it came out.
E Okay.
W It was actually a little later than that (uh).
E Okay.
W I actually got it like \{clicking noise\} probably on the first month or the first week < > or the third week.
E <Okay>.
W I am not really sure.
E Oh you went to watch the movie?
E Or you got the videogame you're talking about [REQCLAR][CR][AR][CLR]?

= Last 2 utterances are part of E's REQCLAR. The breakdown here occurs because W's responses indicate that he was talking about watching the movie a little later than the second day that it was released, which made E to assume he was probably explaining the reason why he didn't get the magazine. However, he revises his comment with the last utterance stating that he got it in the first month/week or third week. Here, E is confused whether he is talking about watching the movie in the first month/week/third week, or whether he is talking about getting the videogame. The use of “it” and the accompanying confusing information is what results in a content rejection by the examiner.

W Well basically>
W I actually got the videogame before I'd seen the movie [ClzResp].

= Though the breakdown was repaired, it clearly shows the difficulty W has in understanding E's question about getting the magazine or following up on E's comment about the magazine. And before E can question W about this again, he starts talking about the story or concept behind the movie. This has a lot of clinical interpretation for both the examiner and the client. For a client who is keen on carrying out monologues about his favorite topics, it may be difficult to actually interject and request for clarification for a breakdown at the time it occurs, as the client is already five utterances away from it. In addition, this may also indicate how listeners may be tired of constantly asking questions to clarify breakdowns, and also being constantly alert in understanding what the client is really talking about. In this case, E had suspected that W may have been talking about the videogame and not the magazine/movie, and therefore asked a specific REQCLAR. This may have occurred because E is aware of the topics that are of interest to W, and also of the manner in which he conducts a conversational discourse. An unfamiliar listener may not be able to pick these details during the conversation, and may find it hard to constantly request for clarifications, especially if the client doesn't give an opportunity to ask them.

E Okay.
W (I) so I actually had a bit of a basic idea about the movie < > already\(\text{so because}\).
E <Uhhuh>.
W So it's just basically (transf*) the Autobot/s (and) that are try/ing to save the human/s.
W And there are (uh) these special glass/s < > that (uh) help find the (uh) cube.
E <Mhm>.
E Mhm.
W That is (uh) actually known as the Allspark.
E Mhm.
W The Allspark is a {clicking noise} a very special cube.
W (and it/s really and because every) and every Autobot has a spark.
E Okay.
W An Allspark in them.
W And if they lost their Allspark or if they have too much, they die.
E Yeah.
W <So>.
E <And> they need it for their planet or something right?
E Remember (it was taken from) the cube was taken from the planet of the Autobot/s.
E And then^ W No no, that/’s the Decepticon/s.
E Okay the Decepticon/s.
W The Decepticon/s took < > the planet of Cybertron.
E <Okay>.
E Okay.
W They took the planet itself so (uh){clikcing noise} because of this the Autobot/s (want/ed) need/ed to find the cube so that they could try fight back the Decepticon/s.
W But then (probably at the end of the movie) < > well at the end of the movie (they uh) they knew that their planet is (just a bunch of salvage) just a bunch of part/s from past war/s.
E <Mhm>.
W And and^ E They decide finally to live <on the planet>, I think.
W <on>.
W Yeah, they decide to live on Earth, so.
E Yeah.
W And they (uh use their) transforming self < > into their vehicle selves when they transform into it (um).
E <Mhm>.
E Do you have like any favorite character out of that?
W {clicking noise} (um) well I personally prefer (um) Optimus_Prime.
E Oh, I like him too.
W Yeah.
E He/’s really cool!
W Yeah, he/’s been here ever since the very first <Transformers>.
E <Tranformer/s> yeah!
E Have you seen the cartoon/s of it?
E Like (they)I think they were release/ed in the eighty/s.
E They had^ W Oh yeah, I/’ve seen those.
E Okay.
W I/’ve seen a couple of those.
W But I only have seen the movie part.
E Okay.
W <Were> (um)^
E <His> voice is amaze/ing, right, Optimus Prime!
W Well about Unicron about Unicron, he'/s just this big big big gigantic robotic.
= Does not respond to E's comment and talks about another character.

W (He'/s) he'/s a transformer too, sort of.
W But he'/s not exactly a transformer because he'/s just way {emphasizes when saying "way" to indicate how big} too big to be a transformer.
E Was he there in the movie [REQCLAR][AR][IrrInfo][CONF]? 
W Yeah he was in the movie during (the uh the uh) older the (uh)twentieth anniversary one [ClResp] [Add].
W The one I was talk/ing about just about the All_Spark, that was just the new {emphasizes on "new"} Transformers movie.
W (I was just talk/ing about) right now I was just talk/ing about the twentieth anniversary movie [Cue].

= Last 2 utterances are part of the Cue repair response. The reason for this breakdown is because E was asking W about his favorite character in the recent movie of the Transformers, and W mentioned he liked Optimus Prime of them all. However, he goes on a tangent when he introduces the ambiguous referent Unicron, who is not a character in the recent movie. In spite of this breakdown, W does a nice job in identifying the source of the breakdown and explaining his repair response in detail.

E Okay.
W I like the music.
E Yeah.
W I love their music.
E Yeah.
W They're good.
W It'/s just {yawns}> 
E It'/s really nice.
E And I also think they did a really good job in term/s of the visual effect/s.
E Like you can't make out when it'/s actually turn/ing into> 
E They had most of those shot/s actually taken in real life kind of event.
E And then^ 
W Yeah but in the (uh)> 
E And the computer^ 
W No, I was still talk/ing about the twentieth anniversary one.
W They don't actually look like they have all those ear zero those gear piece/s and stuff.
W In the movie it may look like a real life thing.
W But you also get to see your gear piece/s.
W If it was real life, you would see some piece/s from the inside of it when it was transform/ed.
W Like gear piece/s and stuff like that.
W (but uh but if you were to see um)but if you were to see something like (um) ((I don't know))maybe {clicking noise}(um) {clicking noise followed by exasperated sigh}(um)> 
W Where was I?
W appears to have lost his train of thought here. In addition, starts a monologue about gear pieces without giving E an opportunity to request for a clarification or a turn to continue her train of thought.

E You were talking about if you were to see real gear pieces.
E Is that what you were saying?
W Yeah if you were to see a real transformer, you would see some of their gear pieces. When you see that, that's what it would look like in real life.

E Here again is another example where W takes the literal meaning of E's comment about the visual effects in the movie, and the fact that most scenes were shot with real trucks. This is further emphasized by W's comment of actually seeing real gear pieces if the scenes were actually enacted. However, he follows this again with the following comment about the cartoons instead of continuing the topic on the movie. Thus, W has three topic shifts in this short duration of the conversation -- he shifts from talking about the recent movie of the Transformers, to talking about the 20th anniversary movie and then finally shifts to talking about the cartoons.

W But in the cartoon/s they never show those gear pieces which really don't make it too realistic and.
E Oh what I meant is that in the movie like when you see it (um), you see like most of these action scene/s where they usually use computer graphic/s to kind of you know put it into the movie.
W Yes, yeah.
E But in the movie Transformers they don't have much of those computer graphic/s.
E (They actually had uh) you know (they) they actually (uh) shot the entire scene like as if real stunt men were actually drive/ing the transformer truck/s and thing/s like that.
E That's what I meant.
E So it look/s really real as versus to look/ing like^ W So you're talking about those hollow hologram/s that a transformer/s[EW:transformer] project/s.
E Interrupts E and does not give E a chance to confirm whether she was talking about hollow holograms.
W Well yeah they only do that when they're in vehicle mode.
E Yeah.
W When they're trying to keep secrecy they usually just make hologram/s.
W But like the transformer/s if there was a human in them < > they would/n't (um use them) use those hologram/s.
W Instead they would just let them drive and (unless they unless the transf*) unless the Autobot/s need to do something.
W He then starts off another monologue about the hollow holograms, thereby, leading the examiner to change topics before W continues to talk at length about the hollow holograms.

E <Mhm>.
E Okay.
E If you were given a chance to play in that movie, (uh) which character would you want to play?
W (uh) Actually I would play a transformer self of my own.
W Something like (um) {clicking noise} I would like transform into some big big battleship {emphasized on the word battleship} or something.
E Okay, nothing compare/ed to the character/s in the movie as such, your own.
W Yeah.
E <Will the Transformer>!
W <I'm basically>> {utterance abandoned}
E Would you have like^ W No no no|no.
W I would actually call myself High_Tide.
E High_Tide?
E Why?
W Well because (uh) if I was the only transformer that naturally can go in water then.
E Oh so High_Tide (for) refer/ing to high tide/s in water.
E Is that why you had the name?
W No, technically the reason why was because there/s actually two Transformers videogame/s.
E Mhm.
W But in one of them there/s this (uh) big big Transformer call/ed High_Tide.
E Mhm.
W And (he/’s) he/’s like {clicking noise} (over million time/s your) even a million time/s the size of a Transformer.
W And a Transformer is like {clicking noise} I don't know like about probably as high as this building.
E Mhm.
W But High_Tide is like a million time/s that height.
W (He/’s like) {clicking noise} he/’s like as high as the (uh): well {W appears to be looking for an appropriate comparison, and E helps out}.
E As high as the sky?
W Well no no.
W (um) He/’s just as high as the (uh) Empire_State_Building I/’m think/ing.
E Oh wow, okay!
W Well probably the tallest mountain probably.
E Okay.
E (and he uh) actually can you tell me what the role of High_tide was like in?
E Was he there in the movie?
E I don't remember.
W No.
E He was/n't right?
W He was/n't in any of the movie/s or the cartoon/s.
W He/’s just one of the character/s <in the videogame>.
E One of the character/s <in the videogame>.
E Okay.
E Yeah that/’s why I don't <recall>.
W: <Yeah> (because he) but he {client moves away from the table and E has to ask him to come closer, so the utterance was interrupted}

E: Do you want to just {E gestures W to move closer} sorry, I just want to make sure I get you on camera too.

E: Okay yeah go ahead.

W: Well High_Tide is kind of a little {clicking noise} huge for a transformer because you see he can actually carry other transformer/s on him.

E: Ah okay!

W: And (he's like he's like a big) he's like a transformer that carry/s a human <> except a transformer drive/s him instead of (a tran*) a human drive/ing a transformer.

E: <Okay>.

E: Okay.

W: And actually High_Tide is a Decepticon.

E: Oh okay.

W: So he's one of the bad <guy/s>.

E: <Guys> okay.

E: So you want to be one of those instead of the Autobot/s?

W: Yeah (I would rather be) but actually I would rather be High_Tide as an Autobot.

E: Oh okay.

E: You want to have the size of the High_Tide.

E: But be in the Autobot team.

W: Yeah.

E: Okay, it make/s sense.

W: Because if the Autobot/s were to actually have him, then they would have it a very very distinctive advantage.

E: Okay.

W: Yeah they would {E finishes W's thought}.

E: Definitely win the game.

W: Well <> definitely bash the (uh) Decepticon/s easily.

E: <I mean>^...<uhhuh> <mhm>.

E: {laughs} Oh wow that would be funny!

W: {laughs} yeah.

W: (it's because High*) because Transformer (is barely a match) {emphasized on the word barely} is barely a match against High_Tide.

E: Okay.

W: Because High_Tide will just simply squish him {gestures and makes a sound effect to indicate the squishing}.

E: Okay.

W: (and he has) And he hardly does/n't have to use his hardest punch.

E: Okay.

W: (he does/n't even use his, even he does/n't even need) he hardly use/s any strength.
W He just {W gestures the action of crushing the transformer with a hand, and E vocalizes the action to confirm if that was what W wanted to say}
E He just need/3s to put his hand down.
E And they’re dead right?
E I mean they’re crush/ed.
W (He just) He just lightly put/3s his hand down.
W And they’re still done.
E Okay.
W (They’re just simply) They’ll just simply get kill/ed or so (because even no) because the weight of the arm < > is barely even able to weigh a weight that a to be carry/ed by a transformer [EU].
E <Mhm>.
E Okay.
W And if you put it and {W completes the utterance using the gesture of putting his hand on the table to indicate the action of HighTide if it crush/ed a transformer, E follows the gesture and vocalizes it}.
E If you just put it down that’s enough for it to crush.
W Yeah it’d be certainly enough to crush him.
E Mhm.
W They probably still be alive.
W (But it would be hard) but there’s only a one percent chance where the transformer can be alive.
W But definitely {W emphasizes on the word definitely} not a human can survive.
E Okay.
E What was your favorite part about that movie?
E Did you like a particular scene or~
W (uh) No, I just particularly like/ed (the character/s) the Transformer character/s.
E More than anything else, okay {E continuing on W’s utterance}.
W And then the Transformer, not the twentieth anniversary one < > it’s really cool how they were able to get Bumblebee < > (his leg/s are like) his feet were like cut off < > from his body, (they put him on the uh they put him on uh) he put him on a tow truck.
= W does a nice job of stating which movie he is talking about after several instances earlier of breakdowns occurring due to poor referential communication.
E <Okay> <uhuh> <uhhuh>.
W And then this woman was in the truck.
W Drive/ing the truck[F].
E Yeah I remember.
W And she (found something use* found out something that he) found out something.
W (She could she) While she drive/3s^ {W points backwards to indicate the action of Bumblebee in the movie}
E He can actually ~
W Well Bumblebee shoot/3s.
E Yeah that.
W Like once he just pass/3s (because) because^
E Yeah (and she was) he could/n’t move because he was injure/ed.
E Like he was actually frozen right?
W No he was'n't frozen.
W (he he) It's just that when he was at the city,(he) his feet were like cut off.
E Oh okay okay.
E I thought he was frozen.
W And so he could'n't walk.
W (He wouldn't walk) he could'n't walk.
E So she just drove him.
E And he use/ed all the ammunition against the other guy/s, right?
W Actually he has an unlimited ammunition < > because they're actually use/ed some other way.
E <Okay>.
E Okay.
= E finally decides to end the topic about Transformers.

E (How about uh)have you gone for any sport/s event/s recently?
W No (I) I don't like sport/s.
W In fact I hate them.
E Oh!
E How about concert/s or play/s?
W (uh){clicking noise} play/s but not any other thing.
W I only (play) do play/s because play/s are fun.
E Okay play/s like which one did you go recently to?
W Well actually it's been a long{W emphasizes on long} time since I've been in a play.
W And it's like^
E When was the last time?
W Well this last time I seen {emphasizes on seen} a play I was like in third or fourth grade.
E Oh!
W But the last time I had been {emphasizes on been} in a play it was like in second grade.
W And one of them was about^
E What did you play in it?
E Like what was your character in the play?
W Well unfortunately the main character I play/ed in (the) that play was actually a girl[EU].
W So I did'n't get to be a main character.

= Last 2 utterances are confusing because W starts of saying that he played the main character in the play, and that the character was that of a girl. However, he contradicts this statement by his next utterance in which he states that he couldn't be the main character. E assumes this was just a revision of his previous statement and does not question him regarding it.

E Oh okay.
E So (wh*) what was the story about?
E What was the play about?
W Well it's been such a long time ago.
W I just can't remember.
Although I do remember that (uh) Ms Daniel, she's my (um): speech teacher <> back at my old school<>, and (uh) she (uh) organize/ed this little play for us.

= Another instance where W uses good referential skills to avoid a breakdown, by clearly explaining who Ms. Daniels is.

E <Uhhuh>.
W And (she uh) {clicking noise} she made the play and(uh){clicking noise}.
E You just play one of those character/s in it.
W Yeah but (uh) I had some big big (uh) thing/s about it.
W I was just (try/ing)try/ing to figure out how to fit in.
W (and) And I'm actually one of those character/s that actually is try/ing to like fit into the family.
E Okay that's interest/ing.
E Seem/3s like a really nice character that you play/ed.
E Kind of complex and^ W Yeah (but it was not) but it/s not my main character.
E Okay.
E How about the play that you (uh) saw you said in fourth grade?
W Third or fourth grade I can't remember those either.
W But (uh) I do distinctly remember something about it.
W But I just can't seem to remember.
W I think there was something like^ {W appears to be thinking about it}
E So (was) was it as part of your school^ W Oh yeah now I remember it!
E Okay.
W (there/s just little this) There/s this guy that/s like a magician.
E Uhhuh.
W (and it/s real) and he/s really cool.
W (He say/3s)one time he said, "Look into this little hypnotizing thingie".
E Uhhuh.
W And then when we look at the hypnotizing [EU].

= Although W omits the noun at the end of the utterance, it is understood as part of the ongoing discourse.

W And then when he say/3s, "Look at his head", then his head actually grew bigger.
W But it was just an illusion.
W But (hyp*) it made it look like he was have/ing a bigger head {W laughs}.
E So you said something about a hypnotizing thing.
E Like you were suppose/ed to look at something and then^ W It/s one of those black and white squirly thing/s.
E Okay, so you had to look at that.
E And then look back at him.
E And then you felt that his head had grown bigger?
W Well yeah.
W Unless we look/ed at it, then his head just grown bigger.
E Oh wow!
W But I mean for the play, I think they must have had something to just show that right?
E Yeah I knew it was an illusion.
W Okay.
W (but) {laughs} but to me in a way there/'s like, "How did he do that illusion"?
E {laughs} yeah do you like thing/s like that?
E (have you)Do you like you know magic and?
E Well apparently I don't believe in magic that much.
W Uhhuh.
W But although I was say/ing to myself, "How could he do that"?
E Yeah.
W I mean how can we just simply look into this squirly thing.
E Mhm.
W And then we just look at him.
W And suddenly his head grow/3s bigger just simply because we just look/ed at the (uh) squirly thing.
E Have you seen Chris_Angel?
W (Um) maybe that was his name.
E Alright.
W But I just can't seem to remember.
E Alright.
E You said that this was a play in your fourth grade right [REQCLR] [CR] [CONFR]?
W Third or fourth probably second or [Add].
E So (who) were/n't the people who were in the play part of the school[REQCLR] [CR] [CONFR]?

= E's last 2 REQCLR are combined as E wanted to make sure that W was talking about a school play he had seen. E was surprised to know that Chris Angel was actually part of a school play.

W (um) no he was actually a real magician <and> [ClResp] [Add].
E <Oh> it was really a real magician so^
E <Uhhuh>.
E Uhhuh.
W (um) basically you just (uh) put a little (uh) quarter (uh) <> (on this) on the card.
E <Uhhuh>.
W (and you) and the people see it.
W But then %puf {sound of slamming the card on top of something; associated with gesture}. 
W And then there's this little container.
W It look/ed like the quarter actually went through.
E Uhhuh.
W But to tell the truth.
W Actually if you flip/ed it over you will see there's this little square that was actually able to actually make the quarter (stic*) get tie in, that make/3s it go really tightly.
W And then (once you slam it)once you slam the top <> (it mak* it look/3s) it/s an absolute illusion <> that the quarter actually went through.
E <Uhhuh> <Mhm>.
E Okay.
W (and when) And I found that out.
W And I knew there/s always a trick to it.
E Mhm.
W Because my friend Alex was do/ing it to me <> when he did that quarter trick %puf <> and when he did a couple more time/s, I thought I saw something on the card.
E <Mhm> <Okay>.
W (and) And I thought it was (a quar*) that quarter.
E (so) So the quarter is stuck on the card [REQCLR][AR][CONFR]?
W No no\no [ClResp].
W The quarter was stuck to the card.
E So it was stuck to the card [REQCLR][CR][CONFR]?
W Yeah [ClResp].

= In the above breakdown, E is confused about the position of the quarter because W starts out by describing how there's a square that makes the quarter go really tightly, and how when one slams it, the quarter actually goes through. Based on this initial information, E assumes that the square is a small slit on the card through which the quarter goes through. However, W then follows this information stating that he saw something on the card, which made E to wonder whether the quarter was actually stuck on the card. The first breakdown occurred due to ambiguous information, or rather contradictory information. W responds to this REQCLR stating that the card was not stuck. However, he then follows it up with the comment stating that it was stuck on the card. This leads to the next breakdown in which W contradicts himself and E has doubts of what exactly W was trying to say and E then tries to confirm this information. Finally the breakdown is fixed.

E Okay.
W And then he show/3s it to the other people.
E Okay.
W And then slam/3s it on there.
W The quarter is still there.
W But it looked like it wasn't.
E Okay (it look) It looked like the quarter went through the container.
W Yes.

= Here is where W really fixes the breakdown although the repair is very subtle. All along W was talking about how the quarter goes through; what he doesn't specify is how it goes through the container and not through the card. So E assumes that probably the quarter was stuck on the card and the slamming action results in the quarter going through the container or rather falling into the container.

E All the way down?
W Yeah something like that there was some sort of (uh) illusion about some sort of (uh)^
E So did they have like a glass or a mirror or something that^\footnote{E: Under the table.}
W Yeah they had a little glass < > so that they could show people that the quarter was there.
E <Uhhuh>.
W (and) And it actually went through.
W But the truth (is) is that (if) there was this little pocket that is hard to see.
E Okay.
W And (uh) if you slam it, W gestures indicate the pocket is on the lid of the container} the quarter goes out of that pocket.
E Okay.
W Then the magician slip/3s the card this way {gestures that the magician is pulling the card away from the container} < > put/3s it in his pocket.
E <Uhhuh>.
W And then open/3s it.
W And to see that the audience^\footnote{E: Open/ing the container [REQCLAR][AR][CONFR]?}
E Open/3s it meaning open/3s the container [REQCLAR][AR][CONFR]?\footnote{W: Open'ing the container \footnote{W: W gestures indicate that there's a lid on top of the container} [Add].}
W Open/ing the container {W gestures indicate that there's a lid on top of the container} [Add].
E Okay.
W And the quarter was right there.
E Okay.
W It was right in the container.
W And make/ing everyone believe that it is/n't an illusion.
W And (it was actually really) it actually went through the top.
E Okay.
W But the truth is that it didn't.
W It actually there was another one <under the table>.

= Based on this information, it appears that there was a quarter already inside the container or rather at the bottom of the container. And that the quarter on the card didn't actually go through the container.

E <Under the table>.
E Yeah that make/3s^\footnote{E: E: Yeah that make/3s.}
W And you have to slam it.
E To just kind of give that illusion that you were actually throw/ing it in.
E But it was already there.
W Yeah like the quarter actually went through.
E Yeah, okay.

= Here again W contradicts himself saying that the quarter went through. E decides not to pursue the topic again as the breakdowns are not really fixed and to avoid it for being frustrating for both W and E.

E Well that's fun.
E When I thought about when you were saying that you went and saw a play and thing/s like that.
E I usually thought that it was something about a drama.
E Or something like you play right as versus to like a musician?
E I mean (uh) as versus to a magician come/ing and do/ing some thing/s.
W (uh) really I'm just really kind of (um) (( well I don't know)) just do stuff.

= Here E tries to explain to W why the first breakdown occurred, but W responds to it with an irrelevant comment.

E Okay.
E (um) how about like vacation/s?
E Are^ W Vacation/s I just basically stay at home most of the time.
W I just basically stay at home.
E Have you been to another place other than Virginia?
W Yeah, couple of time/s.
E Like which place/s?
W And some of them were not in the state of Virginia.
W Some were actually in another state like Florida to go to Disney_World.
E Oh yeah, (you told mo* you) you told me.
E Yeah (it was) you went to Florida to see^ W Oh yeah.
E Yeah you did mention that.
E (what was so) You know what was different about Florida than from Virginia?
W Really there was only one thing that I could think of.
W Tornado/s.
E But you did/n't have a tornado when you went to Florida right?
W No we did/n't have it.
E So I mean when you went there what was interest/ing about that place?
W Well we had (uh) a bit of a>
W There was/n't any tornado/s when we went to Florida.
W We just simply enjoy/ed our vacation in Disney.
W And just enjoy/ed.
W And just sit there in the ride and stuff like that.
W I was (uh) {clicking noise} like about {clicking noise} probably eight to ten year/s old.
E Oh it was a long time back actually.
E <I mean three to> four year/s back.
W <Yeah it was only about>>
W Yeah like about three to five year/s ago.
E Okay.
E So do you plan of go/ing somewhere for Christmas or~
W {clicking noise} (um)I"m not really sure.
W It only depend/3s on my parent/s (because uh) because they/"re the only one/s that normally decide if they want to go out or not.
W Normally I just follow along.
W But sometimes if it/"s somewhere where I don't want to go, sometimes I say no, "I/"d rather be"^  
E Be at home.
W Yeah I/"d rather>
W When only one of us is go/ing like^  
E So (you) you have brother/s and sister/s too or~
W (uh) I only have one brother technically.
E Okay, okay.
E He is older to you?
W (uh) Actually yes.
W He/"s about {clicking noise} eleven year/s older than me.
E Okay.
E So (wh* either) when one of you, you were say/ing.
E I/"m sorry I interrupt/ed you there.
E (you were say*) You were talk/ing about it.
E Like if one of you guy/s^  
W Yeah I was like about he/"s eleven year/s older than me.
W And (uh) at that time he (uh) actually {clicking noise} did some drink and drive {frozen phrase used}.

