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Topic Manipulation in Five Children with Language Impairment

in Response to Topic Probes

Kimberly Kasey Baker

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Master of Science

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ABSTRACT

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in Response to Topic Probes

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Master of Science

This study describes a series of case studies on topic management patterns of five children (ages 5 to 10 years) with language impairment. The children participated in semi-structured topic tasks that assessed conversational abilities on topics that were verbally introduced and topics that were introduced both verbally and with an object. Although there was considerable variability among participants, the children generally responded to most introductions by acknowledging and maintaining the topic. With the exception of one child, however, the children in this study demonstrated immature topic manipulation patterns that could be expected to have negative social ramifications.

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DESCRIPTION OF THESIS STRUCTURE

The body of this thesis is written in a hybrid form that combines current journal publication format with the traditional thesis format, which includes updated university format requirements for submission. Appendix A includes the participants' additional test scores from subtests of the Clinical Evaluation of Language Fundamentals-5 (CELF-5). Appendix B contains the rules that were used for dividing utterances. Appendix C contains the protocol that was used for the topic category analysis. Appendix D contains the annotated bibliography.

Introduction

The term *topic* has been used to describe a number of linguistic and conversational concepts. For example, Palomares, Bradac, and Kellermann (2006) presented a continuum of definitions of topic ranging from a simple noun phrase to the content matter of talk. Similarly, Brinton and Fujiki (1989) noted, "the term topic has been used to describe everything from sentence constituents to conversational organizers" (p. 44). When analyzing topics in discourse, Mentis and Prutting (1991) explained that the topic identified the question of immediate concern and provided a global description of the content of a sequence of utterances. Palomares et al. similarly provided a general definition of topic as the language user's perception of the unfolding discourse. The current study similarly viewed topic in the context of conversation and aligned with the notion of topic as the subject matter of discussion (Brinton & Fujiki, 1989; Goodenough & Weiner, 1978).

Because topic is the subject of discussion, a natural assumption can be made that topic is an essential element in conversation. Goodenough and Weiner (1978) supported this notion by stating, "Conversations are commonly described as being 'topical,' i.e., the information flow between/among the participants has a structure that may be defined in terms of the topics, subtopics, etc., that are the subject matter of the discussion" (p. 395).

Social interactions are often considered in terms of the conversation that takes place, and those conversations consist of the topics discussed. This leads to the notion that topics are the building blocks of conversation. As Palomares et al. (2006) stated, "Topic-free social interaction may be impossible to accomplish" (p. 47).

Topic is an essential element of conversation, and appropriate use of topic management is a critical pragmatic behavior due to its fundamental role in social interaction. However, it is

important to note that although topic is regularly used in conversation and interactions, the ability to manage a topic develops gradually, and this developmental process begins early in life (Brinton & Fujiki, 1989; Palomares et al., 2006), beginning as the infant develops intersubjectivity in the early stages of infancy. As described by Westby (2009), primary intersubjectivity "reflects a system that promotes the infant's tendency to use and respond to eye contact, facial affect, vocal behavior, and body posture in interactions with caregivers" (p. 137). Intersubjectivity enables the child to engage in dialogic, back-and-forth sequences that are an important component of how topics are manipulated in conversation (Hay, Payne, & Chadwick, 2004). From 6 to 18 months-of-age, joint attention emerges as the infant learns to coordinate focus on a shared object of concern and begins to initiate joint attention by using eye contact, gestures, and words (Westby, 2009). Joint attention is a crucial building block of topic development because it represents the ability to share focus on a single subject. In addition, imitation also supplements the growth of topic management, as young children between 16 and 32 months-of-age increasingly rely on imitation to maintain social interactions with their peers (Eckerman, David, & Didow, 1989). Ninio and Snow (1996) reported another leap in topic development at the end of this period (approximately 30 months). This leap occurs due to children's increasing use of words over gestures to direct their hearer's attention. Ninio and Snow described this new ability as a "prerequisite