= W does not continue about the previous topic about going out, and starts out a new topic about how his brother drank and then drove.

E Oh yeah you mention/ed, yeah.
W Yeah he actually got against the law.
W And lost his <driver/z license>.
E <driver/z license>.
W Yeah he lost that.
W And that was just terrible.
E Mhm.
W He lost his driver/z license just because he was a little irresponsible.
E Mhm.
W (And was)And I was glad that he actually survive/ed.
E Did he get into (uh) a really bad accident or~
W No no.
E Okay, he was just caught.
W Luckily the police caught him before < > before there were like any accident/s and stuff.
E <before he did>.
E Okay.
W And the strange thing is that I wonder/ed how the police actually catch (wonder how)>
W The strange thing is that I wonder/ed how the police (uh) know that he was drink/ing and drive/ing.
E I guess you know the way your car move/3s also like on the (uh) lane.
E Like you can make out if the person is drunk, they usually don't move steady.
E It keep/3s move/ing here and there.
E That could be one of the thing/s that they look at.
E So if they have a suspicion about that, they will ask them to (stop uh) stop.
E And check them over.
E And then they do a test.
E They ask them to^ W Oh yeah the breath test.
E Mhm.
E Not just the breath test.
E They will also ask them to walk in a straight line.
E If they can walk through a straight line, then keep their head straight^ W The breath test is actually>
W There/'s actually no flaw/s to the breath test.
W Because on MythBusters one time, they were actually>
W (The myth uh Jadie)Jamie and Adam actually (uh) were gonna^ E (who) Who are Jamie and Adam [REQCLAR][AR][SRS]?
W (uh) They were in the Mythbusters [Add].
E Okay.
W And they had 30 year/s^ E It/'s a TV show [REQCLAR][InInfo][CONFR]?
W Yes [ClResp].
E Okay.
W They/'re usually on the science channel/s.
E Okay, (those) those are some of your favorite channel/s too right you were mention/ing.
W (uh) Actually anyway>
W (uh) They were actually go/ing to become drunk.
W They/'re not gonna drive.
E Mhm.
W But they gonna become drunk.
W And they/'re actually gonna try to see if there was a way to beat the breath test.
E Oh okay.
W And they try/ed breath mint/s which apparently that did/n't work.
E Okay.
W And they were also (um) %mmm{appears to be thinking} I don't know really.
W The best one I remember is breath mint/s which apparently did/n't work.
W Even though it was suppose/ed to make your breath fresh.
E Okay.
W It did/n't beat the breath test.
E Okay wow.
E (um) in terms of like you were talking about your vacation.
E You said that you know depending on whether you like the place or not, you would go^W Well apparently actually I just decide/ed if I want to go or not.
W If I have to go, (I'll) I will go.
E Is there a place that you don't like to go?
W Well no, I just well>
W {frustrated sound} what I'm try/ing to say here is, is that (um uh)((what was it))I'll only go if I have to.
E Okay and also if you feel like the mood (uh) to go to that place and have a vacation I guess.
W I'll only go when I want to go.
E Okay.
E So usually do you have Christmas/s here in Virginia?
E Or do you again for Christmas/s do you visit^W (Normally I) normally I have Christmas in Virginia.
E In Virginia, okay.
E Do you like make/ing snowman and thing/s like that outside or^W Actually I rather prefer {yawns}.
E Just being inside?
W No no.
W Actually there was a time where my dad made this little {laughs} (snow this sort of)>W It's similar to an igloo < > except (it's sh*) it's suppose/ed to be cover/ed against snowball/s.
E <Okay>.
E Uhhuh.
W (And you're try/ing to like protect and it's try/ing to protect) and you're protect/ed from get/ing hit from snowball/s {W imitates the sound of snowballs firing at you}.
E Yeah.
E He actually made that?
W Yup.
E Wow it's cool!
W (with my) with a little bit of my help.
E Oh okay.
E (so) Because you are the designer right, you actually build thing/s.
W No no he was the designer.
W My dad was the designer.
E And he^W And he did most of the work.
E Okay.
W (yeah and he threw snowball and it) and^W That must have been fun!
W Yeah and there was a next door neighbor that was try/ing to like take it out.
E Uhhuh.
W But he couldn't because he was just simply throw/ing snowball/s.
W And apparently (it actually made) he only made it stronger.
W (and) because the more snowball/s (you) he threw out, it just made it stronger and stronger and stronger, which apparently was n't work/ing.
E So how did you finally get rid of it?
W No {laughs}.
E Because if it's so hard to
W But since because it was made out of snow and ice and stuff like that.
E It just kind of melt/ed over time.
W Yup melt/ed.
E Yeah that's right.
W The only thing you could do to take it out is just practically is to get something like some sort of like fire.
W And then you just have a stick that's a little bit on fire.
W And then you put the stick near the bunker.
W And then eventually it just melt/3s it.
E Okay.
E So do you and your brother go out together for thing/s or~
W Well {vocal noise} no not really.
W At the time of the bunker Ben wasn't there.
E At the time of the bunker [REQCLAR][AR][IrrInfo][CONFR]?
E What's that [DR]?

= Last 2 utterances of E are part of the same REQCLAR.

W Well you know when the bunker was made and stuff [Add].

= This breakdown occurs because W introduces an ambiguous referent "bunker" that confuses E. In addition, E had asked a general question regarding whether W and his brother go out together, and W continues to talk about it with respect to the time his dad built the bunker. It is also at this time that W actually defines the igloo model as a bunker. In his initial description of how to get rid of the igloo, he mentioned how one had to light a stick and bring it close to the bunker. E assumed that the bunker was a part of the igloo and did not refer to the igloo itself.

E Okay.
W Ben wasn't there.
E Okay.
W Only me, my dad, and my mom were there.
E Okay.
W And Ben wasn't.
W (and uh) and (uh) because of this (uh no) I could/n't play with my brother.
W So apparently I had to play with (my uh) a friend of mine that is next door.
W He's not really^
E Jason or who^
W (No not not that other) not that Jason friend downstairs.
W Actually a friend of my neighborhood.
W And (uh) his name was Lionel.
W And I was try/ing to (uh) get him to actually try to attack my fort.
E Mhm.
W And my little bunker.
= W rotates on the chair.
E Uhhuh.
E I just want to make sure I get you on camera.
E Sorry go ahead, yeah~
W And (uh) when he was like (um) {clicking noise} I don't know like try/ing: to like try/ing to(uh) hit me while I was inside the bunker>
W He was try/ing to get me in the opening.
E {laughs} hit you with snowball/s or~
W Yeah.
E Okay.
W He was try/ing to do that.
W But I was hide/ing in the bunker very well.
E {laughs} So he could/n't get you.
E But (did you) were you able to get him?
W There was only one way to get me in the bunker (by fir*)>
W By like let's just say that, that/s the opening right there {points to a point on the ground to refer to the opening} < > and then he try/ed to like threw [EW:throw] a snowball {gestures his friend's action of throwing a snowball} through that opening.
E <Uhhuh>.
W But unfortunately for him the (uh) opening could/n't get him to hit me [EU].
= W refers to "opening" as an animate object.
E Okay mhm.
W The opening was big enough (for us) for me to enter.
E And to even get out.
W Yeah to get out.
E Okay so you just narrowly escape/ed his snowball/s.
W No actually I just stay/ed in there.
W And I just did/n't like (get in) get hit.
E Okay.
W No matter what he try/ed to do, he actually just hit the bunker < > instead of me.
E <Okay>.
E Now the bunker^>
W Whenever I get a snowball (from where he was attack/ed) when he was attack/ing me < > I actually try/ed to grab those snowball/s.
E <Mhm>.
W And (when when I/m safe when I look) when it look/3s like I/m safe and I am safe < > I just get out and try/ed to throw snowball/s at him.
E <Mhm>.
E So the bunker is like>
E You said that your dad build an igloo right?
W Yeah well sort of like an igloo.
E Okay.
E So is that what you were (call/ing) refer/ing to as a bunker too [REQCLAR][CR][CONFR]?
E Or did you^>
W Yeah I refer/ing [ClResp][EU]>
The breakdown occurs here because W stated that he was trying to get his friend Lionel to attack his fort and bunker, thereby referring to two items of the object that was created. This may have resulted in E asking W whether he referred to the entire object as the bunker, or whether the bunker actually referred to a part of the created object.

E Okay.
W (Uh uh the ig* the) It was similar to an igloo.
W But it was/n't really an igloo (because it was) because an igloo is made of ice.
E Okay, yeah ice.
W But the bunker was actually made of snow and ice.
E So where did you have this thing where you could (uh) throw snowball/s?
W Did you have like a small kind of an instrument that's kept there to kind of throw at it or?
W Well actually (we uh) we have (a lil* tiny bit) a tiny space.
E Okay.
W But it's big enough for me to go through (and uh) <> and pretty much have some cover.
E <Okay>.
E Okay, shield yourself away from all the snowball/s that's thrown at you.
W Yeah pretty much shield myself <> and get myself in cover and not try to get hit by (um um)>
E <Mhm>.
W How much longer is this going to take?
E No, we are nearly done.
E And we are done.
W Oh!
E Are you tired?
W (uh) yeah.
E Because of doing^{^}
W Yeah I'm just get/ing tired of talk/ing.
W And I just wanna get back to my classroom.
E Oh yeah sure.
E (we) We just have one more thing.
E And we'll be done.
W Okay.
E Like it's just for me to know you better, that's why.
W Oh okay.
E (um) How about music?
E Do you listen to music?
W (um) my favorite music probably from before from the Transformers music stuff.
E Yeah that's about it?
W Yeah the twentieth anniversary.
E Movie.
W (Transformer) twentieth anniversary Transformer movie.
W (It's) I like their music like I said before.
E Okay.
W I love it.
W (It's it's) It's good music.
E Okay.
E And do you listen to any other kind/s of music like?
W {clicking noise} No apparently I just rather prefer that.
E So you play that all the time or?
W Well not all the time.
W It's only (at) when I put up the movie.
W And then the only time you hear it is actually once you put in the disc in the DVD player.
W And then you get to hear the music.
E Okay cool.
W So you have to like eventually wait for it to actually get that music.
E Okay.
E Did you have any question/s for me?
W No, not really.
E Okay so we're done.
E Thank you so much Will.
E You did a great job!
W Thanks.
E How was your Thanksgiving Whitney?
W Good!
W I'm glad I got a break.
E Yeah you had almost 4 days off right from school?
W Yes.
E What did you do?
W I went to my grandma/z house.
E Oh is she in Virginia itself or~
W Ohio.
E Ohio oh!
E (I did my uh) I'm still do/ing my PhD out from Ohio actually.
E So which part in Ohio?
W Cleveland.
E Cleveland!
E Oh that's a nice place.
E Been there once.
E So you went there on Thursday or Wednesday?
W I went there on Thursday.
E Okay.
E Just in time for Thanksgiving dinner?
W Yes.
E Okay, and what did grandma cook for you?
W Turkey and mashed potato/s and cranberry sauce and pumpkin pie.
An example of Whitney's listing behavior.

E Okay, do you always go to grandma/z place for Thanksgiving or~
W Yes.
E Okay.
E And then (when) what else did you guy/s do once you got there?
W We watch/ed Enchanted.
E Oh I have/n't watch/ed that movie.
E (what) What/'s that movie about?
W It/'s about Grazelle go/ing to New York.
E loud noise in the background as W leans on the chair, and it breaks. The responses that follow are with respect to this action.
E Wow okay.
W I'm sorry.
E No no that's fine.
E Are you okay?
W Yeah I'm fine.
C Yeah it just come/3s out like that Whitney.
C (You're) you're do/ing very good man!
E Yeah you're fine.
E That's fine.
E The chair/s are sometimes a little bit you know^ W And guess what my favorite character is (Mesa* Me* Mena*) Nazaniel.
E Mesaniel (uh) I'm [REQCLAR][PE][CONFR]^ W Nazaniel [Kw].
E Nazaniel okay.
W Nathaniel [Rev].
E Nathaniel okay.
E I'm sorry.
W It's okay.
E (And why is she) and why is he your favorite character?
W Because he's so funny.
E Oh what kind of funny thing/s does he do in the movie?
W He jump/3s into the well.
W And he come/3s out of the sewer!
E Oh my God!
E (And he does/n't get hel*) and you know does/n't he drown in the well?
W No (he get/3s he get/3s) he go/3s to NewYork.
E Okay he go/3s to NewYork.
E And how does he end up in the well [REQCLAR][IrrInfo][SRS]?
E Did someone throw him in?
= Last 3 utterances are part of the examiner's REQCLAR. The reason this breakdown occurs is because of the sudden shift in the topic. For instance, Whitney talks about Nathaniel jumping into the well and then coming out of the sewer. And when questioned more about it, she suddenly shifts the topic stating that he went to New York. The examiner assumes that probably Whitney meant to say that he had gone to New York and had jumped into the well there.

W No Narissa sent him [Add].
E Who who's that [REQCLAR][AR][SRS]?
W She's the evil [EU][Add].
= W omits the noun in this sentence, however, the message is understood based on the context.

E Oh!
E She's the evil character throughout the whole movie or~
W Yes.
E Okay, and why does she throw him into that well?
W No (he): he [EW:she] told him to go after Grazelle.
E Grazelle is the good person or [REQCLAR][AR][CONFR]~
W Yes [ClResp].
E Okay.
E I've no clue about this movie.
E That's why (I've) I've no idea about the character/s.
E I'm probably a bit back about that.
E (so)So Nathaniel goes out to look out for Grazelle.
E And (uh) the evil one, what was her name again?
W Narissa.
E Narissa, and so why is she trying to stop him?
W No, the Prince goes after Grazelle.
E Okay.
W And Nathaniel goes with the Prince.
E Okay.
W And so>
W And Pip too.
E Oh okay.
W He's a chipmunk.
E Oh okay so^*
C Whitney, tell her how the movie starts?
C What is it at first when it starts?
E Yeah, what is it about [REQCLAR] [InInfo] [SRS]?
E I'm still trying to figure out what the movie is about.

= Here, Whitney provides inadequate information regarding why Narissa actually sends Nathaniel after Grazelle. In addition, the caregiver intervenes and requests Whitney to provide more information to the examiner regarding the movie's plot. Note: The caregiver identifies that the examiner has not understood the plot, and Whitney does not realize that she has provided inadequate information at this instance.

W It's about a girl who lives in Eudorasia, which I can't pronounce right [Add].
E Okay, that's okay.
E (And) and what happens to this girl who is living there?
W (uh) the Princess/z stepmom <> throw/3s her down a well.
E <Uhhuh>.
E So the girl is the Princess [REQCLAR][AR][CONFR]?
W {Whitney hesitates before answering} Yes [CIResp].
E Okay, so her stepmom throw/3s her away.
E She want/3s to get rid off^.
W No.
W The Princess/z stepmom {emphasizes on the word stepmom}.

= In this instance, Whitney's response indicates that she wanted to correct the examiner on something that the examiner said. However, Whitney emphasizes on the word "stepmom" to indicate that the examiner made an error on that word. This was a bit confusing when transcribing because it appeared that Whitney was trying to correct some information, but placed emphasis on some other information instead. On further reading about the movie online, one realizes what the error is. Whitney wanted to correct the examiner by stating that it was the Prince's stepmom that threw the girl in the well, and not the Princess's stepmom. However, this correction is not realized by the examiner during the conversation, as the additional information was not available for the examiner at that time. So the examiner assumes that Whitney is still talking about the Princess's stepmom. In addition, the conversation that takes place before indicates that Whitney confirmed the examiner's query of whether the girl and the Princess referred to the same person. The audiofile indicates that Whitney hesitated before stating a "yes" to E's query of "So the girl is the Princess?" Based on the knowledge the examiner now has during the transcription, E assumes that probably the hesitation was due to the fact that W wanted to state that it was the Prince's stepmom, and E's query of whether the girl was the Princess seemed in a way correct because she would be a Princess if she did marry the Prince.

NOTE: All this information makes sense only after E had read about the movie's plot online. However, none of this can be interpreted based on the conversation that takes place. This interaction also indicates the trouble W has in identifying what really are the breakdowns, and what repair responses are required to fix the breakdowns. Another example of poor perspective taking skills.

E Okay so the Princess/z stepmom throw/3s her into the well?
W Yes.
E And then what happen/3s?
W She end/3s up in NewYork city.
E She go/3s from the well to NewYork city [REQCLAR][CR][CONFR]?
C Whitney, tell her it/3s animation.
W It/3s animation [Add].
C And when she go/3s to NewYork, she she what^.
E Actually let her.
C Okay.
E Yeah, because that/3s part of the {C probably gestures an apology at this time}.
E No that/3s fine {directed to C}.
E Yeah tell me {directed to W}.
W And when she goes to New York, it's reality [Add].

= Although the breakdown is fixed, the repair is facilitated by the caregiver. Therefore, one cannot attribute the repair response as being spontaneous from Whitney.

E Oh!
E Oh okay!
E I think I saw the trailer of this.
E And then she is trying to get back to the animated part of her life, right?
W Right.
E But she falls in love with <some> guy.
W <Lawyer>.
E Yeah (in in the real*) in New York right?
W Right.
E Oh yeah I think I remember seeing a trailer of that.
E Oh so you like/d that movie.
E So who all went for the movie?
W Mom, dad and Lizy.
E Who is Lizy [REQCLAR][AR][SRS]?
W My sister [Add].
E Okay, alright.
E So everyone was there for grandma/z place for Thanksgiving.
E And then what did you do?
E Did you go for shopping on Friday?
W (uh) I think so.
E So what did you buy?
E Did you get some good deal/s.
W I think so.
E What kind of thing/s did you buy?
W I bought: {followed by a long pause, so E intervenes to facilitate the conversation}.
E (Were were you keep/ing) were you save/ing any money to buy something special for Thanksgiving?
E So did you buy something like that?
W I was save/ing money for Christmas present/s.
E For Christmas present/s oh!
E And did you buy that?
W No, not yet.
E Okay, when are you plan/ing to go for Christmas shopping then?
W %uuu on December.
E Okay in December, yeah.
E We went yesterday.
E My husband and I went yesterday to get the Christmas tree.
E That was excite/ing.
E But it was so huge it wouldn't even you know fit into our car.
E So we had to like pull the seat/s down.
E And try to get the tree in.
E So (did you) did you set up your Christmas tree yet?
E Or are you go/ing to do^ 
W Not yet.
W But we will soon.
E (So does Lizy and come uh) so is Lizy stay/ing with you right now?
E I know she/'s older to you.
E Does she stay with you and mom and dad?
W (uh) yes.
E Okay.
W But she go/3s to work every day.
E Oh so she/'s still live/ing with you guys, okay.
E So maybe both of you would (uh) you know decorate the Christmas tree.
W Right.
E Okay, and you're go/ing to have it here?
E Or are you go/ing to go to grandma/z place?
E Or is grandma come/ing this side?
W (uh): we usually celebrate Christmas (with) by ourselves.
E Okay that/'s fine.
E That/'s nice.
E (um) For us, like I told you I was from India right?
E So for me (uh) Christmas is like a big thing.
E So I come from the US.
E Like I leave from the US.
E I go to India.
E My brother come/3s down from Switzerland.
E My sister is in India.
E So she/'s from another state.
E So (she'll also come)all of us will get together for Christmas.
E Like how you have Thanksgiv ing here~
W Yeah {odd tone}.
E (For Chr*)for us Christmas is the Thanksgiving, kind of get/ing together.
E Family/s get together for Christmas.
E So that/'s fun.
E Alright today (uh) what we're go/ing to do is do a lot of talk/ing.
E I'm just gonna get to know you a little bit better.
E (I) I want/ed to start off with like what kind of hobby/s do you like?
E What kind of thing/s do you like to do in your spare time?
W I like to go bowling.
E Bowling okay.
W (um) Trampoline.
E Trampoline okay.
W (uh) search/ing the web.
E What do you like to surf on the web?
W (fa*) Favorite character/s.
E (uh) you seem to have a lot of favorite character/s.
E What kind of (fra*) favorite character/s do you surf about?
W Nathaniel.
E Oh so that's just one.
E What else?
E What other character/s?
W The Grundle/s.
E Okay, and who are the Grundle/s actually [REQCLAR][AR][SRS]?
W (um)more like creature/s from My_Little_Pony [Expl].
E My_Little_Pony oh!
E That was an old movie right?
W Yeah.
E It was a very old movie actually.
E I think when I was a kid I think I saw that.
E Okay, yeah that's nice.
E And then who else?
W Lina, she's a pr* character from the Princess_in_Kurgie.

= Here's a nice example of how W understands that a breakdown can occur if she introduces a new character without orienting the listener to valid information. It also shows how W anticipated that E might ask her who Lina is, given the fact that she was subjected to that type of question a few sentences before.

E Oh okay.
E And what's that story about?
W It's about Curdie <> whose princess got capture/ed (by the)by the Lord_Balthazar.
E <Mhm>.
E Okay and he's the evil guy in that movie?
W In the book.
E Yeah, oh this is a book, okay.
W I'm try/ing to make it a movie.
E You're trying to make it into a movie [REQCLAR][CR][CONFR]?
W Yes [ClResp].
E How [REQCLAR][CR][SRS]?
W (By): by ask/ing director/s of animation studio/s [Add] {odd tone}.

= The previous breakdown occurs because of content rejection. The second REQCLAR that follows is because E wants to make sure that W actually does mean what she says about making the book into a movie. The REQCLAR also is a request for additional information to clarify the breakdown and an SRS code best suits its description.

E Oh that's so sweet!
E So what (do you write) do you email to these director/s?
E And you say "hey, I like this book so much".
E "And I really want you to make it into a movie".
E Is that how you go about it?
W Yes {odd tone}.
E And do they respond to you?
W I think so.

=E's response is inappropriate and does not answer E's query, which is the reason why the next question follows. In addition, E wants to make sure that W understands what kind of information E is looking for. This is the reason why E decides to ask more specific questions about when exactly W started sending emails, and if she did receive any response after it. This is to make sure that E understands what W meant by her response earlier, which is "I think so" in response to E's query of whether the directors responded.

E Have they respond/ed?
E When did you start send/ing these email/s to these director/s?
W In the summer.
E Okay and you did/n't get any response/s?
W Not yet.
E Okay.
W But I will soon.
E So which director/s did you email?
W First I xx Strockfield.
E Okay.
W But they refuse/ed to make it because they did/n't have enough money.
E Oh!
E What kind of movie/s did they do actually?
W The_Princess_and_the_Goblin.
E Oh the_Princess_and_the_Goblin, okay.
E And then what else?
W Don_Booth.
E Who/'s he?
E Which was his character?
E I'm really poor at (animation)animated story/s.
E So (who what) what kind of movie/s did he^ W He made American_Tale and The_Land_Before_Time.
E Oh, have/n't seen.
E (are) are those old movie/s?
E Like (how) how old are they?
E Two year/s back?
E Three year/s back?
= Long pause.
E When were they made?
W In the eighty/s.
E Eighty/s.
E Yeah that'/s why I have/n't heard it.
E I use/ed to always watch Disney movie/s.
E I love/ed Disney movie/s.
E They'/re so magical.
E And they'/re so beautiful.
E But I did watch (um) an animated movie recently.
E Have you seen (the mov*) the Bee movie?
W Not yet {odd tone}.
E Oh that's nice.
E (do you like) Do you know about bee/s, honey bee/s?
W Yes.
E Yeah, it's all about honey bee/s.
E And how they make honey.
E And (um) what happen/3s when they stop make/ing honey.
E What happen/3s to the world etc.
E It's very funny.
E (um) It's about (um) you know how bee/s talk.
E And you, you don't expect them to talk right?
W Right.
E But this is just (you know) it's just a fictional movie.
E So, have you heard of the character Seinfeld?
E Like have you seen his sitcom Seinfeld?
E No?
W No.
E Okay.
E He's the one who play/3s the voice (uh) for the main character in the movie.
E So, it's kind of hilarious.
E Now if you were given a chance to make a movie, okay (I) I know you love animation, and
(uh) what character would you want to play?
W Lina.
E Lina, who's that [REQCLAR][AR][SRS]?
W She's the ugly monster in the Princess_and_Curdie [Add].
E Why do you want to play the ugly monster?
W (Because) because she's good.
E Okay, but (she she's still) she's a monster.
E So I thought that <she> was the bad person.
W <she>.
W She is/n't.
W She help/3s Curdie.
E Oh okay.
E But it's just that she's given this name ugly monster because she does/n't look that good.
E Is that why?
W No, her name mean/3s light.
E Okay.
= Long pause indicating confusion.

E And so why is she call/ed the ugly monster too [REQCLAR][IrrInfo][SRS]?
E You you^.
W She was sent by Irene/z great great great grandmother [IA].
The breakdown occurs at this instance because Whitney does not explain why Lina is referred to as the ugly monster. E had asked Whitney to explain why Lina was referred to as the ugly monster in two instances in the conversation just prior to the breakdown. E had trouble understanding why a character that was good as per Whitney’s description, referred to as a monster in the story. And Whitney’s response of what the name Lina means without explaining why the character was referred to as an ugly monster indicates her difficulty in understanding what is the source of the breakdown, and accordingly repairing it. Her response also indicates an irrelevant response to the posed query.

E Who’s that [REQCLAR][IRRINFO][AR][SRS]?
W Irene/z great great great grandmother [Rep-i.a.].
E Who’s Irene [REQCLAR][ININFO][SRS]?
W The Princess [Add].

W’s hand gesture and tone of voice in the conversation above indicated a slight frustration as she couldn't understand why E was asking these questions, and not understanding what she was saying. This may be a slight speculation. However, E decides to address this issue in the following dialogue to indicate the reason why she was asking these questions.

E Oh okay.
E You know because we’re talking about so many different movie/s and so many different character/s, I get confused about who’s who.
E That’s why I’m asking you okay.
E Don’t don’t mind that alright.
W Right {echoing}.
E Okay so (um) some of the thing/s you did (uh) as part of your hobby/s was you know watch/ing movie/s, you know surf/ing the web for character/s.
E How did you start get/ing interest/ed in this?
W When I look/ed at movie/s {odd tone, also indicating frustration}.
E Yeah, like when you were a little girl, when you start/ed watch/ing movie/s, you start/ed like/ing these type of movie/s.
E Is that how you start/ed off?
W When I was 12.

Here again is another example of how Whitney tends to concentrate on the literal meaning of E’s utterance without answering E’s query more globally. To be more specific, E’s question is a confirmatory query as to whether Whitney started liking animation movies when she was a little girl. Although E was not specifically asking Whitney for the exact age at which she started liking these movies, Whitney’s response concentrates on a reply that specifies the exact age when she got interested. It’s a good example of how Whitney misunderstands the pragmatic function of E’s query.

E Oh that’s when you start/ed like/ing animation movie/s?
W Yes.
E Okay.
E How about (um)have you seen any play/s?
E Or have you gone to any sport/s event recently?
W Yes, I went to a baseball game.
E Oh baseball game, okay.
E When when was that?
W Last week or~
E Last summer.
W Last summer okay.
E Do you like baseball?
W Yes.
E Okay.
E Why is that your favorite game or~
W (um) my cousin Jeremy has ticket/s.

= Another example of an irrelevant response to E's query, although the response does relate to the topic discussed.

E Oh so you get free pass/s to go and watch the game!
E That's cool!
W Right {odd tone}!
E And then (uh) can you tell me a bit about baseball?
W You see in three strike/s {distorted} in baseball start/3s out {"start out" segment is distorted} bad.
E Baseball start/3s out bad [REQCLAR][PE][CONFR]?
W No, in baseball <strike/s> are bad [ClResp][Rep-a].
=Last utterance said more clearly.

E <Strike/s> are bad, okay.
W But when the batter hit/3s the bat, he go/3s on first place, second place, third place, and home <> in order to win the game.
E <Okay>.
E Okay, (and your friend and) and your cousin Jeremy did he win the game?
E Did his team win the game?
W I'm not sure.
E Oh you did/n't stay for the whole game?
E Or you just saw little bit of it?
W I saw a little bit of it {echoed response}.
E Okay, why?
E Did you have to leave soon or~
W It was over when we left.
E Oh so you did see the ending of the game [REQCLAR][CR][CONFR]?
W Yes [ClResp].

= Here the breakdown occurs because Whitney provides contradictory information. Initially, she mentions that she didn't know who won the game, and when E questioned her about it, she said she had seen only a little bit of the game. When E probes more, Whitney responds saying she actually stayed for the whole game. This leaves the examiner confused and E's REQCLAR is to
confirm whether Whitney actually saw the whole game, and whether she knew who won the game.

E So who won?
W The Blues.
E Okay, and was Jeremy on the Blue team?
E Or was he on the other team?
W He's a fan of baseball.
E Oh so he wasn't playing for the game.
E He just you know (uh) gave you ticket/s to watch it with him.
W Right.
E Ah okay!
E When you told me you know your cousin Jeremy had pass/s, I thought you know since he's an athlete he got pass/s.
E How does he get pass/s for the game?
W He's in a baseball fan club.
E Oh and they give them every month free pass/s?
; {Whitney takes a long time to respond}.
E Do they give (uh) him pass/s every month?
E Or do they give him like once in two month/s?
E How does he get these pass/s?
W He get/3s them every month.
E Okay cool, not bad!
E How about (uh) have you gone to a play or a concert recently?
W I've gone to the Siberia orchestra.
E Oh yeah, you told me.
E (You like)you like go/ing for orchestra/s right?
E I think you mention/ed that the first time I met you.
W Yeah.
E (when) When was that?
E When did you go to the Siberian (con*) orchestra?
W (the) In 2005.
E (2) Oh almost 2 year/s back, okay.
E So (uh what) what was your favorite part about that orchestra?
W That they get to play Christmas music.
E Oh you went during Christmas time to hear the carol/s or~
W Yes.
E Okay.
E Do you go at any other time of the year like just to listen to the music or~
W Yes.
E When?
W Last year.
E Oh you went also last year.
E So you went in 2005 and 2006.
E And you always go during Christmas time?
W Yes.

= This response of Whitney contradicts the information she provided earlier of going to orchestras at times other than Christmas. The examiner may have not probed Whitney regarding this, probably assuming that Whitney usually goes to these orchestras only during Christmas time. In addition, there were other instances in the preceding conversational topics, wherein Whitney tends to provide conflicting information occasionally.

On further research online, the orchestra that Whitney referred to is actually called the Trans-Siberian Orchestra. They are particularly famous for their renditions of traditional Christmas songs. Based on this information, a more appropriate response from Whitney regarding E's query of whether she attends these orchestras at any other time of the year could have been "That they are particularly famous for their renditions of Christmas songs, and therefore are a more favorite pick during Christmas time."

E Oh okay.
E How did you get interest/ed in orchestra/s?
W When I start/*ed take/ing music lesson/s {odd tone}.
E Oh yeah you mention/ed you play piano lesson/s.
E Do you get to play in one of these you know do like>
E Who teach/3s you?
E Who/s your teacher in^
W Ms Robertson.
E Ms Robertson and does he>
E Ms Robertson you said?
W She.
E Yeah she.
E Does she take you to any place where you can play the piano?
E Or do you have any show/s^
W She take/3s>
W (she) I practice my lesson/s at Harrignton_Studios.

= The examiner asked the previous question to find out if Whitney's music teacher had taken her to play at any event/place in front of the public. However, Whitney may have focused on the word "place" in the question and therefore responds by stating the place at which her music classes are. Another example of how she takes the literal sense of the words.

E Where/s that?
W Not far from here.
E Okay, and do you have a lot of student/s who come there to play the piano?
W I take private lesson/s.
E Okay.
E And then do you get to play at some event?
E Or do you get to play for your parent/s?
E Or for people who come to see?
W I play for people who come to see.
= W tends to have a tendency to echo responses that are part of E's queries.
E Okay, (and) and is it usually like what Christmas time or Thanksgiving time?
E When do you have those event/s?
W (um) year around.
E Oh, so anytime.
E Did you have any recently?
E Like any of your^ Christmas music?
W I play Christmas music on the piano.

= Whitney probably misunderstood the question and resorts back to talking about Christmas music, instead of when exactly the recitals took place.

E Oh that/s so neat!
E I should hear you (uh) play once atleast.
E Do you have a piano here?
E Like (do the) does the school have a music room?
W (um) No.
E Okay, have you ever play/ed here at school?
W No.
E Okay.
E You know (uh) when I use/ed to go to school (um), they use/ed to have a talent show where (you can get to play) you can play music.
E Say suppose you are good at playing piano, you can play piano.
E If you are good at acting, you can (you know uh) act in a particular drama and thing/s like that.
E So there was a day reserve/ed for talent/s.
E (uh) It/s call/ed Talent Day.
E That/s your talent.
E So for you, your talent is play/ing the piano.
E And also draw/ing right?
E You love to draw~
W Right.
E So do you (uh) go to any art show/s or art gallery/s here?
W (um) Sometimes.
E What kind of art are you interest/ed in?
W Animation.
E Oh.
E (uh wh* so you draw) So I guess now you/re go/ing to draw Nathaniel soon right?
W Right.
E Because you like him so much.
W Right.
W But I need some practice first.
E So do you look at the picture.
E And then you draw?
E Or do you draw it from your imagination?
W (I have to draw) I have to look at the picture.
E Okay, but still that's pretty good.
E I should get to see some of your work.
W does not respond to the comment.

E Now you said that you went for a baseball game.
E You went to a concert.
E What's your favorite one out of the two?
E Do you like baseball game/s?
E Or do you like concert/s better?
W I like concert/s.
E Yeah, because I think you like play/ing music a lot right?
W : Right.
E How about (uh) have you ever try/ed play/ing baseball with your cousin Jeremy or~
W Sometimes.
E Oh.
E We have a similar game.
E (uh) It's not exactly baseball.
E But it's kind of the same deal.
E (uh) it's call/ed cricket in India.
E So you know (the person throw/3s) there's a bowler who bowl/3s the ball.
E And then there's someone bat/ing it.
E And you've to run.
E And like the same thing like you said one two three four, like a home run kind of a deal.
E But it's a little bit different.
E You've eleven player/s who play in that.
E That's interesting.
E I love that game.
E I love watch/ing it.
E But you know people don't play cricket here.
E So you don't get to see any of those game/s here.
E I did go (uh) however for an icehockey match.
E Have you ever been to (an) a hockey match?
W No.
E Oh that's fun.
E That's really fun!
E And that was my first icehockey match here.
E And I had no clue.
E I mean we have field hockey in India.
E But we don't have icehockey.
E I mean I have/n't been to any.
E So it was really nice to watch that too.
E You should probably try that once, maybe something different.
W But I've been iceskating.
E Iceskating okay.
E (uh) If I put any iceskate/s, I would you know within 2 second/s I would fall off, because I've no balance.
E You have good balance?
W Yes.
E You’ve been skate/ing from when you were a kid or~
W Yes.
E Oh cool!
E Alright.
E Have you been on a vacation?
E Or a trip that you can remember?
W I’ve been to the beach house in North Carolina.
E Okay, what was special about that place?
W (They) It’s by the shore.
E Uhhuh.
; {Whitney takes time to respond}.
E It’s got a lovely beach?
W Yes.
E Okay.
E What else?
E What was different about Virginia and North Carolina?
W It has the plane where the Wright brother/s flew their first plane.
E Uhhuh.
E Did you get to go inside the plane?
E Did they allow you to get inside it?
W No.
W But they^
E So you can just see it from outside?
W Yes.
E Okay.
E But they, you were say/ing something~
W And I wasn’t allow/ed to go into the memorial.
E Oh why?
W (um) because if I do, they’ll catch me redhanded.
E Who would catch you [REQCLAR][AR][SRS]? 
W The police [Add].
E Why [REQCLAR][CR][SRS]?
W (Because if I uh) because they keep it lock/ed, so no people could get in [EU][Add].
E Oh do they keep it lock/ed just for a few day/s?
E Or do they open it to the public for some <day/s>?
E Like some place/s < > are close/ed, that’s why.
W <They>.
W They only keep it lock/ed forever.
E Oh why?
E They don’t want anyone to see the memorial?
W Inside the memorial, yes.
E Oh wonder what they’ve bury/ed in there!
E What else did you do there when you went to North Carolina?
W I : went to the beach.
W I went into the water a little.
E Okay, do you know how to swim?
W Yes.
E Okay, alright.
E Then what else?
W I :^)
E You went with your family?
E You went with Lizy (uh) dad and mom?
W Yes.
E Okay.
E And this was a year back or~
W It was one two three four {Whitney counts} five month/s back.
E 5 month/s back!
E So, that/'s over summer.
E That/'s the perfect time to go to a beach!
; {Whitney does not respond to the comment}.
E You had the summer off right from school?
W Right.
E Okay.
E And then (uh) what was different about North Carolina and Virginia?
W Like North Carolina is (the South x ss*) in the South.
E Mhm.
W And Virginia is up in the North.

= A good example of how Whitney gives the factual information about the place rather than describing what was different about vacationing in North Carolina. A reported finding in individuals with ASD is their emphasis on factual information.

E But what about the place?
E (like why) I mean yeah I understand that it/'s in the South.
E And this is you know in the North.
E But what about the place was different?
W There were palm tree/s.
E Ah, okay!
E You like palm tree/s?
W Yes.
E They/'re pretty, yeah.
E What else?
; {Whitney does not respond}.
E There were palm tree/s, and the beach.
E And then what else?
E Was there something interesting about that place?
E One is about (the) the plane you said that the Wright brother/s had you know made.
E What else did you do there?
W Explore the huge beach house.
E (Ex*) Oh what/’s so special about the beach house?
E Is it like you know the kind of normal beach house/s you have at the beach?
E Or was that a little bit different^
W (they/’re) They/’re three story/s high.
E Okay!
E And you get to stay there too right?
W Right.
E Okay, and what/’s so great about that place?
W That it/’s not small and uncomfortable like a hut.
E Oh okay.
E Then (what), do they have activity/s that you can do there?
W I could play the GameCube.
E Oh okay.
E What/’s that [REQCLR][AR][DR]?
W It/’s a Nintendo [Expl].
E Oh okay.
E But I mean is that a videogame?
W Yes.
E So you could play that at home too [REQCLR][CR][CONFR]?
W No [ClResp].
E Why [REQCLR][CR][SRS]?
W Because I think it/’s Paul/z.
W He/’s my cousin [Add].

= Last 2 utterances are part of the Add response to E’s REQCLR. The breakdown occurs in this instance because Whitney talks about playing the GameCube in response to E’s query of what activities Whitney could partake in at her stay at the Beach house. Although E’s first REQCLR is to confirm what the GameCube refers to, the REQCLRs that follow occur because E assumes that a videogame could be played at home, and need not be something that is specific to being at a beach house. Note: E’s queries were intended to obtain information of what was unique about staying at the beach house as versus to any other place. In addition, E questions Whitney’s response of not being able to play the videogame at home, because E assumed that the videogame belonged to Whitney and she wouldn’t have had any problem playing with it at home or at the beach house. However, Whitney's response is what initiates the next breakdown, which is the introduction of her cousin Paul. This information conflicts with the information Whitney provided earlier which stated that she went with her own family (Lizy, mom, and dad) for the vacation.

E Uhhuh.
E So, oh (you) you mean you went with Paul too (for the) for your vacation [REQCLR][InInfo][CONFR]?
W Yes [ClResp].
E Oh so it was/n’t just your family.
E It was^W My relative/s.
E Oh okay.
E Paul/^s your cousin.
E And (did) does Paul have any family?
E Like his^W Aunt, uncle, and brother.
E Okay.
W Right.
E Okay, and all of them came together with you?
W Right.
E Did you drive to North Carolina?
E Or did you take the flight?
W (I) We drove to North Carolina.
E Wow (that/^s) how long of a drive is it?
W (uh) 7 or 8 hour/s.
E Wow!
E Do you like long car ride/s?
W Yes.
E What do you do when you^re (in) in the car?
E I get dizzy if I^ve such a long car ride.
W I listen to my music.
E Okay.
W Play my DS.
= Whitney describes what she does (e.g. listening to music and playing the DS) in a sing-song intonation pattern.

E DS is your videogame again [REQCLR][AR][CONFR]?
W Right [ClResp].
E Okay.
E What does it stand for, DS?
W I^m not sure {odd tone}.
E Mhm.
E You know I^ve no clue about videogame/s.
E I use/ed to play them when I was a kid.
E But right now I^m so out of videogame/s.
E I^ve no clue of it.
E Maybe you should teach me some.
E That/^s why I ask/ed you <what> was DS.
W <Yes>.
E Mhm, and so (uh you) you said that you listen to music.
E What kind of music do you^W {yawns} (uh) sometimes Disney, sometimes rocknroll.
E Okay.
E What was your favorite part about Disney music?
E Do you have any particular movie/z music that you like so much?
W: The LionKing.
E: Oh that's beautiful!
E: What's your favorite song in that?
W: I just can't wait to be King.
E: Oh that's amazing!
E: It's got a nice upbeat tune to it, right?
W: Right.
E: How about (uh) Beauty_and_the_Beast?
E: Have you heard the music for that?
W: Yes.
E: Do you like that?
W: Yes {odd tone}.
E: That was also very beautiful!
E: Then there was what, Pocahontas?
E: Have you seen Pocahontas?
W: Yes.
E: Do you like that movie?
W: Yes {odd tone}.
E: That was also nice.
E: What other movie/s?
E: I can't think of the one/s that I've seen.
E: I've seen LionKing, Pocahontas, Beauty_and_the_Beast.
E: (um) what else?
E: There were some other movie/s that were release/ed during the same time as the LionKing though.
E: Have you seen Tarzan?
W: Yes {odd tone}.
E: Do you like?
E: Oh so you said like you just have a whole CD of all the music of different movie/s?
E: Or do you have just LionKing/z music?
W: I've a bunch of CD/s.
E: Okay.
;
W: But I get them from the web.
E: Oh so you download it.
E: And then you listen to it while you drive.
W: Right.
E: How about your sister Lizy?
E: Does she listen to the same kind of music you listen to or~
W: Yes.
E: She does/n't like any other kind of music?
W: Oh she like/3s Christian.
E: Music okay {E completes the phrase Christian music}.
E: You said you like/ed rock'n'roll music too right?
W: Right.
E: (what'/s) What'/s your favorite band?
W The KidsClub CD.
E Oh okay.
E Why do you like them so much?
W Because {yawns}(I've) I like the music.
E What's so special about the music?
W It has my favorite song/s.
E Okay.

= In the above conversational exchange, Whitney's difficulty in expressing why exactly she likes a particular kind of music is emphasized. Whitney concentrates on the literal or factual information of why a person likes a particular type of music, instead of explaining why that music differs from other kinds of music.

E And your favorite song?
E What's your all time favorite song from the rocknroll music that you listen to?
W The All_very_company_sea {title unclear}.
E All very, I did'n't hear that [REQCLAR][US][NeuR]?
W Oliver and Company C [Rep-a].
E Okay, I have'n't heard that.
E Some of this is different for me.
E I was into more of classical Indian music.
E That's a little bit different.
E Have you ever heard Indian music?
W Sometimes.
E Oh you've heard Indian music?
W Yes.
E Where?
E That's surprise/ing!
W I heard it on the Simpsons.
E Oh yeah!
E (There was a chara*) There was an episode of the Simpsons, in which Simpson go/3s to India, right?
E That was hilarious right!
W Right {laughs}.
E He go/3s all the way to Bangalore.
E And then he become/3s a God or something.
E And they all worship Simpson.
E Do you remember?
E Oh that was hilarious!
E Oh yeah, you're right.
E Yeah, talk/ing about TV show/s (uh) what's your favorite TV show?
W The Simpsons.
E I thought you like/ed Family_Guy too right?
W Right {Whitney laughs uncontrollably}.
E Are those the two favorite/s?
W Yes {W continues to laugh uncontrollably}. 
W I'd combine the x Family_Guy and the Simpsons episode {utterance said when Whitney was laughing uncontrollably too}.
E What, what?
E I did/n't hear that [REQCLAR][US][NeuR]?
= Last 2 utterances are part of E's REQCLAR.

E I'm sorry.
W (I put)I'd combine Family_Guy and Simpsons.
W And turn it into one Simpsons episode [Rep-a].
= Last 2 utterances are part of the Repetition appropriate response to E's REQCLAR earlier.
E {laughs} Maybe the Family_Guy can actually go and visit the Simpsons.
E Oh it will be so crazy right?
W Right {W laughs}.
E And (uh) whose your favorite character on the Simpsons?
W Homer {Whitney continues to laugh uncontrollably, appears to enjoy talking about the Simpsons}.
E Homer yeah he's^
W I mean the comic book guy.
E Oh okay, of course.
E Well, I mean he's the guy (in the m*) in the TV show too, yeah.
W Yeah.
E But why did you say Homer in the comic book [REQCLAR][CR][SRS]? 
E (why did you mean) What did you mean by that?
= Last 2 utterances are part of E's REQCLAR.

W He's funny [IA].

= In this instance of the breakdown, Whitney provides irrelevant information that does not repair the breakdown. However, it also acts as a topic shift, which may have been the reason why the examiner continued on that topic, without resorting back to the breakdown.

E He's so lazy.
W Yeah {W laughs}.
E He always get/3s into trouble right?
W Right {W laughs}.
E He's so dumb sometimes.
E He'll do all these crazy thing/s.
W {laughs uncontrollably} Yes!
E (and uh) and his kid/s are more smarter than him, right?
W Right.
E Do you like any of the kid/s?
E Whose your favorite out of the kid/s?
W Bart.
E Oh yeah.
E He's always try/ing to you know kill his dad, right?
W {laughs}.
E He always does thing/s to mess up his dad/z schedule, right?
W Yeah right.
E Mhm.
E (how uh) When did you start see/ing the Simpsons?
E Did you watch the movie by the way?
E I'm sorry.
W Yes {odd tone}.
E Did you watch the Simpsons movie?
W Yes, and I manage/ed it.
E Oh, manage/ed it meaning [REQCLAR][InInfo][DR]?
= Whitney probably means something very specific when she refers to "managed it".

W Mean/3s that I can watch Simpsons episode anytime I want {odd tone} [Expl].
E Oh!
W (Without) with manage/ing it.
= E assumes that Whitney meant she probably downloaded the movie or had a personal copy, so that she could watch the movie any time.

E Oh okay.
E That'/s so cool.
E And (uh what) did you go and watch the movie you said right?
W Right {continues to laugh}.
E Did you go and see it with your family or~
W I went to see it with my sister.
E Okay, she like/3s the Simpsons too?
W No.
W But she put me on a test.
E Put you on a test [REQCLAR][CR][CONFR]?
E Why [SRS]?
W To see if I could manage it, the movie [Add].
E Manage the movie [REQCLAR][CR][CONFR]?
W Yes [CRResp].
E (I) I still don't get that [REQCLAR][InInfo][NeuR]?
E Like how [REQCLAR][IS] [SRS]?

= Now E has doubts of whether the word "manage" refers to something else. The breakdown occurs because of inadequate information and the idiosyncratic use of the word "manage" ("means that I can watch Simpsons episode anytime I want).

E Like you go to watch the movie in the theater right?
W Right.
W Without even laugh/ing [Add].
= Finally the breakdown is repaired. What Whitney meant regarding the word "managing" is that she could watch the entire movie without even laughing.

E Oh that'/s what you mean by manage/ing!
E Oh okay, I get it now.
E So whether you could stop laugh/ing.
E But you fail/ed the test right, I'm sure?
W (uh) no.
E (You you could'n't laugh) Like you were not allow/ed to laugh right?
E That was the whole thing right your sister put^ W Right.
E But (you) I'm sure you laugh/ed the first scene itself.
W (uh not) I did'n't.
E You did'n't?
E You stay/ed like you kept quiet (throughout) without laughing through the whole movie
[REQCLAR][CR][CONFR]?
W Yes [ClResp].
E Amazing!
E How did you do that?
E How could you stop laugh/ing?
W By stare/ing at the movie.
E Oh but it was so funny.
E How could you not laugh?
E Simpsons always crack me up.
E When I get tired, I always put the Simpsons on just to keep me you know in a good mood.
E What about Family_Guy?
E Who's your favorite character on the Family_Guy?
W Pierre.
E Pierre, (is that the guy) Is that the father or the^ W The fat guy {W starts to laugh uncontrollably}.
E It's the fat guy!
E Why is he so funny?
= W starts to laugh uncontrollably.
E You seem to love that movie.
W Because : (he does) he does this crazy stuff {continues to laugh uncontrollably}.
E Like what?
W Do/ing the {continues to laugh uncontrollably while speaking}.
E Oh my God, you're cry/ing (so) because you're laugh/ing so much, you're cry/ing out loud too?
W Yeah.
W Because he did the milk shake dance.
E A milk shake dance!
E What's that about [REQCLAR][AR][DR]?
E I have'n't seen that.
= W starts to laugh uncontrollably.
W (He) he put his breast/s together.
W And pull/ed down his pant/s [Expl].
= Last two utterances are part of the Expl response to E's REQCLAR.
W And so, it's inappropriate work {said while W continues to laugh uncontrollably}.
E Oh okay.
E Okay, okay, (let's) let's stop there about that.
E And (if) if you had a chance to play in Family_Guy, (what would you)I mean whose character would you play?
W Meg.
E Meg is the wife?
E <Or is the daughter> [REQCLAR][AR][CIR]?
= Last 2 utterances are part of the REQCLAR.

W <No, the daughter> {W says the word daughter inaudibly in addition to the overlapping speech} [ClzResp].
E The dog [REQCLAR][InA][CONFR]?
= Here the breakdown occurs because Whitney's response overlaps with E's query.

W The kid [Rev].
= Semantic substitution.

E The kid.
E The girl?
W Right.
E Oh okay.
E Why do you like her so much?
E She play/3s the piano, right?
E Does/n't she?
W Right.
E Does/n't Meg play the piano?
W Right.
E Is that why you like her so much or?
W That/'s why I like her so much.
= Last utterance maybe an echoed response, given that Whitney tends to echo; which is why the examiner continues to probe her for more reasons as to why she likes Meg.

E Because she play/3s the piano, what else?
W She has a crush on Joe_Swaynson/z son.
E Oh okay, I have/n't seen that.
E Joe_Swayns is the neighbor [REQCLAR][AR][CONFR]?
W Yes <> in the wheelchair [ClResp][Add].
E <Okay>.
E Ah yeah.
E And oh she has a crush (on the guy)on his son, okay.
W And x with his x wife with his great whiz child wife Connie {emphasizes on the word Connie}.
E Oh I don't remember this.
E Say that again [REQCLAR][US][NeuR].
W He live/3s with his great whiz child wife Connie [Rep-a]{said more clearly this time}.
= NOTE: Whitney tends to change the names of the characters. This could be due to her speech errors or semantic substitutions. For example, she refers to the main character in Family Guy as Pierre, whereas in actuality it is Peter. She probably is using the French version of the name Peter. In addition, the neighbor's name is Joe Swanson and his wife's name is Bonnie.

E I thought his wife pass/ed away or something.
E I thought that I saw the episode where he/'s>
E Is/n't he the guy who/'s very religious?
E And go/3s to church?
E And is/n't that the neighbor?
E I don't know if I/'m get/ing that wrong.
W Yes, Neil_Goldman/z parent/s.
E Okay.
E Now Neil is the guy that she like/3s, right?
W No.
E Oh.
W (she) Neil like/3s Meg.
E Okay, and Meg like/3s who?
W Kevin.
E Kevin, oh so it/'s like a triangle love story huh?
E One like/3s the other.
E And the other one like/3s the other.
E But does Kevin like Meg?
W Not ex* {appears to be thinking}.
E Not yet anyway, right?
W Not yet anyway.
E Yeah.
E So (you uh) why would you want to play Meg?
E The character in the movie.
E I mean in the show?
W Because she/'s funny.
E Okay.
E (Do you like the chara*)do you like the dog?
W Yes, Brian.
E Yeah, I think he/'s very smart.
E Don't you think?
W Yeah.
E (He) I think if I had to play the character, I would take the dog/z character.
E (He/'s the) I think he/'s the coolest in that.
E And in fact he/'s got more sense than Pierre, right?
W Right.
E Mhm.
E Are there any other TV show/s that you like?
W Maybe American_Dragon_Jake_Gong.
Another example wherein Whitney uses another name. The actual name is American Dragon: Jake Long. This information was found online.

E Oh I haven't seen that.
E Oh what's that about?
W It's about a boy who's actually a dragon.
E Oh okay.
E How did he turn into a dragon?
W He says he's dragon up.
E Okay, and then he turns up into a dragon.
E Oh, so he's got special powers or something?
W Yes {odd tone}.
E Okay, and what's the whole story about?
E What does he do in the--
W He debates/3s the Hunt/z clan.
E (He debates/3s) He what[REQCLAR][CR][SRR]?
E I didn't hear that.
= Last 2 utterances are part of the REQCLAR.

W He fights/3s the Hunt/z clan [Rev].
E Hunt/z clan, and that's like their rival [REQCLAR][AR][CONFR]?  
W Yes [ClResp].
E Okay.
E So it's a Japanese movie or--
W An American movie.
E Okay, but it's a Japanese character?
W You mean Chinese character?
E Oh he's a Chinese character okay.
E And so (he's against) why is he against the Hunt/z clan?
W Because the Hunt kill/ed and capture/ed animal/ed.
W Especially magical creature/ed.
E Oh!
E And so he kind of ((what do you say)) transform/3s into a dragon to rescue these captured magical character/ed?
W Yes.
E Oh interesting!
E Why are you laughing?
W Oh nothing.
E No tell me.
E Was there something funny about that show?
E <Or are you still>^ 
W <I think the>^ 
E Or are you still think/ing about the Simpsons and the Family_Guy?
W I was still think/ing about the Simpsons and the Family_Guy.
E Oh okay, cool.
E So (uh) what other kind of thing/ed do you do in your spare time?
Well, I play videogame/s.
Okay, do you have a favorite videogame or?
Tak and the Power_of_Juju.
(uh) What's the Tak about?
He's a Shaman/apprentice of the Pupanuwu {inaudible syllable at the end of the word} people.
Oh what's that?
Who are those people [REQCLAR][AR][SRS]?
(uh) the people who are turn/ed into sheep [Expl].
Oh okay.
And they're call/ed the Pupanay people.
Is that what you said [REQCLAR][InA][CONFR]?
Last 2 utterances are part of the REQCLAR.
No [ClResp].
What was the name of the people you said [REQCLAR][InInfo][SRR]?
The Pupanunu [Kw].
The source of this breakdown is inadequate information because although Whitney responds to E's previous REQCLAR, she does not completely resolve the breakdown.
The Pupanuwu, okay.
Different name/s okay.
Alright, and (so uh)so tell me about the videogame.
It's
So <> this character fight/3s with these guy/s or?
No, he fight/3s Trayloc.
An evil Shaman.
Okay.
So he's the leader of these people who were turn/ed
No.
(He's he is he was the) He use/ed to be a Shaman.
Okay.
The Chief is the leader of the Pupanunu people.
Okay.
(Which): which he is/n't name/ed {odd tone}.
Okay there's no name for that character.
He's just call/ed the Chief, okay.
Yes.
And so they fight against this evil guy.
(Why) why do they fight against him?
What does the evil guy do in the videogame?
He (um): {long pause}.
Does he also capture innocent creature/s or?
No, he turn/ed all the Pupanunu people into sheep.
So can you turn them back into people?
W (uh) {inaudible}.  
E Is that possible in the game?  
W (I) Yes.  
E (how) how do you go about do/ing that?  
W You have to (um) use the spirit route {route said inaudibly}.  
E Spirit route, what/'s that?  
W It/'s a x shelf and a stick combine/ed together.  
E Okay.  
E And so what do you do with that?  
W It help/3s you turn : {long pause}.  
E It help/3s you turn left or right or forward or backward^  
W It help/3s you heal thing/s.  
E Heal thing/s [REQCLAR][CR] [CONFR]?  
W And it help/s you see orb/s [IA].  

= Based on the information provided earlier, the spirit route seems to be a stick that is used to turn; so, the examiner assumes it could not be something to heal things. This is why the examiner asks for clarification regarding what she heard. Based on the information found online about the game, this particular item is called the spirit rattle, which is an enhanced club that has magical powers. However, when Whitney introduces the term, it is inaudible and sounds like "spirit route" to the examiner. In addition, Whitney does not correct the examiner when the examiner refers to it as the spirit route in the utterance that follows. Furthermore, Whitney's repair response seems inappropriate as she does not address the issue of the spirit rattle as being something to "heal" things. Instead she shifts to another topic or probably another feature of the spirit rattle, which is its ability to see orbs. The sudden shift in the topic and the introduction of a new character during the repair response is what initiates the next breakdown.

E Okay, and what/'s Orb/s [REQCLAR][AR][DR]?  
W And Tikis [IA].  

= Again another example of how topic shifts and no response leads to the next breakdown.

E Okay, (what) what are all these thing/s?  
E What are Orb/s?  
E What are Tikis [REQCLAR][AR][DR]?  
=Last 3 utterances are part of the REQCLAR.

E Are they the bad people [REQCLAR][AR][CONFR]?  
E The bad^  
W No [ClResp].  
E Okay.  
W They/'re the good guy/s [Add].  
E Oh, they/'re the good guy/s.  
W And the Juju/s are the good guy/s.  
E Okay, the Juju/s are the good guy/s.
W Especially Moon_Juju.
W And^
E And he/s the head of it?
W She.
E She, okay.
E She/s the head of it, okay.
E So the Moon_Juju/s, the Orby/s and the Tekis, am I right?
E So all the three of them^
E <(um)> They team up together to fight against the evil guy?
W <She/s>.  
W No, the other Juju/s.
W One/s TwoHeaded.
W One/s Caged.
W One/s Dead.
W One/s Belly.
W One/s Dinky.
E Oh these are the five good guy/s?
E Or bad guy/s?
W Good guy/s.
E Good guy/s, okay.
E Alright, and so then they get together.
E And what do they do?
E They fight the evil Juju/s?
W No, (they fight) they help Tak fight Trayloc.
E Trayloc, who/s Trayloc?
= The above utterance is not necessarily a breakdown as the character was introduced earlier. However, as there were many other characters introduced after Trayloc, the examiner was just collecting information regarding it, given the time frame between the initial introduction of the character and the re-introduction of the character again at this instance.

W The guy with the bird/z head and horn/s and feather/s.
W And the evil guy.
E Oh okay.
E So he/s actually a bird.
W No, (he/s he/s) he/s a human.
E He/s a human!
E But he/s got feather/s [REQCLAR][CR][CONFR]?
W No [CIResp].
E You just said that he had feather/s and^
W (he he had): I forget what he had.
E Okay, you were^
W But his sidekick/s are Pins and Needles.
W They/re voodoo doll/s.
E Oh.
E God that/s scary!
E (does it) is it a scary videogame?
W No, not exactly.
E Okay.
E So have you gone through all the different level/s?
E Have you reach/ed the highest level so far?
W {vocal sound} I think so.
E Okay.
E So you have one of these.
E And then you told another videogame, right?
E I forgot that.
E This is Tak, right?
E The game that you talk/ed about.
W Yes, (it was)which is also a TV show.
E Hmm, okay.
E I think I should better start watch/ing these thing/s.
E I've no clue of them.
E Okay.
E (what) Okay so Tak, and then you said another videogame too, right?
W Spyro.
E Spyro, and what/^s that about?
W It/^s about {yawns}.
E Feel/ing a bit sleepy?
W Yeah.
E Only just a few more minute/s.
E And we are done.
E Okay?
W Okay.
E Yeah, what/^s
W It/^s about a dragon who save/3s dragon realm/^s.
E Okay.
E Oh is that the one you said about (um) the Chinese>
E No.
E Now I'm get/ing confuse/ed.
= Whitney sighs.

E I'm sorry.
E Because I think there are so many game/s you told me, now I've to keep track of them.
E This one/^s a different game?
W Yes.
E Okay, so (what) what happen/^3s in this game?
W (You have to) You have four town/^s like breath/ing fire, water <> electric, and ice.
E <Uhhuh>.
E Okay.
E (And and they uh what)are they team/ed up against a particular person?
E Against an^"
W Red, Cynder, Ripto, and Gnasty Gnorc.
E Okay, those are the enemy/s right?
W Right.
E Oh okay.
E And they fight and you’ve to see who>
E And you can get to choose which team you want to be in?
E Or do you always end up being in the dragon team?
W I always end up being in the dragon team.
E Okay, cool.
E Do you want to talk about something else?
E Something you want to tell me about?
E Or something you like talk/ing about?
W I would like to: {long pause followed by a yawn}>
W I’m gonna talk about my book The_Arkadian/s {last syllable of the word Arkadians said in a slightly inaudible tone}.
E Okay, what’s that about?
E Is that the book that you’re read/ing right now?
E Or are you write/ing it?
W That I’m read/ing right now.
E Okay.
W It’s about guy named Mushun who escape/3s from King_Burmeus and his soothsayer/s with^=

= NOTE: Based on research online regarding the book, the main protagonist's name is Lucian; but Whitney provides a different name. Whitney tends to mispronounce the names of characters in addition to speaking inaudibly at the end of the word. Another instance of this behavior can be noted when she introduced the Pupanunu people during her description of the Tak videogame. This had resulted in a breakdown at that instance. These errors tend to occur more frequently in her following description of the book. Being unfamiliar with the book discussed, the examiner does not catch these errors. However, had a listener who was familiar with this book been involved in this discussion, one would predict the occurrence of more breakdowns, owing to the discrepancies in the names of the characters.

E (uh who are who who) Who’s King_Burmeus and [REQCLAR][AR][SRS]^=
W Bromios [Kw].

= Attempts to correct the examiner's pronunciation.

E Bromios^=
W He’s King of Arkadia [Add].
E Okay.
W And the soothsayer/s are Calchas and Phobos.
E (who) Who are these character/s [REQCLAR][AR][SRS]?
W They are his soothsayer/s [Rep-a].
E Who^=
W And Phobos is the one with the Mr Bern/z voice.
E Oh okay.
= Here the examiner does not request for clarification about Mr. Bern, probably because Whitney has not clearly answered what role the earlier introduced characters play in the story or what the story is really about. This could also be another example wherein listeners who are constantly bombarded with different characters and topics within a short span, may hesitate to ask for clarification owing to the vast majority of questions that may arise had they requested for clarification at each instance. Once again, this is just based on speculation.

E And you like him the best?
W No, I like Bucksword the best.
E Who's Bucksword [REQCLAR][AR][SRS]?
W Bucksworn [Kw].
= Attempts to correct the examiner's pronunciation.

E Bucksworn, who's that [REQCLAR][AR][SRS]?
W He's King of the Goat people tribe [Add].

= NOTE: Based on the research online, the real name of this character is Buckthorn. Here again is another example of how Whitney's phonological errors affect her naming of the characters in the book. Also, note that when the examiner mispronounces the name because of Whitney's speech intelligibility errors, there are 2 requests for clarification. For example, Whitney's response to the first request is more of a keyword emphasis response in order to correct the examiner of her pronunciation. As a result, E has to follow this up again with another REQCLAR to redirect Whitney's attention to responding to E's query of who the character is in the story.

E Oh, so are these people also turn/ed into goat/s or something?
W No {odd tone}.
E Oh, then (why are they call/ed) why are they call/ed the goat people?
W Goat folk.
= Attempts to provide the correct term used in the book. They were referred to as the Goat Folk in the book.

W Because they were goat/s in jacket/s.
W And their horn/s (were) are made of clay.
E Oh okay.
E So what's the story about?
W About Lucian {Whitney correctly pronounces the name of the character at this instance} who take/3s a journey with a poet turn/ed donkey named Fronto.
E <Mhm>.
E Okay.
W And he meet/3s Joy_in_the_Dance.
E Joy_in_the_Dance, who's that [REQCLAR][AR][SRS]?
W She's daughter of the Lady_of_Wild_Things [Add].
E Okay.
;
= Long pause. E waits to hear more about Whitney's description about Joy-in-the-Dance. So, although Whitney does use an appropriate repair response to rectify the breakdown, it does not necessarily give the listener a clear indication of who the character is and what role the character plays in the story. This is also another example of how individuals with ASD tend to provide factual information as versus to providing the global picture of the story.

E And then what happens?
E Did you finish reading the whole book?
E Or are you?
W I finished reading the whole book.
E Okay so do they finally?
E (uh) so what do they go for?
E Like what's the story about like [REQCLR][InInfo][SRS]?

= Last two utterances are part of E's REQCLR. The source of this breakdown is because of inadequate information. As mentioned in the interpretation earlier, Whitney fails to provide the bigger picture about the story and so the listener is only aware of the tiny details, such as the names of characters, without understanding what the over-arching goal of the protagonist really is.

W She[EW:He] goes to find the Lady_of_Wild_Things so Fronto can turn <> into a man [Add].
E <back>.
E Oh because he's turn/ed into a donkey right?
W Right.
E Oh okay.
E And does it have a happy ending?
W Yes.
E Okay, that's^.
W (when) It was only three wedding/s.
E It was only three wedding/s [REQCLR][InInfo][CONFR]?
W Three wedding/s [Rep-i.a.].
W One was Oudeis and Mirina.
W One was Lucian and Joy_in_the_Dance.
W One was Laurel_Crown and Ops[Add].

= Last 3 utterances are part of the Add repair response. NOTE: The last 2 utterances were said hastily, and transcription was possible owing to the fact that the examiner identified the characters from the background check regarding the book. This was due to an educated guess. However, what the examiner heard initially was Lucian and Georgia Danson, and Laura_Cown and Ops. 

E What do the wedding/s have to do about what you are saying right now [REQCLR][In][RR]?
W (They uh the way) I mean the Lady_of_Wild_Things will>
W It's part of the ending [Add].
E Oh so she get/3s marry/ed in the end?
W No, Joy_in_the_Dance get/3s marry/ed in the end.
E Oh okay.
E But Joy_and_Dance (are the one) is the one that>
E She/'s the queen of the Wild_Things right?
W No.

= Here is another example of how the introduction of different characters and the time frame that exists between the initial introduction and reintroduction of the character may cause confusion.

E <She>^ 
W <(She)> her mother is the <Lady_of_the_Wild_Things>. 
E <of_the_Wild_Things>. 
E Okay. 
E And who/'s the character who was turn/ed into a donkey? 
W Fronto. 
E Fronto, okay. 
E So (um) who/'s wedding is in the end? 
E Joy_and_Dance right? 
W And Ops. 
E Okay, that/'s the third wedding. 
W :No it/'s the second. 
W And Oedius. 
E Oedius, okay. 
E And they get marry/ed last? 
W Yes. 
E Okay. 
E So it/'s about wedding/s. 
E It/'s about try/ing to get (um) Fronto change/ed into a man. 
W It/'s about adventure. 
E It/'s about adventure. 
E Try/ing to find people who can help them reach the goal. 
E Is that how it work/3s? 
W Yes. 
E Okay. 
W That/'s how it work/3s! 
E Alright. 
E Do you want to talk about anything else? 
E Are you> 
W I think I′m finish/ed. 
E Okay, you′re finish/ed! 
E You′re tired? 
W No, I think I can talk. 
E You think you can talk [REQCLAR][CR][CONFR]? 
W I think I can talk a little more [Add].
The source of this breakdown is content rejection. This happens because Whitney mentioned before this exchange that she was finished talking. So, when the examiner asked whether she was tired, she responded saying she wasn't tired and that she could talk. It seemed a bit contradictory to the information that preceded it, which is why the examiner asks the REQCLAR to confirm what she had heard.

E Okay, so you can tell me.
E You want to ask me anything?
E You want to know something?
W What's your favorite book {odd tone}?
E My favorite book %mmm {appears to be thinking}.
E That's a hard one.
E Because I've a lot of>
E I don't have a favorite favorite book.
E But I like reading a lot of book/s though.
E There's nothing < > that's a favorite.
W <And> what's your favorite movie?
E My favorite movie is Sleepless_in_Seattle.
E Have you seen that?
W No {odd tone}.
E (um) it's about (um)->
E (have you) Do you know of the actress Meg_Ryan?
W Yes.
E And Tom_Hanks?
E They're the two character/s in that movie.
W Yes.
E And Tom_Hanks has a son.
E And the son is try/ing to get (uh) his father Tom_Hanks (uh) a wife.
E And so he try/3s to track that down through a talk show.
E There's a radio talk show.
E So he call/3s.
E And he say/3s "My dad's lonely".
E "I need someone".
E And so women start you know call/ing in.
E Try/ing to you know meet the dad and thing/s like that.
E It's a very beautiful movie.
E It's very touching.
E And (I I) I love (the the) the kid in that.
E The way he's try/ing to make everything okay for his dad.
E So it's a nice sweet movie.
E But I love LionKing too.
E I like LionKing.
E That was a really nice movie.
W I know {odd tone}.
E Yeah.
E What else then would you like to know?
W What's your favorite character in the LionKing?
E Simba of course.
W Oh {odd tone}!
E (I like uh) I think I like that movie so much because (um it was)you know it was act/ed out really well.
E And I love/ed the song/s.
E I love/ed how they play/ed it out.
E And how he finally get/3s to go back to his land.
E And you know recover (um) his kingship, right?
E He become/3s the king again.
E So I like that.
E I like the storyline.
W Right.
E Anything else?
W I think we're done.
E We're done?
E You did an excellent job Whitney.
E I got to know a lot about you.
E I got to know a little bit last time around.
E But this time I really got to know what all you like.
E And what thing/s interest you.
E And you did a good job explaining it to me.
E Thank you for being so patient.
W You're welcome.
E Alright, you have a good day then.
W I will!
E Bye.
Based on video sample, the first few minutes were spent in rearranging the setting for the client. He had preferred another chair and wanted to sit differently. That part of the transcript is not recorded on the audiofile.

E Were you outside just a few minute/s ago?
P Yup.
E You had your playtime or~
P No, sleepy time.
P But no more sleepy time from now on {said inaudibly and with face down, appeared a bit moody}.
E Is he have/ing an okay day {question directed to caregiver}?
C Yeah, he had a great morning.
E Okay, what did you do in the morning {question directed to the client}?
P (um) Scrabble.
E Scrabble okay.
P Scrabble or scribble {question directed to the caregiver}?
E Okay, we'll forget she/she's here, okay.
E I want you to talk to me so that I get to know you a little bit better today.
P Okay.
E (uh) One of the thing/s I want/ed to talk about was about your hobby/s.
E And what you like to do in your spare time?
P Legos!
P Lego okay.
E What else do you like to do in your free time?
P (uh) Play toy/s.
E What kind of toy/s?
P Racecars, Legos <> and the : sport gun/s, (and the and the) and dot gun/s.
E <Uhhuh>.  
P You know like those little phone dot/s.
E No, I don't know that.
E Oh okay.
E So do you play by yourself?
E (Or do you uh) do you have any sister/s or brother/s?
P Seven each.
E Se se^ 
P Not (e* e*)each.
E Seven^  
P But altogether [F].
E Oh altogether!
E I was like 7 sister/s and 7 brother/s.
E Wow that would be a big family!
P Yeah.
E So <> altogether you’re 7.
P <I have> {abandoned utterance}.
E Okay, that’s great.
P No, include/ing me that’s 8.
E Oh that’s 8 of you guy/s, okay.
E And are you the youngest?
E Or are you the middle guy?
E Or are you the oldest?
P There’s not a really a middle one in there.
E Okay, like I^  
P There’s Chris, Nick, and>  
P Chris and Nick are both boy/s and brother/s.
= Odd way of describing his brothers from a third person's perspective.

E Uhhuh.
P Jennifer is a girl.
E Mhm.
P Alex <> is a boy.
E <Are you> tell/ing me the order in how it go/3s?
P Uhhuh, yeah.
E Okay.
P Oldest to the youngest.
E Okay.
P And : Ashley the girl.
E Uhhuh.
P And also {hits the table accidentally and utterance is abandoned}>
P Sorry.
E That’s okay.
P And then there's me.
E Mhm.
E Oh so you come fifth, right?
P Sixth I believe.
E Oh you come sixth, okay.
E Okay.
E Chris, Nick, Jennifer, Ashley.
P Alex.
E Alex, okay.
E I forgot Alex.
P Then Ashley.
E Okay.
E And then?
P Chris, Nick, Jennifer, Alex>
P Chris, Nick, Jennifer : Alex, <Ashley>.
E <Ashley>.
E Okay.
P Me.
E Uhhuh.
P Then there's Noah, which is a boy.
E Okay.
P Then Ab.
P Then there's *a girl.
E Oh.
P Eight.
E Okay, and (um) how old is your youngest guy like Noah?
P (uh) I can't remember.
E Okay.
P So much in the family!
E {laughs} And so^'
P And did you know 15 more people would turn x family came over xx Thanksgiving
{underarticulated speech accompanied with a fast rate of speech}?
P So all the other x was^'
E What, what, (I) I didn't hear that [REQCLR][US][NeuR]? 
P On Thanksgiving, 15 more people from my family came over.
P So that would be 15 plus <8> [Rep-a].

= Last 2 utterances are part of the repetition repair response of Peter to E's REQCLR.

E <8>.
E My gosh!
E That's like 23 people in the house.
E Did you have enough turkey for all of them?
P I think we finish/ed up every single thing.
E My gosh!
E And so mom does all the cooking or^ P And dad. E And dad okay. P He does the chicken, the turkey, pig. E Oh you had^ P Well not pig. P But you know ham. E Okay. E So I mean you had a lot of meat, that mean/3s. E (uh) Did you roast chicken and ham too? E Or did you just roast the turkey? P We did like a x. E What/s that [REQCLAR][US][NeuR]? P A rotisserie x and grill [Kw]. E (what) What/s that? E I did/n't hear [REQCLAR][US][NeuR]? = Last 2 utterances are part of E's REQCLAR. P A rotisserie [Kw]. E Oh rotisserie chicken, yeah. P %Yay yum yum_yum! E So (what) what kind of thing/s> E Okay, you had said that one is like play/ing Legos. E And you know play/ing with> E Do you play by yourself, you said? E Or do you play with (uh)any of your sister/s or brother/s ? P Sometimes, sometimes not. P And I play videogame/s. P I^ E Yeah, you like videogame/s. E What kind of videogame/s do you like? P Pokemon, Fighting,and Adventure. P Fighting and Adventure. E <So>^ P <x> and Racing, stuff like that. E Okay, and so like when did you first start get/ing interest/ed in these game/s? P Soon as I got my first one. E When was that as young as 7 year/s or 6 year/s or~ P 4. E 4! E Wow, that/s quite young! E Were your brother/s^ P Actually it was more like 5 or 6. E Okay. E So your brother/s also were play/ing those game/s? E Are those the favorite game/s for your brother/s and sister/s too?
P I'm not sure {odd tone}.
E Oh, what do they like to do otherwise?
P They like to>
P I don't know.
P I can't remember.
P I am not them {odd response}.
= Last 3 utterances said hastily and in an odd rhyming tone.

E Okay.
E You don't do thing/s together?
= Peter looks at a chart on the wall with numbers and starts counting in a whispered tone. The following utterance of the examiner is in response to that.

E Oh we'll forget about that.
E Oops not there, just me and you.
P Whiteout.
E Yeah white it out.
P "Paint or without paint".
P "White paint".
= Last 2 utterances said in an animated and imitated tone of two people talking.

E So (uh) tell me Peter, do you guy/s do thing/s together?
E Do you guy/s go out together or~
P We sometimes have family x.
P But sometimes we just have boy/s day out and girl/s day out.
E Okay.
E Oh so what do you guy/s do on your boy/s day out?
E Let me just lift this up {E moves the table so that P can sit comfortably}.
P Well, we don't have them anymore?
E Oh how come?
E Was that just for the time being or~
P I don't know {appears to be a bit moody at this instance}.
E Okay, so who organize/s it?
E Does dad come with you for the boy/s day out?
E And mom go/s out for the girl/s day out?
P Yes.
E Oh that'll be fun!
E And (uh) what do the girl/s do?
E What do your sister/s do?
P I'm not sure.
P I never ask/ed.
= Last 2 utterances said in an odd tone.

E (Do they go) Probably they might be go/ing shopping I guess.
P I like shopping too!
E Oh you like shopping too?
E Where do you like^  
P I shop for toy/s and gift card/s and icecream and book/s.  
= An example of how Peter likes to list things. Peter was very excited in stating the things he liked to shop.  
P More like the toy/s than book/s.  
E So what kind of book/s do you like to read?  
P Not like read, picture book/s.  
E Picture book/s, okay.  
E And (uh) do you usually pick (uh) them up when you go shopping everytime or^  
P No.  
P Only very rarely occasion [EU].  
E Okay.  
P Because I don't like book/s.  
E So much?  
E But I thought you just said [REQCLAR][CR][CONFR]^  
= Last 2 utterances are part of E's REQCLAR.  
P No, probably at all [F][EU][CIResp].  
= The above repair response though appropriate does not completely resolve the breakdown. However, the utterance that follows fixes the breakdown completely.  
P (I) I like the book/s that come with a picture book, and well like a map and stuff along [Add].  
E Oh (you don't like the) you don't like book/s that actually have word/s in it.  
P No.  
E Oh okay.  
E So that/s why you like/ed the picture book that I gave you yesterday, right?  
E The one about the flying frog/s.  
P Alien frog/s attack from xx {said in an excited tone and with a fast rate of speech}.  
E What/'s that?  
E What did you say [REQCLAR][US][NeuR]?  
= Last 2 utterances are part of E's REQCLAR.  
P Alien frog/s attack/ing Earth from Planet_Mars [Rep-a].  
E {laughs} (do you like the) Do you like see/ing picture book/s of alien/s or what?  
E Is that something you like?  
P No.  
P But I like x, chipmunk/s, and raccoon/s {said hastily and in an odd tone}.  
E You like chipmunk/s and raccoon/s [REQCLAR][US][CONFR]?  
P And squirrel/s, squirrel/s [Rep-a] {Also is an affirmative answer indirectly}.  
E And squirrel/s too, okay.  
E Are those your favorite animal/s or what?  
P My favorite animal is the pe*, the penguin and the x.  
P The puf x.  
E Oh did you see the movie on the penguin/s?  
E There was a movie I think almost (a) two year/s back, right?
E What was that?
P Happy_Feet {said hastily}.
E What was that {REQCLAR}[InA][NeuR]? 
P Happy_Feet [Rep-a] {said clearly and slowly}.
E Was it Happy_Feet?
E Oh there was another one I thought.
P x penguin/s?
E Yeah, (I can't) I can't get their name.
E Oh my!
P (I I) I know it.
P (uh): {long pause}.
E It was hilarious.
E (I did/n't) I mean I could/n't get to watch it.
E I just watch/ed the trailer though.
E It's about I think 100 penguin/s.
E And they're trying to>
E I don't remember.
E They're trying to leave the place that they use/ed to stay before because it's all melt/ing away.
E And I don't remember that really well.
E I just have a faint memory^
P I know the only penguin movie/s I saw was Happy_Feet and this other one where: it show/ed live action penguin/s.
E Really?
E Oh!
E And (uh) is that your favorite movie Happy_Feet?
E Or do you have^
P Happy_Feet, %dutidut %dutidut %dutidutu!
E Is that your favorite movie or^
P "The xx is through his feet x".
P "I don't know dad".
= Last 2 utterances are said in an imitated tone and probably maybe lines in the movie Happy Feet.

E What are you say/ing{REQCLAR}[US][NeuR]? 
E (I did/n't) did/n't get^
P I was repeat/ing part/s of the movie [Add].
E Oh you're trying to imitate the penguin/s in the movie?
= Peter keeps rotating the chair, which is the reason for the examiner's comments that follow.

E Okay, (we'll) we'll just sit straight.
P I like cushiony chair/s.
E Oh you like them.
E Okay, but it's you know harder for me to hear what you're saying if you keep turn/ing, that's why.
I just want to make sure I hear what you're saying.

Okay.

So what's your all time favorite movie?

Give me a second.

Okay, I'll let you think.

Give me some more second/s.

Is it that hard to remember your favorite movie?

<Yes>.

Yes.

(uh) let's see.

= Peter takes a long time to respond.

Are those one of those cartoon movie/s, the animation movie/s?

Or are they movie/s that

I'm not sure.

And there's so many I like {appears to be frustrated at this time, and having a mood swing}.

Oh okay.

PacMan, no wait Mile, no wait.

Like there's three of my top favorite/s.

Okay.

PacMan_Holiday_Special movie.

Okay Batman_Holiday_Special movie.

No PacMan.

PacMan, okay.

And there is : the Myobogs movie.

The Myobogs movie, what's that?

Myobros {unclear}.

= Based on research online, it appears that Mario bros might be the movie that Peter referred to in this instance. However, if it is the movie, then the real title is Super Mario Bros.

What's that movie about?

It's about these two plumber/s who I>

There's two plumber/s.

And they meet a princess.

And they protect from this evil guy named Belzer.

Oh okay.

I think

Remember Myobros.

No, I have/n't seen it.

You see I've become so bad at watch/ing all these movie/s.

I've to go and

Well this is a very old movie.

Okay maybe that/s

And then there's Sonic_the_Hedgehog.

Uh huh.

Why are they your favorite movie/s?
P Because there are wedge/s and {unclear, Peter turned his chair away from the examiner while he was saying this utterance}.
E Because of the what [REQCLR][US][SRR]?  
P Because some of them are adventurous [Rep-a].
E Adventurous, okay.
P And what was the other one?
P Oh yeah, they're all adventurous.
P And they all have a nice ending.
E And so who's your favorite character out of all of them?
E PacMan?
E (what) Who's your favorite character in PacMan?
P In each movie?
E No, in PacMan.
P PacMan.
E {laughs} and how about^  
P Actually I like the doggie.
E You like the doggie?
E Why do you like him so much?
P I don't know.
P PacMan/z dog is like awesome!
E Oh really?
P He's always get/ing into trouble.
P But the PacMan save/3s the day by eat/ing the super pellet.
E Oh okay.
E That/3s what the movie is about.
E Okay, I have/n't seen^  
P No he just (uh) munch>
P He just x {unclear and Peter keeps rotating in his chair} these ghost/s.
E He/3s the what [REQCLR][US][SRR]?
P He defeat/3s the ghost/s [Rep-a].
E Okay, they were plenty of ghost/s that he has to take care of, okay.
P Mhm.
P And then on Sonic, you know who Sonic is right?
E I told you (I'm) I'm zero at these movie/s right now.
E So you're the boss.
E <And so> whatever you say I'll^  
P <Alright then> my favorite movie is>
P My favorite Sonic x^  
E So what/3s the movie Sonic about?
P It/3s about this hedgehog, this blue hedgehog.
E Blue hedgehog!
E Wow that would be interesting, okay!
E Oh I think I've seen.
P Sonic, sonic {says this and points to the E in a gesture that indicates that "yeah, you got it"}.
E Yeah, yeah, okay, and~
P {clears throat} I should bring the movie in sometime.
E So what does (uh) Sonic do in the movie?
P Sonic the Hedgehog {says this utterance in the theme music tone}.
P Oh I nail/ed it!
P (uh) Sonic, he save/3s the day from people, from bad guy/s like Doctor Eggman.
E Okay, Eggman okay.
P And : he like get/3s this ring that power/3s him up.
E Oh!
P And it turn/3s him all golden like and shiny.
E Oh.
P I like shiny.
E Okay.
E And (uh)^
P And then he like destroy/3s Eggman/z robot/s and everything that try/3s to take over the world.
E Oh okay.
P And the Eggman/z robot/s are made by Eggman.
E Mhm.
E And so if you were given a chance to play in that movie, whose character would you play?
P (uh) : I don't know.
E Like say suppose a director come/3s and tell/3s you, "Hey Peter, I want to put you in a movie".
E "You get to choose the movie".
E "You get to choose the character too".
E That would be cool!
P I won't be a very good {the segment "very good" said hastily and sounds as a single word} person.
E You won't be a what person [REQCLR][InA][SRR]?
P I won't be a very good person to play in that whole movie [Rep-a][Add].
P I'll be good enough to be in this like>
P I'm gonna be good enough to be Eggman because he/s fat like I am.
E No, but you can always play like say you do good intonation pattern/s.
E Like you imitate (uh) character/s.
E Like you just did that.
E From Happy_Feet, you imitate/ed something that the penguin/s said.
E So I think^  
P I can do Mario < > {slight pause, less than half a second} voice.
E <Yeah>, so^  
P "Mario" {said in an imitated tone}.
E Oh (so) so you see you already know how to play those role/s.
E So which character would you play?
P I'll be Mario because I like spaghetti.
E Oh you like spaghetti.
E And I think cooking is another one of your favorite interest/s right?
P Yeah.
E (what) What kind of thing/s do you like to cook?
P Mama_Mia meatball/s {said in an imitated and odd tone}!
= Idiosyncratic use of words.
E {laughs} Mama_Mia meatball/s!
E Why do you call them Mama_Mia meatball/s?
P I don't know.
P I just like say/ing Mama_Mia.
E Oh okay, have you heard the song Mama_Mia?
P No.
P Mama_Mia, Mama_Mia {said in a singing tone}.
P Spaghetti something what not.
= Last 2 utterances may have been Peter's way of making a song about Mama Mia meatballs.

E It was by this really old eighty/s group Abba.
E They sang this song Mama_Mia.
E Yeah, and so (uh you), you like prepare/ing meatball/s, then what else?
P No, I don't like prepare/ing them.
P I like eat/ing them.
E Oh you like eat/ing them.
E So there are foods that you like to eat.
E And there are like kinds of food that you like to^*
P But I can prepare a good cake.
E A cake.
E Like (what) what kind of (fav*) cake/s do you like to bake?
P Big one/s, tall one/s.
P I can bake the little one/s like cupcake/s.
E {laughs} So whenever there/s someone/z birthday in your family, <are you> are you the one who does all the bake/ing for the cake?
P {<says something>}.
P Nope.
E Then who does the bake/ing?
P My mom.
E Oh.
P She/s better (than I) than I am.
E But I think you/ve got great idea/s.
E You told me yesterday about the volcano cake.
P Mhm.
P I don't take action to my eye/s, ear/s.
E But why is that?
P I really do not know.
P Hi camera!
E Hey, we/ll forget about the camera.
E We/ll just talk about you and me here.
P %shhh {gestures as if he is placing a box on top of the camera to cover it}.
E Okay close {said in response to Peter's gesture}.
E So (uh) what other kinds of thing/s do you like to cook or bake?
P (uh) cinnamon bun/s.
E You actually make that from scratch?
P Not from scratch, I actually use a little recipe powder < > in my EasyBake oven.
E <Oh okay>.
E Oh okay.
E Do you (bake) bake batch/s so that everyone get/3s to eat it?
E Or do you just bake for yourself?
P It's not enough in the powder have/ing usually to make one batch per time.
E Yeah, that's like 14 or 20.
P No, that's 4.
E 4 just that's it [REQCLR][CR][CONF]?
P Yeah, just for one person [CResp][Add].
E Okay, alright.
E And then (uh) how about like do you go (uh) to different restaurant/s to actually try different
type/s of cuisine/s or~
P I like pizza!
E You like pizza.
P Icecream pizza!
E Icecream pizza [REQCLR][CR][CONF]?
E I've never had that.
P It's at the>
P (I saw I had the < > I saw it at one) the restaurant one/s like is made of [EU]>
E <Wow that's amazing actually>!
P No (cr* cr*)crust is made of (uh) oh>
P Oh yeah it's at Chuck_E_Cheese, I believe [Add].

= The utterances that precede the repair response are revised or abandoned utterances. However,
they do lead to Peter's repair response in the end. Although the repair response does not contain
an affirmative answer in the form of "yes", the information definitely affirms and provides
information to the listener regarding ice cream pizza.

E Chuck_E_Cheese (has uh) it has (uh) icecream^
P It has an Oreo crust <> fill/ed with icecream.
E <Oreo crust>!
P And topped off with little topping/s, like icecream topping/s, and cookie dough, and
marshmallow/s.
E And so do you get it by the slice?
E Or do you get it (like) like just how you^
P A whole pizza {Peter gestures how big the pizza is}.
E Big!
E Wow, I've never heard of this one!
P So, I'm not sure if they still have it.
P If they x out on it.
P If not, I'd like to make some money out of it {laughs}.
E Do you try to make some of those^
P %chichink {associated with a gesture indicating putting something into a slot or box}.
E What's that?
E What did you just do now [REQCLR][NV][SRS]?
= Last 2 utterances are part of E's REQCLR.
E: What's that [REQCLAR][InInfo][SRS]?
P: It's the money sound [Add].

= Breakdown regarding the gesture is finally fixed.

E: Oh!
E: So you're trying to imitate to me like how you're buying a pizza?
E: Is that what you're trying to do [REQCLAR][InInfo][CONFR]^

= Last 2 utterances are part of the E's REQCLAR. NOTE: Although the breakdown regarding the gesture associated with the sound (%chichink) was fixed, the repair response does not clearly indicate what Peter is referring to. In order to confirm whether Peter referred to the cash register and the process of buying a pizza at the restaurant, the examiner asks the confirmatory REQCLAR. Thus, the source of the breakdown is the inadequate information as provided by Peter. Also note that E's REQCLAR was interrupted by Peter's response.

P: Yeah %chichink [ClResp].
P: Cash register opening sound.
P: It's the (catch cash register/z wh* cash regis*) cash register opening sound.
E: Uhhuh.
P: Like when you press the button <> it goes %chichink [Add].

= The utterance "cash register opening sound and the utterance "Like when you press the button, it goes %chichink are both part of the Add repair response. The breakdown is now completely fixed.

E: <Yeah>.
E: Yeah, yeah, correct, correct.
E: (uh) So that's how you order your pizza okay.
E: Then what else?
P: I like play/ing ball/s and tube/s!
P: Ball/s and tube/s?
E: What's that [REQCLAR][AR][SRS]?^ = last 2 utterances are part of E's REQCLAR.

P: You know ball/s and tube/s [Rep-i.a.].
P: The tube/s that go %squikkly %squikkly.
P: Then there's like ball/s.
P: A big tub of ball/s [Add].

= Last 3 utterances are part of the Add repair response to E's earlier REQCLAR. It follows after Peter's first repair response to E's query, which is a repetition i.a. response. However, the additional information provided following the repetition repair response does not fix the breakdown, which is the reason for the following REQCLAR.
E (why) Why are we talk/ing about the ball/s and tube/s [REQCLAR][IrrInfo][RR]?
P It's at Chuck_E_Cheese.
E Oh!
P And that's where the pizza was from [Add].
= The utterances "It's at Chuck E Cheese" and "And that's where the pizza is from" are both part of the Add repair response. Breakdown is finally fixed.

E Oh okay.
P And these ball/s and tube/s are just kept there.
E Or do they have thing/s in these ball/s and tube/s?
P Ball/s.
E {laughs} That's it?
E It's for kid/s to play with or~
P Yes.
E Oh and so can you^?
P And they also have videogame arcade/s.
P (And a big) It's like a giant videogame arcade.
E Okay.
= Peter's chair is moved a bit further away from the table because of his constant rocking. So the following utterance of the examiner is in response to that.

E Do you want to just come here a little bit?
P And have you ever been to : my favorite place is call/ed DameBusters?
E No, I have/n't.
P Darn it!
E Why is that your favorite place?
P It's like a (ho*) giant decorative better than Chuck_E_Cheese arcade {Peter was rocking in his chair and banging his head against the chair while saying "giant decorative better"}.

E (It's like a) It's like a what, a giant [REQCLAR][InA][SRR]?
P It's a restaurant <> that in the back it's a arcade <> with (big <> bigger than) bigger than four class>
E <Uhhuh>.
P It's about beat/3s four classroom/s, even bigger [Add].
= Last 2 utterances of Peter are part of the Add repair response. Although he does not repeat what he said initially, the information he provides helps in fixing the breakdown by indirectly providing a description of the place.

E Wow!
P And so you like being there to play the videogame/s?
P Yes.
P Okay, and how long do you spend there?
P About like a couple of hour/s.
E Wow!
P Like^
E Don't you get tired playing the videogame/s?
E Or do they just kind of like^ P And then I like eat (uh) in between sometimes.
E Oh yeah, of course, because most of those place/s will have thing/s to eat too.
P Yeah!
E Yeah.
E How about have you ever been to (um) {interrupted by person entering the room to replace Peter's chair with a non-swivel chair}. = Peter's chair is replaced and following utterances are part of that incident.
P With wheel/s and no wheel/s.
E Let me just make sure, okay great.
E So let me make sure I have you {with reference to readjusting the camera}.
P Hi camera, hi camera!
P Hi cam cam cam camera!
= Last 2 utterances said in a singing tone.
E Alright, so>
E Thank you {utterance directed to caregiver}.
E (um) so (uh) what were you talk/ing about?
E Oh yeah, about the arcade game/s and (uh)^
P Yeah there/'s like all these little>
P One game there/'s all these little light/s.
P And you/'ve to hit the button just right in order to get (uh) a prize.
P And the prize is a videogame which kid/s love.
P I like the videogame/s because sometimes of the demo/s.
P Sometimes there/'s a real game.
P Sometimes it/'s all sort/s of little game/s.
P And which you can play^
P You know keychain game/s, coupon game/s, playable game/s, and not playable game/s {said in an excited and hurried tone}.
P (what/'s) What/'s the difference?
E Okay.
E How about like (uh) do you go to watch game/s like you know basketball or < > baseball?
P <No>.
E You don't like go/ing for^ P I don't like watch/ing sport/s.
P They/'re too loud, %aah {vocalization indicating the loudness of such games}.
E They/'re too loud.
E But have you been to a baseball game?
E Or have you been to a concert or a play recently?
P Concert or play, not recently.
P But I/'ve been to concert/s and play/s.
E When like how long back?
P One month or two.
E Oh okay, that/'s not too far back.
E So (uh) where did you go?
E What did you go for?
E Did you go for a concert?
E Or did you go for a play?
P Sometimes either one, depend/3s on which it is {odd or stereotypical quality in voice}.
E So what play did you see?
P %mmm {appears to be thinking}.
E Was it part of the school or^?
P I did/n't choose to go to the play.
E Okay.
P But my whole family x went there.
P And I stay/ed with my dad here.
E (you you) Your whole family went for it [REQCLR][US][CONFR]?
P Not whole family, that/s a big whole family to go [CIResp]!
P We/’d take up all the seat/s.
P And no one else could have the seat/s!
E {laughs}, well it/’s just the 8 of you.
E So it/’s not a big deal.
P No I mean^
E 8 plus 2, mom and dad too.
P No, I mean you said whole family.
P And well that mean/3s like Chris, Nick, Joe, Alex, (s* chr*) me, everybody in my house.
P Plus the other one/s at the little Fallway that will come over here.
P That was like at least 20 something.
E Oh okay.
E What I meant is like your mom, dad, and your brother/s and sister/s.
P Oh!
E Did you guy/s go together for the play or~
P I stay/ed here.
E You stay/ed here [REQCLR][CR][CONFR]?
E But I thought you just said that you went for a play.
P No,my xx [CIResp].
E Okay.
E How about you?
E Have you been to a play or a concert?
P A couple of month/s ago.
E For a concert?
P Yes.
E Which concert?
P Like (uh) 3 or (ss*) 5 month/s ago <> {sighs} I went for a concert at my sister/z school.
E <Mhm>.
E Oh okay.
E (does she uh) Does she play^ 
P Play/3s the flute.
E Oh she play/3s the flute, okay.
E Do you play any instrument/s Peter?
P No.
E Okay.
P I use/ed to play the harmonica.
E Oh wow!
E That's hard also!
E So when did you start^ 
P It's hard!
E Yeah, it is really hard to keep track of^ 
P I really wanna play the electric harmonica.
E Oh okay.
E Yeah, is that a little bit more easier to manage?
P No, but it sound/3s cool!
E Okay.
E And so you went to your sister/z concert.
E And (uh what what did you) what kind of music did they play like at the concert?
P They play/ed : some Thanksgiving stuff.
E Oh okay.
E Oh this was made what 2 or 3 month/s ago you said?
P 3, maybe three and a half.
E Okay.
E And (uh did you) would they probably be have/ing something for Christmas too come/ing up?
P Probably.
E Okay, will you be go/ing^ 
P If I know this school!
E Okay.
P There/?s no doubt!
E Will you be go/ing (uh) for that?
P I hope so.
P Because I hope they have food!
E Oh so that/?s why you go for concert/s and play/s?
P In a mission!
E {laughs} Because you can get to eat so much?
P For free!
E Yeah, for free, oh yeah!
E Why, they don't charge you at all like nothing?
P No, some concert/s don't.
E Okay.
P Well some place (uh) my bad.
P Because some place when you are invite/ed by your own family member, and your daughter is 8 ((I think in the play)) then you get free intermission snack/s.
E Oh okay.
E That/?s good.
E (so) So that mean/3s (you) you/?ve gone for a play.
P Yeah, and <their food> is tasty!
E <What play>?
P They/?ve Popeyes and everything.
E Who for the play?
P My sister Abigail, she was the turtle.
E {laughs} She was in the play?
E {laughs} {associated with the gesture of a turtle moving} turtle!
P %tuhtutuhtuh
P Maybe some people made the food.
P Some people bought food.
P And brought it there.
E So it's like a potluck party too?
E Like you've to bring stuff?
P Yeah sometimes it's potluck.
P I wish (it) this one's gonna be a potluck.
P I hope it is.
E Which one?
P This coming up one.
E And is that the one that you were talking about Abigail being a turtle?
E No, that was a little time ago.
E So which is the play that's coming up?
P The one for Christmas.
E Oh (who's) who's playing in that?
E Is that Abigail who's playing in that?
E Or is that Jennifer?
E Or (who) who's playing in that?
P Probably Abigail and Ashley, maybe Noah.
E So what are they going to do?
E They're gonna probably have the Nativity Story I think.
E The Christmas Story, is that what they're gonna play or~
P I wonder if they're gonna do a Christmas Carol theme song.
E <Okay>.
E Okay.
P It's all along with the thing/s they were gonna do.
E Okay.
P Because I don't know what they're gonna do.
E Okay.
E Do you like^ 
P I think that if they'/re gonna do a play <> they might want to put some song note/s that go along with it.
E <Uhhuh>. 
E Okay. 
E Do you like go/ing for concert/s and play/s? 
P Yep yep.
E Which one'/s your favorite out of the two? 
P The play/s < > because of the potluck. 
E <The play/s>. 
E {laughs} So I think the real thing is that your favorite thing to do is eat, right? 
P Yes, yes. 
P And they have delicious Popeyes, and pie/s, delicious cake/s. 
P And I like the chicken {said in a very animated and excited tone}! 
E {laughs} So if they had baseball game/s or basketball game/s with great food, would you go for those? 
P Maybe just to stand the noise, I'll do the food. 
E You'll do the {laughs}> 
E That'/s great! 
P I'll eat the food. 
E You'll eat the food, oh! 
E So (uh) who else in your family like/3s to eat so much? 
P I don't know. 
E Does anyone come^ 
P I never ask/ed. 
E Okay. 
E Does anyone come to help you while you bake? 
P %mmm No, not really except for my mom and dad when I ask. 
E Okay. 
P And I can'/t get it. 
E Maybe you should tell your mom about the volcano cake. 
P We did/n't have the right stuff to make it. 
E And maybe she can try to make it. 
E That'/d be cool! 
P I try/ed to make it once. 
E Oh you did? 
P Recently. 
E Oh okay. 
E (and) And how did it turn out? 
P We did/n't have the right stuff to make it. 
P So we did/n't get to do exactly what we had plan/ed for. 
E How about vacation/s? 
P Actually I enter/ed a contest the soupstake/s {unclear}. 
E Have you gone for vacation/s recently? 
P No.
E <The soupstake/s> what [REQCLAR][CR][US][CONFR]^ 
P <I> Sweepstakes [Kw]. 
E Sweepstakes, okay. 
P And it was <> till I get: four people for free at SixFlags! 
E <What/s the>> 
E Yeah, (you) you told me about the SixFlags. 
E What exactly is the SixFlags? 
P You don't know what SixFlags is? 
E Mhmh. 
E I just came here recently to Maryland. 
E So <> I have no clue. 
P <Oh>! 
E I have/n't been live/ing here. 
E I live in Ohio. 
P Where potato/s come from. 
E {laughs} Yeah. 
P Potato sale! 
E I live in a small town in Ohio, %mmm. 
E So tell me (what/s)what/'s the SixFlags? 
P Alright, the SixFlags is a amusement park. 
E Amusement park okay. 
P You know what that is? 
E {laughs} Yeah, I know. 
E That I know {laughs}! 
E So (uh) you go with your family once in a while? 
E Or do you go> 
P Well it/'s very expensive so (in) in admission <> well I mean you know the ticket/s for get/ing inside cost : about a hundred dollar/s per person. 
E <Mhm>. 
E Wow that/'s as expensive as get/ing into (Disney/z uh)DisneyLand_Amusement_Park. 
P Yeah, I know. 
E Wow, okay. 
P That/'s why I did Sweep. 
E Oh because you enter/ed the contest. 
E And did you get it? 
P I'm not sure. 
P It/s^ 
E When do you get to know the result/s then? 
P Well the videogame one is at Christmas time. 
E Okay. 
P And the other one is a little bit after Christmas. 
E Okay. 
P So it/s gonna be at NewYear/z eve. 
E Oh okay. 
E Okay, perfect. 
E So^
P Actually no, at NewYear/z.
E So who else in your family would love to go for that if you get four ticket/s, four free ticket/s?
P Actually wait, mom,<> dad.
E Will everyone go, or just 4?
E <dad> you, Noah.
P I'm not sure.
E Abigail would come?
E Oh (which is) which is dirt cheap actually (compared that) compare/ing to the fact that you just
don't have to pay for 4 whole ticket/s.
P (We'll think we will talk about) I will talk^.
P Actually no, at NewYear/z.
E You probably tell them why you want to go right?
E Abigail would come?
P I will go.
P Dad will go.
E Noah, Noah and me.
P Well so far I was think/ing about the 4 free ticket/s.
E About who has to go for it?
P I'll take dad, me, Noah (um) {bends his head down to ponder}^.
P Dad will go.
E Or < > does he like to go for the ride/s?
E Yeah, Noah and me.
E Or < > does he like to go for the ride/s?
P (uh) <See> (Noah he) we had a fight over this earlier.
P Yeah, Noah is (um) quite young for these?
P Uhhuh.
P (uh) <See> (Noah he) we had a fight over this earlier.
E Yeah, Noah is (um) quite young for these?
P Yeah.
E Oh you did?
P Yeah, Noah and me.
P Oh okay.
P Yeah, that can be hard, especially when you just get 4 ticket/s and there are 8 of you to go.
P Yeah, but some of us left.
P Yeah, but some of us left.
P So : now there's only Ashley, dad, me, mom^.
P So : now there's only Ashley, dad, me, mom^.
E When you said some of you left,(uh) did some of them go for college?
P Alex went for college.
P Yeah.
E Where here in Maryland itself or Virginia?
P Alex went for college.
P Okay.
P Well he went to UDA.
P Okay.
P And : Nick and Chris are go/ing.
P Alex went for college.
P So that/s three total.
P So that/s three total.
E And they all go to the same place?
E And they all go to the same place?
E Or (are they)have they gone to^.
E Or (are they)have they gone to^.
P Yeah, their own place/s.
P Okay.
P Their own place/s.
P Do you get to visit them?
P Their own place/s.
E Do you get to visit them?
= Peter does not respond to this query.

E So basically we only have to pay for one extra ticket.

P So basically we only have to pay for one extra ticket.
E Oh (which is) which is dirt cheap actually (compared that) compare/ing to the fact that you just
don't have to pay for 4 whole ticket/s.
P So basically we only have to pay for one extra ticket.
E Actually wait, mom,<> dad.
P Actually wait, mom,<> dad.
E Abigail would come?
P Actually wait, mom,<> dad.
P {nods his head to indicate yes}.
P Actually wait, mom,<> dad.
E So that/s 5.
E Well that'll be cool if you get it.
P And then there's Jen.
E %mmm, so 2 tickets.
E But maybe you can split it up right since you have 2 of those?
E You have the videogame one for Christmas time.
E And the other one for New Year's Eve.
P I mean (I'm getting) if I'm winning both < > then that'll be great because that would bring 2 more gaming system/s.
E <Wow>!
E Mhm.
P And the two more gaming system/s would be (Nintendo two) two Nintendo_DS/s.
P So 5 game/s with Nintendo_DS/s and 5 game/s for the Wii, and 4 Wii (contra*) regular control/s and 4 Wii Nunchuck/s.
E Nunchuck/s, what/s that [REQCLAR][AR][DR]?
P It's (uh)^ E A videogame [CONFR]?
P A videogame control [Expl].
E Okay.
E So (uh) how about Christmas time like are you planning something special for Christmas time or~
P: I like pie {said in a whispered tone}!
E You like pie.
E You're going to bake a pie during Christmas time?
P (uh) No.
P I'm hoping my mom would do the Gingerbreadman.
E Ah okay.
P They're classic!
E And (uh) anything else?
E Any other cookie/s that you would^ P Little Gingerbreadman house/s too.
E Oh you make?
E Wow, that'll be so cute!
E <So your mom spend/3s a lot of time baking>.
P <And there's like go go go Gingerbread house/s>.
E So do you watch TV show/s (uh)?
P I don't know.
E You don't watch?
P (uh) you have (uh) a TV show called FoodNetwork.
E You don't watch that because it has a lot of^ P I do so.
E Oh you do, okay!
E Whose your favorite in that?
P Emeril Lagasse.
P "Bam".
P "Kick it up a notch".
= Peter imitates Emeril's catch phrases in the last 2 utterances.
E Why do you like Emeril?
= Peter does not respond to this question.

P And I also like the Food Marathon/s where like^ 
E Oh where they have those (uh) AceofCakes and (uh)^ 
P No, I mean Unwrap. 
E Oh (un*)Food_Unwrap, okay. 
E The one by ((who/'s that guy))? 
P Well I have the video/s. 
P I have the first season of Unwrap. 
E Okay, (when when I) oh Unwrap, I don't think I've seen that. 
P It's where I've the candy and the corn unwrapped. 
P I have^ 
E Oh yeah, they go to each place. 
E And they find out what/s special out of it. 
E Or what go/3s into make/ing those candy/s. 
E Yeah, I think I've seen one. 
P And I've the other kind/s of Unwrap/s. 
P I have 4 Unwrap tape/s <> that have 5 episode/s on them. 
E <Oh okay, cool>. 
E Okay. 
E So you like Emeril the best out of the lot? 
P I like Unwrap the most. 
E The most. 
P And Emeril nice x {odd tone associated with unintelligible word}. 
E Why do you like him so much because he put/3s a lot of cheese on his food? 
P I like cheese! 
E Okay, I thought so. 
E Anybody else you like in that? 
P I : that lady that has (two both), two twin [EW:twins]. 
E Two twin/s [REQCLAR][CR][CONFR]? 
P Yeah, (that uh not) I think it's like Martha someone, the one that come/3s on the magazine/s and {appears to be thinking} [ClResp][Add]. 
E Who RachelRay? 
P %mmm {appears to be thinking, mood starts to fluctuate because he can't get the name}. 
E SandraLee? 
= Peter starts to rock in his chair and starts getting frustrated. 
P {sighs} I'm not sure. 
E Oh even I'm not sure of which one you're talking about. 
= Peter's mood starts changing and he is getting more frustrated. 

E (what) What's special about her show? 
= Peter takes time to respond.
E Paula Deen?
P Paula Deen!
E I thought so.
E She also does a lot of those cookie/s and ^
P She and her brother/s.
E Oh she has got two son/s yeah.
P Yes two son/s.
E Yeah, the Lady and Her Sons.
E Yeah correct.
E You’re right.
E So you watch her show too?
P Yeah.
E Do you try to make some of those dish/s or ~
P Well my dad made someone/z dish in and it was ((I can't remember whose it was)) but it was a gooey gooey pumpkin cake.
E Ah!
E Oh did he make that for Thanksgiving ^
P Yes {claps his hands in excitement} delicious!
P It’s best heat/ed up.
E Okay, great.
E (um) What about thing/s that you do here in school?
P I don't know.
E Like what kind of fun thing/s do you do here?
P (um) I like the parachute.
E You what [REQCLAR][CR][SRR]?
P I like the parachute [Rep-a].
E Parachute [REQCLAR][CR][CONFR]?
P Yeah, parachute [ClResp].
P (It’s like it’s like) It’s like about >
P (Well the) what’s that play {question directed to the caregiver}.
= Following response is with regards to Peter's question directed to the caregiver.
E Remember we’re play/ing the pretend part.
E She does/n't exist in this room.
P Aww but I need her help.
E {laughs} It’s okay.
E Tell me whatever you can about it.
P The person that come/3s from OT, she bring/3s in a parachute.
E Oh!
P And then we like lift it up and down and up and.
E You play outside with it right?
P Yeah, and we play game/s with it.
E That sound/3s fun, wow!
E With the parachute, (do) do you like go really up or ~
E Can you go ^
P We don't lift people.
E: Yeah^.
P: Because we're not that <strong>.
E: <Strong>.
E: But still it goes a little bit higher than usual or~
P: Well we put ball/s on it by xx.
E: Ah okay.
P: And then we lift up the tube/s.
P: And people will go under it.
P: And sit in secret spot/s.
P: And then you've to go and xx {remaining part of utterance is said in an excited and hasty tone that renders the utterance segment as unintelligible}.
E: (What what)what [REQCLAR][US][NeuR]? 
E: You need to go slow.
E: (I I) I lost track there.
P: And then there's the other one like what I just said where the other people will go around.
P: And the person who goes around the middle passes the ball <> while the other/s go around in circle/s [Rep-a].
= Last 2 utterances are part of the Rep-a repair response. Peter was very excited while saying the above utterance which caused a lot of distortion in the audiofile.

E: <Is this a type of game>?
P: And then^
E: Is this a type of game Peter [REQCLAR][InInfo][CONFR]? 
P: Yes [ClResp].
P: They're all type/s of game/s [Add].

= The reason the above breakdown occurs is because the examiner and Peter were talking about the parachute and whether it goes higher, and then Peter introduces the description about a particular activity, without orienting the examiner to what he was talking about. In addition, the examiner wants to know if it is a game and if it was related to the games Peter plays with the parachute as he had mentioned earlier.

E: Okay with a parachute.
E: It's just that everything is under the parachute.
E: Is that how it work/s [REQCLAR][InInfo][CONFR]? 

= Last 3 utterances are part of E's REQCLAR. The source of the breakdown is inadequate information because Peter does not state whether the games were part of the parachute games he had talked about earlier.

P: And then, there's one that's called something else [IA].
= Peter fails to respond to the examiner's query, and thus does not fix the breakdown.

P: I can't remember its name.
E: Okay.
P: {sighs} Anyways, you lift up the parachute.
E And is that the best part of being here at school, the OT time?
P Yeah, I like pastry/s.
= Response indicates a sudden shift in topic; however, it may also be that Peter was trying to tell the examiner about the other things he likes about being in school.

P And I like cooking them.
P And so it feel/s like a tent.
P And so it feel/s like a tent.
E Oh okay.
E And is that the best part of being here at school, the OT time?
P Yeah, I like pastry/s.
= Response indicates a sudden shift in topic; however, it may also be that Peter was trying to tell the examiner about the other things he likes about being in school.

P And I like cooking them.
E Oh you do have cooking session/s here too?
P Yeah, we already made those {utterance was directed to the caregiver}^
P E I told you we don't know she/s here.
P P I will take the part/s out of my brain {utterance was intelligible based on the audiofile, but it was unintelligible to the examiner at that instance. This can be inferred based on the utterances that follow the REQCLAR}!
P E (What what) What {REQCLAR}[InA][NeuR]?
P E I did/n't hear that.
P E Can you tell me that again?
P E You turn/ed your head.
P E And so I couldn't hear what you said.
P E No, you said that you do cooking?
P E You made what [REQCLAR][US][SRR]?
P P RiceKrispie treat/s [Kw].
P P RiceKrispie treat/s [Kw].
E Oh wow!
P E In shape of turkey/s [Add].
P E In shape of turkey/s, wow that/ll <be interesting>!
P P <And we put> frosting on them!
P P <And we put> frosting on them!
P P And then we made cookie/s too!
P P And then we made cookie/s too!
P E Wow, when did you do this?
P E Right before Thanksgiving?
P E Or was it after Thanksgiving?
P E No, you said that you do cooking?
P E Yes, we made xx.
P E No, you said that you do cooking?
P E Yes, we made xx.
P E You made what [REQCLAR][US][SRR]?
P P RiceKrispie treat/s [Kw].
P P RiceKrispie treat/s [Kw].
E Oh wow!
P E In shape of turkey/s [Add].
P E In shape of turkey/s, wow that/ll <be interesting>!
P E In shape of turkey/s, wow that/ll <be interesting>!
P E Wow, when did you do this?
P E Right before Thanksgiving?
P E Or was it after Thanksgiving?
P E Right before Thanksgiving?
P E Or was it after Thanksgiving?
P P We put before Thanksgiving for turkey/s and cookie/s.
P E Okay.
P P We put before Thanksgiving for turkey/s and cookie/s.
P E Okay.
P P And then what was that?
P P And then what was that?
P E So whose idea was it, RiceKrispie cookie/s in turkey shape/s?
P E So whose idea was it, RiceKrispie cookie/s in turkey shape/s?
P P The teacher/s <> and the OT person and the OT helper and the OT xx.
P P The teacher/s <> and the OT person and the OT helper and the OT xx.
P E <Wow that/ll a nice idea>.
P E <Wow that/ll a nice idea>.
P E Great!
P P I like cookie/s!
P P I like cookie/s!
P E So I guess you/ll have something special to do for Christmas too.
P E So I guess you/ll have something special to do for Christmas too.
P Gingerbread house/s {said hastily}, I should tell them!
E (You you)what did you say [REQCLR][InA][NeuR]?
P Gingerbread house/s [Kw].
E Oh!
P We should make some.
P I like Gingerbread house/s {said in a singing tone}.
E Okay.
P Yeah, yeah {said in a singing tone almost as if continuing the first line earlier about "I like Gingerbread houses"}.
E Alright, did you want to ask me any question/s?
P No.
P What question should I ask?
E No, I don't know.
E I'm just ask/ing.
E Do you have any question/s < > for me before we stop?
P <Hi> {directed to the audiorecorder}.
P No.
P What/s that dropping sound {question with reference to a sound on the ceiling because of the classroom above}?
E I think some>
E I don't know.
E I think it stop/ed.
E I guess (they) they just need/ed to hear your question to stop I guess.
P Hi dropping {waves hand upwards and directs question to the ceiling}.
E Okay.
E Alright, we are all done then Peter.
E Thank you so much.
P Okay.
E You have a good day!
P Bye.
E Bye.
APPENDIX H

Language Transcripts (Peer with ASD Context)

WILL AND PETER

$ Peter, Will, Examiner  Caregiver
+ Language: English
+ SubjectId: S.P.
+ Name: Peter
+ Gender: M
+ DOB: 3/17/1993
+ DOE: 12/11/2007
+ CA: 14;9
+ Grade: 8
+ Ethnicity: Caucasian
+ Context: Con
+ Subgroup: ASD
+ Location: V
+ Collect: 2
+ Examiner: Biji A. Philip
+ Transcriber: Biji A. Philip
+ Peer with ASD Context
+ Database: Conversation
- 0:00

E Okay, so thank you both for being here today.
W Okay.
E And I think for you Will, this is going to be the second time around.
E So (uh) today we're going to play a game, alright.
E It's called the get to know you game.
E I want you both to get to know each other as much as you possibly can.
E So, to help you out, I've got some question/s to help you get start/ed.
E But feel free to think of your own question/s.
E (um) The most important thing is that you get to know as much as you can about each other.
E And when you're done, I'm going to come back and quiz you about each other.
E If you do a great job, (uh) you get a prize too.
E And just remember that you might find a friend here today.
E So you want to make sure you know each other really well by the end of the task.
E Alright, do you guy/s have any question/s?
P (uh) what's the prize?
E (uh) that's a surprise in the end, okay.
P A surprise prize.
E Oh yeah.
W I think I know what the surprise is.
E (uh) no, I don't think you know.
E It's going to be different this time for you.
P Chocolate!
E Alright.
E So have fun with the activity.
E Do you have any other question/s?
P (uh) Is the surprise a little snowman made out of chocolate and marshmallows?
E No.
E I thought that since you're really good at that, I'm gonna leave all those kind of thing/s for you.
E I'm not good at that, okay.
P I like chocolate!
E Okay, so do you want to get to know each other better?
E Get started.
W (um) what is your name?
P I think you already know that my name is Peter.
= Peter appears happy at this time.

W (um) yes, I was hearing that a couple of time/s when I was in your classroom wait/ing.
W <(um)>.
P <(uh)> Tell me about yourself?
W (um) I think what you meant to say was what's your name.
W I think that's what you were suppose/ed to say.
P Well anyways just tell me about yourself.
= Peter's mood changes at this time when he utters the above utterance.

W (um) {clicking noise} I like playing videogame/s.
W In fact it's so cool.
W (It's just) I love to play around with them.
W It's just really exciting.
P I like videogame/s too.
W {yawns}.
P And my favorite one is x game/s.
W Hmm?
W What did you say [REQCLAR][US][NeuR]?
= Last 2 utterances are part of Will's REQCLAR.

P (like) Like the Zelda game/s [Rep-a].
W Oh Zelda.
W Yeah, I got a couple of those too.
W But I don't like them that much.
W %mmm.
P I've all of them except for : the newest one.
A noticeable change is the interaction between Will and Peter when a common interest is found. Will now looks at Peter while talking and shifts his body to Peter's side to listen to what Peter has to say.

W Oh you mean that (uh) the Phantom_Hourglass [REQCLAR][AR][CONFR]?
P Mhm [ClResp].
W {clicking noise} %hmm don't have that one either.
P In fact I have every single other one.
P Even the one/s down (the Su*) the SuperNintendo and the Nintendo.
W I actually {yawns}(um)^
P DS_4 and x {said inaudibly and overlapping with Will's yawn}.
W You know I think I actually got Zelda Oracle_of_Time.
W Do you have that one?
P What [REQCLAR][CR][NeuR]?
=W The source of the breakdown is content rejection, because it can be inferred from the conversation that follows. This may be the reason why Peter asked a neutral request, as he probably was not sure whether Will had sad Oracle of Seasons or Oracle of time.

W Zelda Oracle_of_Time [Rep-a].
W Do you have that one?
P Oracle_of_Sequences [REQCLAR][CR][CONFR]?
W No, Oracle_of_Time [ClResp][Kw].
P There's only Oracle_of_Sequences.
P And then the other^.
W No, on the Nintendo64, the Oracle_of_Time.
P There is/n't one {Peter appears a bit agitated}.
W There is actually.
W <So you actually must>^.
P <I don't remember> see/ing that in my entire life and even in the Jed.
P And Jed was back when those xx on sale.
W Well Zelda Oracle_of_Time was/n't the very first Zelda.
P No, (I think) I think you must mean the GameBoy one, right [REQCLAR][CR][CONFR]?
W No, actually it is on Nintendo64 [ClResp][Add].
W And Ninetendo64 is^.
P Oh Ocarina_of_Time!
P I've that.
W What [REQCLAR][InA][NeuR]?
P I think that's what you must have meant [IA].
=W Peter probably wouldn't have heard Will's neutral request as it overlapped with what he was thinking and saying at the same time.

P You must have mispell/ed it.
W No (I I said) it's not that I mispell/ed it.
W I said {Will seems to be getting irritated}^.
P I've mispell/ed it a couple of time/s when I said that.
W I did/n't say it right.
W It's the Zelda the Oracle_of_Time.
W That's how you say it.
P Probably not.
P (it's it's) That's probably how you pronounce it as Oracle.
P But Ocarina is how you say it.
W No, no, actually the way I say it is the right way.

= Based on research online regarding the videogame, Peter's correction of Will's answer was correct. The games under the videogame Zelda include Ocarina of Time and Oracle of Seasons. This could have been the reason why Peter was confused as there were only two games titled as Oracle of Seasons and Oracle of Ages. The only game title associated with the name Time was Ocarina of Time. However, in the conversation that follows, Peter appears to be thinking that Will probably meant Ocarina of Time, but his pronunciation of Ocarina was Oracle.

W And not to be offend/ing^ 
P Well I say it a little bit different.
P So it sound/3s a little bit better.
W {clicking noise}.
P Ocarina_of_Time.
W That's not how you say it.
P Because Ocarina is what it's call/ed.
W It's Oracle.
P xxx{Peter says something, but because of overlapping and interrupted speech, the utterance is unintelligible}.
W It's Oracle, not Ocarina.
W It's Oracle.
P Well, it's Ocarina {Peter emphasizes on the last syllable probably to indicate to Will that he had mispronounced it}.
W No it's Oracle.
= Peter laughs at this instance, and Will clearly seems irritated and keen on proving his point.

W You are pronounce/ing it wrong.
P No, you are.
= Will shakes his head in frustration, so the examiner intervenes.

E Okay, so that's just one game so^ 
P Yeah, I have it.
E Okay, what else?
W It's pronounce/ed Oracle.
P Well there's Oracle_of_Seasons.
W {clicking noise} Yes, but there's also one Oracle_of_Time {emphasizing on the word Time}.

= Peter does not respond, and sighs at the end and Will seems clearly irritated. E intervenes again to facilitate the conversation.

E Okay, it look/3s like both of you have those version/s.
E Maybe you know>
E Let's move to the next question.
P <Well anyways>.
E <Let's (talk about)> get to know each other a little bit better.
E Okay you knew now something about his videogame/s.
E Go ahead.
= Will sighs and seems irritated.

P If you had a pet of any sort, what would it be?
W Isn't it obvious, a dog {said in a sarcastic and irritated tone}?
P Mine would be a dragon.
W But there/s no such thing as a dragon.
P I said of any kind, any sort, what would it be?
W There/s no such thing as a dragon.
P You could even make up a x.
W There/s no such thing as a dragon {shakes his head in frustration}.
P Yeah, but if there was.
W If there was a thing as a giant, if there was a thing as a little creature, what would you have?
P Not if you train it.
W {laughs} Yeah < > by the time you train it, (you probably) it would probably already burnt your house down.
P <Like in>.  
W Because (it take/3s pro*) it take/3s a lot of year/s before you can actually train a real dragon.
P How do you know that?
P They don't exist %duh!
= Peter seems to be provoking Will with his comments.
W I know it.
W Trust me.
= Last 2 utterances said in a very assertive tone.

W If you had a real dragon, he'll probably burn down^  
P You just assume that.
W Trust me, trust me.
W Once you get a dragon, and once you train it <your house will be burnt>. 
P <You assume that> because they're not really real.
W (uh) well I said is trust me.
W Now let me finish {seems to get irritated}.
W I said trust me.
W Once you've train/ed your dragon, your house will probably already be burnt down.
P Yeah, but I'm say/ing you assume that because you know they are/n't real.
= Background noise affects initial intelligibility of utterance in the audiofile. Utterance transcribed based on videosample.

P And (it/s) it sound/3s like you're assume/ing it.
= Examiner intervenes to avoid situation from getting out of control.
I guess what Peter was trying to just say was that he (uh) you know if ever had a chance to wish for something as a pet, he would wish for a dragon to be a pet.

E I don't think he^ P Oh and if you had your first wish {slightly distorted}, what would it be? P Your first three wish/s from a Genie/z lamp. W Huh, what? W What/’s your question [REQCLAR][InA][NeuR]? = Last 2 utterances are part of Will's REQCLAR. Based on speculation, the source of the breakdown could also be that Will was distracted or that he was expecting a question from the script and not one that Peter just came up with.

P If you had a Genie/z lamp and you had three magical wish/s, what/’d they be [Rep-a]? W %mmm my first wish (that) is actually to wish for (another a) three more wish/s. W Then, my second one would be give me ultimate wealth or otherwise no^ P And that would be two wish/s. P Now you have <4 left>. W <Well what> I mean is unlimited money which mean/3s that there/’s no end to the money I got. = Will appears to be continuing his train of thought, rather than responding to Peter's comment about still having 4 wishes.

P I thought that ultimate wealth like meant like your health. W Anyway, and my third wish would be (uh) ((I don't know)) get all the videogame/s in the world. = Will chooses not to correct Peter regarding his misunderstanding of ultimate wealth versus health.

W And since I technically (um){clicking noise} said my first wish was to wish for three more wish/s, I technically get another 3. P And then you wish for 3 more, 3 more. P And then you continue until do/ing that same thing two wish/s make^ W No (I'm only just gonna) I'm only willing to go upto like (si*) 9 wish/s. W But apparently I'm not that way. W I would rather use 6. P Yeah, but (in the) in those also^ W I know.

W If you keep on say/ing, "wish for another 3 wish/s", it will just keep on go/ing and go/ing and go/ing. W I know. P Yeah plus when you> W I know. P But that/’s my point. P It/’s that you/’ve to. P Or else when you wish your last wish, it/’s not 3 more wish/s. P Then all the other wish/s that you wish/ed for will go away. W That ain't exactly true.
W You see once you wish for, you get it.
\[\text{= Will shakes his head in frustration maybe.}\]

P And it's gone after the Genie is gone.
P Then he takes the stuff that you wish\ed.
W Well that's what you believe.
W That's what you believe.
\[\text{= Will sighs and shakes his head in frustration.}\]

P Alright anyways.
P Well what I would wish for would be infinity\[EW\] money.
W Infinite or otherwise unlimited.
P Unlimited is good.
W Infinite or unlimited, that's fine.
W (Those are how) That's how you say it.
P My other one would be to wish for all toy/s in the world.
P My other one, 3 more wish/s, for the game/s in the world and all.
P Then\^.
W Well game/s are \technically toy/s\^.
P \technically toy/s\^.
W Game/s are technically toy/s.
P Alright.
W So (uh) technically you wouldn't you know :.
P Do that.
\[\text{= Peter completes the utterance for Will.}\]

W Yeah, because you would already have everything.
P Alright then for my second wish I would instead of the toy/s, I mean instead of the game/s
\{sighs slightly\} I would : wish for a gold mine \{emphasizes on the word gold\}.
W A gold mine \[REQCLAR\][CR][CONFR]?
P Next is \[IA][Intp]\^.
W Actually (if you had a gold mine you would still) even if you did\'t wish for a gold mine, you
would still have (a) an infinite amount of money.
P I know, just in case.
W %mmm now, that is true.
W Someone can steal your money \{laughs\}.
P \{laughs\} Yeah.
\[\text{= Both Peter and Will seem to enjoy this part of the interaction, probably because they agreed on something together.}\]

W Anyone can steal your money.
P And now I would wish for 3 more wish/s.
P And then I will wish for another gold mine.
P And then I'll wish for lock/s on everything like shut down gold mine/s right from the roof top.
P You know like cave adventure type that go up and down.
W Oh those again.
W %Aww.
P No I mean like boobytrap/s not^ W Boogie trap/s.
P Sorry, not boobytrap/s just like latched door/s that go/3s %shshsh {sound associated with the gesture of a latched door falling from the top the bottom}. W Oh one of those {laughs}. W I see what you're talk/ing about like door/s that when there's an emergency. W They (uh) have door/s that do this {gesture indicating doors closing sideways} and this {gesture indicating doors closing from top to bottom}. = Will directs the last utterance to the examiner, for which the examiner responds.

E I'm not here.
E It's just the two of you guy/s.
P Yeah, and then> P Yeah those kind/s.
P And it's laser proof, electronically access hand.
P And every single lock made for mankind on there.
W (uh) I would say actually (um) you know what^ P And visibility proof.
P So it can't be seen unless you've the remote %tingting.
P And x> P And on my third wish and final, I'll wish for 3 more wish/s.
P And wish for (the) the <> 100 extra copy/s of the remote.
W <You know we can't go on>^ W (um) you know^ P And lock those up.
P And I wish for (uh) a key for that.
W You know you keep on do/ing that, we're just gonna be rewasting our time.
W But wait a minute <> that's actually a good thing.
P <And then>^ W So go ahead.
P And three more wish/s.
P I wish for^ E Well there are some more question/s (uh) Peter to help you through it.
E So if you want to try something else?
= E intervenes because Peter has a tendency to list things and usually is obsessive about completing his list.

P I wish for giant disco ball.
W Oh.
P Or a giant videogame stadium arena that has holographic everything.
W %mmm interesting!
W %mmm I should probably^ P And then for my second wish, I wish for baby dragon that is train/ed fully.
P And equip/ed it with armor.
W Equip/ed it with armor (just that) just like Saphira on Eragon?
P Uhhuh.
W {laughs}.
P (and) And Eragon because when we go into battle.
W You got a great imagination!
W You know that?
P Red, actually black armor with a silver dragon.
E Okay so that's the last part of the wish, okay.
P And three more wish/s.
E We need to stop there about the wish/s.
= The examiner intervenes as she is aware of Peter's obsession in completing a list. In addition, the conversation tends to focus mostly on what Peter is saying and acts more like a monologue than a dialogue.

P And this is the last three.
E Okay.
E And the last three, and then we stop about wish/s, okay?
P And all the dragon stuff that you have in all these little dragon thing/s including x and xx you know and>
P Oh I got a good one.
E That's the last one.
P That's one of them.
E Yeah, but you need to get to know (uh) him {referring to Will} really well right, so^ 
P And armor and sword.
= Peter does not respond to E's suggestion, and continues to talk about his wishes.

P And then last wish to set the Genie free.
P So I won't have to you know like say goodbye to all my good wish/s.
W Oh I see {odd facial expression}.
;
W {clicking noise} Well anyway^ 
P (uh) What's your wish plan?
P I mean, you already said yours.
W (um) {clicking noise} what is your favorite place to go and hang out?
P Well I like the videogame store and the (uh) electronic boutique/s and all that.
P Hobby store USA, stuff like that.
P I guess stare at the videogame/s.
P And wish I could buy them.
W Yeah, I kind of like go/ing to the videogame store too.
W But the hobby store, no.
W But the videogame store, yeah.
W (I) I usually go there.
P Yeah, and plus you get to have free sample play/s of the newest videogame/s.
W %mmm yeah!
P At Walmart.
W Not only at Walmart.
W Oh yeah!
P Those little x and the {gesture indicating playing the videogame}.
W Yeah I know.
W <I know what you're talking about>.
P <And (sometimes at) sometimes at GameStop where John works, (my brother my sister/z girlfriend) and (uh) my sister/z boyfriend, he had a discount, so I can get discount 15 percent off of videogame/s.
P Isn't that nice?
P <And x too>.
W <Yeah I got some too>.
W I got one too.
P And plus: he sometimes (uh) ((let's see)): let's me play all sort/s of game/s like BamaMan and NintendoDS.
W Oh yeah DS.
P I have DS.
P It's nice.
W {clicking noise} I prefer (the game) the biggest game in the big game system/s because it's easier to not get lost.
W You know it's not as hard (to get) because it's kind of harder to get lost.
W (You can al*) because it's easier to find your way around, where you're going or stuff like that.
W It's kind of easier to do it.
P The GameSource [REQCLAR][AR][CONFR]?
= The source of the breakdown is AR because Peter wanted to know what type of Game systems Will was referring to.

W (ye*)No like the game, you know the game system/s like XBox360 [ClResp][Add].
W When you play the XBox360 or Nintendo64, it's harder to get lost and [Intp]^

= Will provides additional information about the referent and how it is harder to get lost in the games like XBox360 and Nintendo64 as versus to the NintendoDS. Last utterance part of the Add repair response of the previous utterance.

P In the game [REQCLAR][AR][CONFR]?

= The source of the breakdown probably is AR because Peter wants to make sure he understands what exactly Will means by "getting lost". Based on the conversational sample before, Peter thought that Will referred to GameSource which is a game that is larger in size than the NintendoDS, so he probably wanted to know if Will was referring to getting lost in the game or physically losing the gaming device. It's easier to lose the NintendoDS because it is smaller as versus to the GameSource which is larger in size. This can be inferred based on the conversation that follows and when Peter actually mentions regarding the size of the Nintendo.

W Yeah, in the game, it's harder to get lost [ClResp].
W But when you play a DS, it kind of.:.
P Ease/3s your way through it.
W No, no, it's kind of hard to get around when you^
P So they’re both hard [REQCLAR][InInfo][CONFR]?
W Well, no, no, the game [ClResp][Intp]^ 

= The source for the above breakdown is inadequate information because Will does not clearly define what he means by getting lost in the game. In addition, Will's repair response does not fix the breakdown because Peter interrupts him while he is responding to the REQCLAR.

P Which one’s easier [SRS]?
W Well it’s easier to get lost in DS, which is a bad thing.
W But it’s harder to get lost in the game system/s which would mean it would be [Add][Intp]^ 
P What are you try/ing to say [REQCLAR][InInfo][AR][NeuR]?
P Put it into word/s [DR].
W Well what I’m try/ing to say is that it’s just easier (to do) to play game/s on the game system/s like XBox360 [Add].
P I don’t get it [REQCLAR][InInfo][NeuR]?
W {sighs} {clicking noise} {appears frustrated} [IA].
= Will probably does not respond because of frustration, and trying to keep his cool before responding. But this in turn leads to the clarification request made by Peter, as the breakdown was not fixed.

P Are you say/ing that it’s easier to lose the game/s [REQCLAR][InInfo][CONFR]?
W No, no_no {laughs} of course not [ClResp].
P Because in that case it will be easier to lose the DS game because they’re so tiny.
= Based on the above utterance of Peter, the examiner is able to figure out why Peter was confused earlier and why he had asked whether Will meant getting lost in the game, as versus to physically losing the game.

W {clicking noise} %ahahah {indicating frustration} okay, let me tell you this.
= The above utterance is an indication of how sometimes challenging behaviors may arise due to the inability of the speaker or listener in fixing the breakdown and understanding the repair response respectively.

W {clicking noise} say that you were play/ing a game system [Add][Intp]^ 
= Last 2 utterances are part of Will's repair response to Peter's REQCLAR. But while responding, Peter interrupts Will again.

P Alright let's move onto a different topic.
= This might be a way in which individuals with ASD deal with breakdowns. When they cannot get the breakdown fixed, they might resort to leaving the topic and moving to another topic altogether, which is what happens in this case.

W Well {gesture indicates that Will wants to continue} {clicking noise} say you were play/ing a game system where you are in a maze.
W In the DS you can't see the whole maze.
W But when you're play/ing in an XBox, you can see the whole maze, practically see the whole maze, which make/3s it easier to get through.
W So what I'm trying to say is, is that it's easier to just get around in (a game like game) XBox game/s than to get around in DS game/s [Add].

= Last 4 utterances are part of Will's repair response to Peter's earlier REQCLAR. Finally the breakdown is fixed. There could be many reasons why the breakdown was not repaired earlier. One could be the inadequate information, Will being interrupted by Peter, and ambiguous information without clearly defining what he meant by getting lost in the game. However, his final explanation really describes what example he was trying to illustrate early on in the conversation.

P Okay, I get it now.
P (uh)>
;
W (um) What kind of music do you listen to?
P Well I listen to the music on that Pokemon show.
W (um)^
P The first one of Meetwo_Strikes_Back, that soundtrack.
W Oh that soundtrack.
W (um) The kind of music I kinda like to listen to is actually that Transformers/z music.
P "Transformers, robot/s in disguise" {Peter sings the first line of the theme music}.
W Well actually it/s a little different.
W It/s (that) from that twentieth anniversary movie.
P Oh you mean the one^
W %duhduhduh %mmmmmm <*> Transformers %duhduh {hums and sings the theme song}.
P <The new one>?
P Oh that one.
W The one from (um) <the twentieth>^ 
P <Way back>.
W Yeah, the movie that was made way back.
P Of Unicron?
W Yeah, the Unicron.
W Yeah, that/s right.
W That/s the one I/m think/ing of.
W I like that music.
W "More than meet/3s the eye" {sings a line from the theme music}.
P Alright, anyways.
= Peter looks back at the script to ask Will the next question. Will continues to sing the theme song.

W "Transformers, robot/s in disguise" {continues singing the theme song}.
P What do you do for fun <*> besides play/ing videogame/s?
W <um>.
W {laughs} That/s practically all I do for fun.
W Just play videogame/s.
P And watch TV?
W %mmm {appears to be thinking}.
P Maybe some board game/s every once in a while.
W (uh) I mainly just play videogame/s.
P Atleast I have more activity/s than you.
W Well you know {yawns} I just (pre*) prefer to (um) play videogame/s than just to watch TV or anything like that.
P Well you can still see a lot of good TV show/s.
W So (um)I don't have no x to watch TV show/s.
P But (uh) anyway (um) what do you like to do for fun?
W I like to watch TV, eat, and play videogame/s and < > play outside with my sport gun/s
%ishsishish {sound associated with gesture indicating firing with guns}.
P <I said what do you do for fun>.
W (uh) I said what do you for fun.
W Eating is not what you do for fun.
P I do it for fun.
W Oh, oh!
P Yellow pastry/s taste tasty {said hastily}!
W What job would you like to do after you’re done with school and why?
P Be an inventor!
P Invent thing/s!
P I like pie.
= An example of a totally unrelated topic being introduced in the middle of a conversational exchange.
W {laughs} oh no don't tell me you’ve got that pie thing from (billion) the Guru Inventor/s and Builder of Many.
P No, I grew up with it.
W %eww.
P Oh.
W I thought I somehow heard that somewhere.
W I did.
W I thought I did.
W %hmm I wonder {seems distracted and detached, so does Peter}.
P Peter do you want to ask him also some question/s?
= Examiner intervenes because Will always seems to be the one taking the initiative to ask the questions in the last few turns.
E Peter oh by the way, what/*’s your favorite videogame/s?
W (um) I don't really much have a favorite.
W I like them all pretty well.
W I don't really have that much of a favorite.
P Well me, well :^)
W Well anyway, what could be hard about do/ing the job when you’re^
P Being an inventor?
W Yeah as being an inventor.
P Kind of want to have lots of idea/s at certain pace that’s very fast.
W Yeah, and don't forget (there are some idea/s that all) there’s a lot of idea/s that <have already been thought of>.
P <have already been taken>.
W But a time machine, that idea has already *been thought of.
W But it's not made yet.
W But a time machine is never been made just yet.
W Or so we know.
P %duhduhduh but they have made an invisible clock.
P Like they take camera/s and they>
P %uuu How did that move {referring to the table moving}.
W It's got wheel/s on it.
P And they put one on each side.
P (so) So what's behind you is project/ed (on)through the camera and onto the clock.
P So that it will (put) act like you are invisible.
W <Is my bookmark still in there, because it doesn't look like it> {directed to the examiner}.
P <But it will be project/ing what is behind you onto you>.
E I have it {responding to Will's question}.
W Oh.
W %mmm {After the examiner's response, Will redirects his attention back to the script to continue}.
P So anyways what's hard about your job?
P What is your job again?
W Well in my last (um) conversation, I'd like to do[EW:be] *a {clicking noise} police officer
{Will is referring to the conversation he had with Whitney a few days back for this same task}.
W But there's also this other job that I'd like to do.
W It's (a) known as a videogame tester.
P Oh, I like those {Peter claps his hands in excitement}!
P Like you check the videogame and see what's wrong with it.
P And then>
P Oh sorry, I'll move that back {in response to pushing the table accidentally; directed to Will}.
W Well at first I thought videogame testing was all about just test/ing what the videogame/s are like.
W I never thought (that) <> (they actually um) that they had to fix the videogame or anything.
P <> (it) It's also about>.
W Well anyway.
P Oh and (if you had <> a million dollar) if you had a hundred dollar bill, what would you do
with it?
W <Well>.
W (uh)<> (probably) what I would probably do is actually give that to (um) give some of>
P <> (x>.
W You know what I would do?
W I would give that one hundred dollar bill to someone (that it really) who it really belong/3s to.
W Try to be generous.
P No, I mean if you {emphasizes on the word "you"} had enough money that it would equal a
hundred dollar bill.
W Well^
W {clicking noise} I would still give it to someone because a hundred dollar is just a little too much for me to^  
P My brother, he/'s 10.  
P And he had hundred dollar/s.  
W {laughs}.  
P I'm serious!  
W Yeah (uh) but I got up like about 90 bucks {laughs}.  
P And one time, he had a 150, just like the Pokemon.  
W Well it/'s not exactly actually dollar/s.  
W It's actually like a 150 key/s or something.  
W It look/3s like a key though.  
W Anyway^  
P I like golden dollar <bill/s>.  
W <So (uh)> are/n't you gonna ask me what could be hard about do/ing my job?  
P I did.  
W Oh you did?  
W What was the question?  
P Well, I did.  
P So did you answer?  
P I think so because you said>  
P (did) Oh wait did he answer?  
W No, I don't think you ask/ed me the question, that/'s the thing.  
P I did ask you the question man!  
P But did you answer?  
W I don't remember you ask/ing.  
P Alright then I'll ask you again.  
W Alright.  
P What/'s so x hard about your job?  
= Peter turns away from the camera and the digital recorder while saying the last utterance.  

W (um)^  
E Peter, do you want to look here?  
E So that I get you on camera because I don't want you to>  
E Just stay where you are.  
E Okay?  
W Well {clicking noise} there is one thing about my job that/'s hard.  
W (um) it/'s fix/ing the game system/s.  
W (I I) I/'m not sure why you have to fix the game system/s.  
W I don't want to know why.  
W And sometimes you^  
P And you don't know how yet.  
W Yet, yes.  
W (yet) Not yet.  
W But I know some basic tip/s though.  
P And I know you/'re not suppose/ed to put>  
P Some people think you/'re suppose/ed to put alcohol stuff^
W You know^ 
P Swab it and rub it on the videogame. 
P That^'ll actually hurt it. 
W Well anyway, what talent/s do you think (you could would) you think could make you 
successful in your job as an inventor? 
P Well I think take/ing a lot of lunch break/s. 
W A lot of lunch break/s! 
W I don't see (that^'s how) how that^'s gonna help. 
P Alright, just kidding, just kidding, alright. 
P Well the first idea I came up with would be ((I call it))fastfood service in a car. 
P But it^'s really the penguin. 
P No wait, because it serve/3s cold food only, maybe some related to hot food. 
P But mostly cold food. 
P Call/ed the penguin. 
W Well if it^'s cold food and if you^'re do/ing it in the car then^ 
P I know I know. 
P (I) I^'ll have a conveyor belt that like push/3s icecream scoop/s, or else scoop/3s icecream into 
the conveyor belt and^ 
W Let me explain something. 
W If you actually put a cold food that need/s to be frozen in a car^ 
P Yeah I know. 
P It^'s gonna have a mini freezer that stand/3s up. 
P And it open/3s. 
P It has this little^ 
W No, no_no let me (finish/ed) finish. 
W You would have to freeze the whole car just enough to actually keep (the) the (uh) cold food 
that need/3s to be frozen^ 
P No, I have it all figure/ed out. 
P I^'ll freeze it in a refrigerator. 
W Oh a miniature freezer. 
W But how are you gonna power it if there^'s no plug [REQCLR][InInfo][CR][SRS]? 
W That^'s the thing. 
W All refrigerator/s practically almost everything need/3s a plug like that camera {pointing to 
the camera}. 
W That^'s why she does that right now. 
P But some car/s actually have plug/s (for) or electric outlet/s that are attach/ed to a battery I 
believe. 
P That are attach/ed to a battery [Add]. 
= Last 2 utterances are part of Peter's Add repair response. 

W Well let me explain. 
W If every refrigerator^ 
P Basically way back^ 
W Let me finish {seems irritated and agitated, tone and gestures indicate the same}. 
W Every refrigerator has a plug, every refrigerator.
W And if every (refrigerator has a plug, but there’s no plug in the car, or van, or truck, how’re you gonna power it [REQCLAR][CR][SRS]?
P You know those %mhm [Intp]^=
W Before Peter can respond, Will interrupts him and suggests a response.

W Oh let me guess.
W Adaptor/s.
P %hmm {this could have been a REQCLAR, but there is too limited information in the listener's tone to identify it as a breakdown}.
W Those little circle thing/s.
W Those little circle hole/s that you (put) usually use to recharge your phone.
W You get an adaptor.
W Plug in the (uh) circle part into the adaptor.
W Then use the plug (fo*).
W (then) Then you put the plug^=
P No, because there’s no part for that.
P I figure/ed you know those big slow [Add][Intp]^=
W I said let me finish {seems clearly agitated and insistent on completing his train of thought}.
W And then you put the plug into the adaptor.
W Then the refrigerator will be run/ing.
W And (um)((let's see))(um)< (what else was there))?
P <x>.=Last 2 utterances are part of Peter's Add repair response.
W Then what you do next is that you actually like you know^=
P Can I get my idea?
W Now I can’t think of anything else at the time.
W So go ahead.
P Alright.
P You see you know those thing/s that you use too in your videogame system/s where you have more than one [Add].
= Peter looks around in the room at the plug, probably to illustrate what he is referring to.

W Oh no, you’re not talk/ing about those {clicking noise} grey thing/s (where you).
W There’s the 1,2,3,4.
W And you just press the button.
W And it will switch to what the game system is [REQCLAR][InInfo][CONFR]?
= Last 3 utterances are part of Will's request for clarification. Peter's previous utterance did not contain adequate information for Will to understand, and so Will's queries are more of a confirmation request to see if Peter was referring to the same thing he was referring to.

P No I’m talk/ing about the thing that has many plug hole/s.
P And has a plug that attach/3s to it [ClResp][Add].
= Peter probably is talking about a surge protector. Just a speculation.
W {vocalization indicating frustration} look, look_look.
W I am^ P You see that {pointing to something in the room}?
W Look^ P And that?
W (That that one/'s only) that/'s only used for computer/s.
P And phone/s.
P But that one right there, just imagine 2 or 4 of those on a^
W I know I know.
W Look I know what plug/s go to which.
= Peter moves his chair back, his mood suddenly changes.

W I know a refrigerator plug go/3s with a (plug) regular plug/s^ P I know.
P But you don't know^
= Peter's facial expression indicates frustration at not being able to convey his thoughts.

W And plug/s from a computer and phone can go to that.
= Peter moves his chair further back and the behavioral specialist intervenes in order to avoid any aggressive behaviors from occurring between Peter and Will.

W I know that.
W %uufuuf {indicating frustration} Now can we actually just get on with this.
P Alright, alrightAlright.
P I need a^ W So that we can get this over with it.
P Let me talk {said in an agitated tone}.^ = The examiner intervenes at this point to facilitate the conversation.

E Okay, alright.
E I guess you know (what) what happen/3s is Will you have some thing/s to say.
E So I guess Peter just want/3s to say something too.
E So you know, you both will take turn/s in say/ing it.
E Okay?
W Well yeah.
W But he just keep/3s interrupt/ing.
W And I say "Let me finish".
E Yeah, I guess he^ W That/'s all I'm say/ing.
E Yeah, which is good.
E (I'm I'm) I'm happy that you're tell/ing what you want.
E But at the same time, let Peter also say what he has to say.
E And then you can say what <you want to>.
W <I know>.
E Okay?
W But sometimes it's best to just let that person finish.
W (It’s) And wait until they’re finish/ed.
W And that’s just more polite.
E Okay.
E So did you have anything else to say Will < > about that topic?
W <Well {clicking noise}>.
W {Takes time to respond}.
E Or do you guy/s want to take another topic?
E Let's take another topic.
P I have^
W I think we should take another topic, yeah.
P But (uh){puts his head down}>^ 
C What's wrong?
P I have/n't got a chance to say what I had about my idea.
E Okay do you want to say that now Peter to him?
P Mhm {Peter nods his head in affirmation too}.
E Okay.
P Alright, you know those adaptor/s or whatever they’re call/ed [Add]?
P The one/s that have many hole/s in them.
P Just like that {pointing to the plug point through which the camera unit is plugged in}, those hole/s for that cord that she has plug/ed into her little camera [Cue].
= Last 2 utterances are part of the Cue repair response.

P There/s this little attachment that has 4 of them, and sometimes even 8.
P And I was gonna be plan/ing to plug in a freezer in there you know x that many freezer/s and prop open it on its back [EU].
P And {interrupted by background noise made by Will}^ 
W Sorry.
P It/s okay.
P And prop open it on its back.
P Put an icecream in the back of the freezer: with ice :.
P And then put/ing it in the refrigerator.
;
P It/s gonna like slide the refrigerator the freezer.
P And then when you put it on the conveyor belt, it slide/3s (it) the refrigerator freezer and keep on turn/ing it side to side [EU].
P (And) {sighs} and then when it/s warm enough, it keep/3s on move/ing warm enough to scoop.
P So, each time it/s ready to scoop, we take a hot scooper that/s just been heat/ed up by electricity right.
P And then we attach it to the scooping machine which scoop/3s it onto a conveyor belt.
P And remember this also has automatic driving system.
P So you can just relax, eat, while it does the drive/ing for you.
P And it require/3s a GPS.
= Will sighs and raises his hand to ask for his turn to speak. Peter doesn't see.

P Guiding_Computer_System or whatever it/s call/ed or stand/3s for.
P And you attach the GPS/z map and everything to the driving part/s.
P (And) : and also I have/n't figure/ed out the rest yet.
P But I got the scooping part out for the icecream.
P And: also there/'s gonna be like capsule on, on top of you.
=Will raises his hand to speak, Peter still doesn't see.

P So (you) the sun/'s out, not fall/ing on you while you eat.
P That sort of thing.
= Will still keeps his hand up to ask for his turn to speak.

P It/'s call/ed the capsule, so [Add] [Intp]^= All conversational exchanges that are prior to the above utterance were part of Peter's Add repair response to Will's clarification request early on.

P Yes {Peter finally sees Will's hand gesture and responds}.
W I have a question.
P Yes.
W (If your scoop) if the scooper was just recently heat/ed, that would mean that the icecream could have just melt/ed while you were actually were (just scoop*) scoop it up.
W (because if you were actual) If it was the actually you know heat up, and it was just recently heat/ed, well it/'s true that the icecream would make it easier to pick up, although (on the way of go/ing up) on the way of move/ing (when it pick/3s it up)when it get/3s pick/ed up, the icecream will get melt/ed [EU].
P But I/*m gonna put on a ice cold (tray) melt tray.
W An ice cold melt tray.
P and^W Then what happen/3s next is that your melted icecream land/3s in the melt tray.
W And if there was a customer or whatever, and they would say, "Why is my icecream melt/ed"?
W Then, simply (someone would say)someone that (uh) was work/ing on the machine would say, "Well, I guess it/'s because the scoop was heat/ed up just recently".
W That would mean some^P No, no, I got it.
P And for it to stay cold on its way down the tray to in the car < > it will^W <Let me guess> you/*ve got something call/ed an (ice floor forward) ice floor similar to a fire floor except a fire is ice.
P No, no.
W I mean flame floor.
P Nothing like that.
P It/'s like a little ice :>
P Underneath each plate is a layer of crush/ed ice, crush/ed ice < > that which will keep it cold.
W <Oh no>!
P Underneath each plate is a layer of crush/ed ice, crush/ed ice < > that which will keep it cold.
W Yeah but it does not^P It/'s a layered tray.
P So it can lock in place, keep/ing it cold underneath.
P And just to make sure I will also put in a super cold air blowing machine which will blow on the side of it to keep it cold.
P Just like in the freezer.
W Well even so that would'n't work because if your scoop was recently heat/ed, even if there was ice on the melt tray, it won't just suddenly be not melt/ed again.
W Once it land/3s in there, it would still be melt/ed.
W (By that time) and by the time it freeze/3s, it/’s just < > frozen melted icecream {laughs}.
P <Besides>.
W It/’s kind of hard to explain.
P No besides, (I) I try/ed it with a heat/ed up scooper before.
P You know how in those restaurant/s, they even have heat/ed up spoon/s there.
W Well^
P Spoon/s may not seem material but^
W Actually they only use spoon/s at room tencherpur [EW:temperature] {phonetic error}.
P Yeah that/’s what I mean, room temperature.
W Well that mean/3s it/’s warm>
W What I meant by room tencherpur [EW:temperature], is that the spoon is just as warm as the room we/’re in.
P Yeah.
W That/’s what I meant by room tencherpur [EW:temperature].
P Temperature.
W Which would mean that the spoon is/n't actually heat/ed up recently.
W It/’s just at room tencherpur [EW:temperature] is what you meant to say.
P Oh boy {Peter shakes his head in frustration}!
= Examiner intervenes in order to avoid another conflict.
E Okay,(let's) let's take another topic.
W Yeah that/’s what I was think/ing too.
E Okay.
E There/’s another topic there on the list, if you guy/s want to^ W Anyway, where was I?
W Let's see.
= Peter sighs.

W If you were given the chance to change something in your school, (what would be) what would it be and why?
= Peter sighs and takes time to respond.

P The rule/s.
W The rule/s[REQCLAR][InInfo][CONFR]?
W Like how [SRS]?
P (Like instead of:) Like instead of have/ing to do work, read or write, sit around, eat pizza and icecreem, and get sick [Add]!
W (um) yeah.
W But you do realize if there was not a single rule in the world, everything would be^ P No I mean(the rule/s)the rule/s change them, not destroy them [EU].
W Well even if you just change them, they will be utter chaos everywhere.
W Let me tell you something.
= Peter's vocalization indicates frustration and distress.

W Look, let me just^
P Come on.
W Just let me tell you something.
P You always ruin me and my good idea/s.
= Will sighs in frustration. The examiner intervenes and the behavior specialist moves closer to both of them to avoid a conflict between the two.

E Oh (he) he/'s just say/ing his opinion.
E It/'s not that he/'s ruin/ing your idea/s.
E Okay?
E You both have great idea/s.
E Alright?
= The behavior specialist moves and decides to separate the distance between the two of them.

C Can you guy/s do me a favor please?
C Peter, excuse me.
C Can you sit on this end of the table.
C And Will you sit on this end.
W Good idea!
C Thank you.
= The examiner then talks to the behavioral specialist regarding the seating position, while Will and Peter continue to talk.

W Well, let me tell you something.
W Even though if you just change the rule/s, there will be utter chaos.
W Like for example, {clicking noise} say like if every single rule in the world, even if it was/n't destroy/ed, just change/ed, there will be complete utter chaos.
P No {puts his head down in distress}.
W That/'s why we have rule/s.
W Rule/s are need/ed if we are to keep order.
W That/'s why we have a law that you should not try to drink too much.
P This will go on forever {said in a frustrated tone}.
W That you should not drink too much alcohol.
W The rule/s are there for a reason.
W And that reason is to keep order and safety.
P And what if the rule/s are not good enough?
= Will sighs.

W Every rule has a point.
W Every rule has something good compare/ed to another rule.
W Say {interrupted by Peter's frustrated sighs}>
W Look (what you/'re) the rule/s that you/'re change/ing is safety.
W Safety is a rule that you can>
W Rule/s in safety is something you^
P But there/'s gonna be a nurse in the office.
W Look < > (rule/s in) rule/s about safety>
P <Instead of there not being aa>>

= Peter moves his chair away from the table. Will looks at the examiner and directs the next utterance.

W I don't think this is go/ing out too well.
E Okay.
E Do you guy/s want to take a break?
W Well {appears to be thinking}.
E Alright?
= Based on both their body languages, the examiner decides to stop.

E (we/'ll) We/'ll stop here, okay.
E We/'ll stop here, okay?
W Yeah, I think it/'s start/ing to get a little bit out of hand.
E But I do want to say you guy/s did a good job talk/ing to each other.
E I know these are (um) really hard topic/s sometimes when you have two different opinion/s to talk about.
E But that/'s okay.
E That/'s how people are when you go to talk like>
E When I go to talk to someone <> and they have a different opinion, it/'s sometimes hard to keep the conversation go/ing.
W <That/'s right>.
E But you guy/s did a really good job!
= During the whole time when the examiner was talking and resolving the issues, only Will looked at the examiner and tried to take in what she said. Peter kept his head down and still seemed very angry. In order to involve Peter in the conversation, the examiner directs the next question to him.

E Did you learn something about him Peter?
P No.
E Nothing, you did/n't learn anything about^
P Nothing.
P I don't want to say.
E Okay.
E How about you Will?
E Did you find anything about Peter?
W Well what I found out was that he want/3s to change rule/s that apparently that you can/'t change.
E Okay but I mean what are the thing/s to do?
Well, apparently he likes video games like I do.
So you both have something common there, okay.
That's right.
In fact a lot of people these days like video games, including me.
= Peter gets up from his chair in a gesture that he indicates he is done with the task and wants to leave.

Okay, alright (we) we're done.
I said you do get a prize too.
So you guys get the prize.
Do you want to have a seat Peter once I give it to you?
I wonder if I'm gonna get the same thing as I did in my last one.
Tell you what since you need to take a break, you take your gift's while you go.
And you can open it up whenever, okay?
Okay.
Alright this is your book {examiner returns the book Will gave at the beginning of the session for her to keep aside}.

= Examiner distributes the gifts and Peter gets excited finally and wants to open it. Behavioral specialist instructs him that he can open it in class.

This is for you Peter.
%Yay!
And this is for you Will.
You guys did a great job, okay.
And you can open it in class.
Alright thank you.
Thank you Will for helping us out the second time around.
Alright.

= The session ends.
Okay, so thank you both for being here.

Okay.

Today we're gonna play a game (uh) a get_to_know_you game.

And I want you both to get to know each other < > as much as you can.

Okay.

Alright.

To help you out, I've got some question/s to get you start/ed.

Okay.

And (uh) once you're done, I'm gonna come back.

And quiz you about each other.

So you want to make sure you find out as much as you can.

Alright.

And you also get a prize at the end of the activity for doing a good job.

So remember that you might find a friend here today.

So you want to make sure you know her {directed to Will} really well.

And you want to make sure you know him {directed to Whitney} really well by the end of the activity.

Have fun!

Okay.

You have any question/s?

%mmm (um) what/s the game gonna be?

You're just gonna get to know her better.
W Oh that's what the game is.
E And these are some question/s to help you get start/ed to ask some question/s.
E (You can think) Feel free to think of your own question/s too.
E Okay?
W (uh) okay.
W (um) {clicking noise} what is your name?
G My name is Whitney Lambert.
W Whitney Lambert eh %mmm {stereotypical quality in tone}.
G What/s yours {odd tone}?
W (uh) My name is Will Robinson.
G Nice name.
W Thank you.
W <(um)> tell me about yourself.
G <so>.
G I like to draw.
G I like to read, write, draw, and do some fan fiction/s.
W %mmm {indicating interest}.
G I'm great sometimes.
G I forget thing/s that I'm suppose/ed to do.
W %mmm {indicates Will's response that is similar to the verbal response "oh!"}.
G And I'm (um) {sighs}:
G And my favorite subject is Maths {odd tone}!
W %mmm, that/s my favorite subject too.
G So tell me a little about yourself.
W Well, I like Math like we apparently talk/ed about just a couple of second/s ago.
W And (uh) {clicking noise} well, basically I just like to play videogame/s.
W Just kind of fun.
W And it/s just really exhilarating.
W It/s just fun.
W I just like (how people) how you get to control the people and stuff.
W I like that.
G Hey I like that too {odd tone, stereotypical quality, sounds rehearsed}!
W Oh %mmm interesting {odd tone}.
G So what/s your favorite place (to ha*) to go and hang out?
W (um) I don't really go and hang out.
W I just rather stay home.
W I basically just wanna stay home.
G (I ss*)I think {think was said a bit inaudibly} about hang/ing out at the library.
W (um) {clicking noise} no actually (I said) what I said was that I rather just stay back at home < > than you know {clicking noise}~
G <Oh> {odd stereotypical tone}.
G Oh, I see {odd stereotypical tone}.
W I just rather stay at home because (I get) I kind of feel comfortable where (it/s just) it/s just (uh) it kind of make/3s me feel right at home.
W {laughs} get it {laughs}?
= The conversational exchange that takes place regarding hanging out is really unique in this case. Although Whitney's inaudibility may have been the reason for Will misunderstanding what she said, he corrects her immediately. And although Whitney made the statement regarding herself and not Will, she does not persist to clarify his misunderstanding. This indeed is a very strong indication of how sometimes poor perspective taking skills in addition to shyness that may have occurred owing to age may affect how individuals with ASD deal with breakdowns or choose to ignore breakdowns in this case. In addition, although Will did pass a humorous comment regarding staying at home, Whitney does not respond to the humor based on the pun intended.

W (um) {clicking noise} what's your (play) favorite place to (hang out) go and hang out?  
G I like to hang out at the library.  
W (um) you like to hang out at the library %mmm.  
= This was a real good instance for Will to have figured that Whitney was probably talking about herself earlier than him. However, due to his poor perspective taking skills, he probably fails to make the connection. Another example wherein the breakdown could have been identified.

G Because I like to read book/s.  
W Well, I don't like to read book/s that much.  
W Sorry if I offend/ed you {Will being extremely formal}.  
G It's okay.  
W %mmm okay.  
W (um) what kind of music do you listen to?  
G Oh I listen to : Disney <> such as Lion_King, Aladdin, Little_Mermaid, and Beauty_and_the_Beast.  
W <%mmm Disney>.  
W %mmm what about Finding_Nemo?  
G I kind of like that too!  
W %mmm %mmm.  
W If they made a movie about you, what would you want to play your charac* >  
W (uh) I mean {clicking noise} if they made a movie about you, who would you want to play your character?  
W And why?  
G %hmm I would play Lina, because she's smart and brave.  
W Smart and brave %mmm.  
W (That's just)that's interesting.  

= In this case Whitney misunderstands the question and provides a different answer. Will does not follow this up with a REQCLAR. Another example of how breakdowns are ignored. In addition, Whitney introduces an ambiguous referent, which Will probably doesn't even know, but Will does not ask who she is referring to. Based on the adult-client context, the examiner understands that Lina is the character that Whitney liked in the book about the Princess and Curgie. Will, who earlier admitted that he was not interested in reading books, probably would have never read the book to know who Lina was.

G What kind of music do you listen to?
W (um) I (kind of uh) {clicking noise} kind of like that Transformers music on my (uh) Transformers_Twentieth_Anniversary movie.
W {clicking noise} I like that music.
W Oh man I'm just (that) in fact I'm sing/ing it right now in my head.
= Whitney does not respond to Will's comment.

G If they made a movie about you, who would you want to play (your part)your character?
G And why?
W Well %mmm^ ^
= Will was a bit away from the table and the following utterances are the examiner's attempts to get him seated closer to the table, in order to get him on camera.

E Will do you want to go in a little bit?
E So that I get you on camera because you're far out.
E Oops, okay.
E That/’s good.

W Well %hmm : {clicking noise twice} (I would be) I would probably be Unicron in my own Transformers (Anniversary) Twentieth_Anniversary (because he can devour he) because he can devour entire planet/s.
W Unbelievable {guttural quality in voice} when he does it like that.
W And he can transform into some sort of giant {emphasizes on the word giant} robot too.
= Whitney does not respond to any of these comments, probably because she is more interested in animation stories and movies of princesses and unusual creatures.

W Let's see {looks back at the interview script}, what do you like to do for fun?
G I will like to write fan fiction.
W %hmm.
G And do some fan art.
W %hmm {indicating the tone of someone saying interesting}, that/’s what you like to do for fun.
G What do you like to do for fun?
W (um) I rather play videogame/s {laughs}.
; {Whitney remains silent}.

E Feel free to ask more question/s too okay.
= The examiner intervenes here to encourage the participants to ask more questions regarding topics they introduce, and also in an attempt to let them think of questions other than those on the interview script.

G Okay.
G What job will you like to do after you’re done with school?
G And why?
W Well {clicking noise} (I) I was think/ing of being {clicking noise} (a) a police officer.
W I was think/ing of being a police officer.
W It/’s kind of great job.
W And it's really kind of {clicking noise} fun.
W (I mean) I mean {clicking noise} I like it when they shoot stuff like the military does.
W And I like it when they have something like that.
= Whitney does not respond to any of these comments, which is why Will decides to ask her the next question on the script. It also appears to be that Will tends to have a clicking noise whenever he is searching for the right word, or is thinking. This is based on his sample of the adult-client context, and this sample. This is merely a speculation.

W (um) what job would you like to do after you're done with school?
W And why?
G I like to be an animator and a voice actor because I've been practice/ing my doing other people's voice/s.
G And I like to draw.
G And help with animated movie/s.
W (So uh basically you like) {clicking noise} (uh) so basically you just like to be an actor?
G Yes.
W %hmm, okay.
W What could be hard about doing that job?
G That they want you to make different voice/s.
W Yeah I kind of wonder why they sort of let you>
W I don't really know why {remaining part of the utterance is lost because of background noise}.
W I wonder why they do that.
W %hmm Anyway, let's see.
W What talent/s do you have you think you (can) would make you successful in that job?
G I can imitate people's voice/s {said excitedly}!
W %hmm.
G And I could draw {said in an excited tone, although not exclamatory in nature}.
W %hmm, draw.
G And I could write script/s <> and fan fiction {said in an excited tone, although not exclamatory in nature}.
W < %hmm >.
W %hmm, Fanatasy/s and fiction eh?
W %hmm.
G Yeah.
G: That sort of thing.
G (How) what could be hard doing that job as a policeman?
W Police officer?
W (um) {clicking noise} probably try/ing to avoid get/ing hit by someone shoot/ing at me and stuff like that.
W {clicking noise} Kind of want to try to like avoid someone hit/ing me with a bullet as much as I can.
= Whitney seems to be distracted at this point, and does not respond to his comments. Will then very softly reminds Whitney to go on in the next utterance, but Whitney does not hear. So, Will goes ahead and asks the next question.

W Go on {directed to Whitney and said softly}. 
G: If you were given a chance to change something in your school, what would it be and why?

W: I would change field trip/s.

G: Field trip/s (um) like every single day? No, just on : special event/s?

W: %mmm oh, like a Friday? Whitney does not respond, and Will goes ahead to the next question. Based on the video sample, Will didn't appear to be waiting for a response from Whitney. The utterance probably acted more like a comment than as a question.

G: What do you think about videogame/s?

W: I think they're good. And they're good for kid/s because some kid/s like enjoy/ing videogame/s.

G: Well, I actually think the benefit/s are as that (I) they get better eyesight.

W: Because I believe they actually get better eyesight.

G: In fact whenever I play videogame/s, I actually get a better eyesight.

W: So I <> think it is true.

G: <I know>.

W: It is good for kid/s because it give/3s you better eyesight.

G: But my dad say/3s it's bad for you in the long run.

W: But I don't believe him about that {clicking noise}.

G: So what kind of talent/s do you have you think you could make successful in that job?

W: Probably my (uh) knowledge of see/ing all the videogame/s where you could just shoot and stuff. Probably that might help me in try/ing to (uh) make me (uh) do better in my job because see/ing the skill/s (that all the uh game) in all the game/s (and shoot) and all the shoot/ing game/s and (how)what skill/s they have like duck down and cover.

G: And just basically (like hold) like get a pistol out.

W: And then carry like two pistol/s %pipipipipipif {indicating the sounds associated with shooting with a pistol, sound is associated with the gesture too}.

G: And that/s why I think I can be (um) successful in that job.

W: If you were given a chance to change something about your school, what will it be and why?

G: Well %hmm {clicking noise} probably my (uh) knowledge of see/ing all the videogame/s where you could just shoot and stuff.

W: %hmmm {laughs} well technically this is not a change in {emphasizes on the word "in"} the school.

G: But it is a change that well {laughs} basically I just say no school {laughs} because I love to have something like no school.

W: I love no school {laughs} (because it's because it's kind of school/s) because school is kind of a little overrated for me anyway.

G: What do you think about videogame/s?

W: Are they good for kid/s?

G: Why or why not?

W: Well as we explain/ed a couple of minute/s ago, well I'd say (it's um better for eye/s) it give/3s you better eyesight.
W And (um it just um){clicking noise} (if) if it give/3s you better eyesight then you could focus a little better.
W And you can just keep play/ing.
W (And then) and it/s also a fun thing.
W So it/s actually help/ing you in two different way/s {clicking noise}.
= Whitney does not respond to any of these comments. And at this time, Will looks at the examiner as he has reached the final question on the script. The examiner's response is what follows.

E Do you want to ask her why she think/3s videogame/s are good?
W Why do you think videogame/s are good?
G It : can help you hear well.
W Mhm.
G It help/3s you stay focus/ed.
;
G And it help/3s you see thing/s better.
W Mhm.
E Do you guy/s have any question/s to each other that you want to ask?
W %mmm.
E Something that will help you get to know each other a little bit better?
E These were just few question/s to help you get start/ed.
W {clicking noise} %mmm I don't feel like there/'s any question/s involve/ed in my mind.
E How about you Whitney?
E Do you want to ask Will any question/s?
G No, thank you.
E So you guy/s know each other really well now?
G Yes.
W %mmm I guess so.
E Okay, so now it/'s my turn to ask you about each other.
E So, (um) Will can you tell me about Whitney?
E You heard quite a bit about her now, so.
W I heard she was[EW] (uh) like/ing [EW:liked] to read and draw.
W And she (um) want/3s to be an actor when she grow/3s up.
E Mhm.
W And (um) {clicking noise} Whitney (would like to um um) does like to draw thing/s.
W And she does drawing and reading for fun.
E Mhm.
W (And um) {clicking noise} and she want/ed to be (an actre*) an actor for her job because she/'s good at (um) {clicking noise} reading and drawling [EW:drawing].
W And (um) she's good at imitating voice/s.
E So did she tell you like what kind of movie/s she would like to act in or~
W Well {clicking voice} basically in some sort of movie (where you actually uh are) where you actually smart or brave ((I believe)).
E And is that right Whitney?
G Right.
E Okay.
E Then what else did you learn about her?
W Well (um) : she say/3s (that um) that videogame/s are good for kid/s which is what I also think too.
E Okay.
E And (uh) what are her favorite thing/s to do?
W (um) read and draw.
W That/'s like her favorite thing/s that she want/3s to do.
E How about you Whitney?
E (what do you have) I mean what do you know about Will?
G He like/3s videogame/s.
G He enjoy/3s being a police officer.
G (He has) He say/3s that videogame/s (are good good for ba*) are good for your eyesight.
G And she [EW:he] think/3s^ E So you both have interest in videogame/s, so I think you guy/s should probably exchange (uh) videogame/s together.
W {laughs} well I wouldn't want to do that.
E Oh why?
W Because most of the videogame/s is probably not {clicking noise} age appropriate.
E Okay.
E Okay go ahead Whitney.
G And he enjoy/3s being a police officer.
G And he had to whoosh [EW:risk] being shot <> and stuff.
E Mhm.
G And he prefer/3s to stay home.
G And he like/3s Transformers <> the twentieth anniversary.
E <Mhm>.
E Oh you remember it quite well!
G And he prefer/3s listen/ing to the Transformers/z music.
E Mhm.
G And {yawns} he like/3s to play videogame/s just for fun.
E Okay.
E Do you want to ask him any other question/s or~
G No we/'re good.
E You/'re good?
W I'm good.
E Alright you guy/s did an excellent job.
E And so you both get prize/s.
W %mmm {sounded excited}.
= The prizes were then distributed and the session ended.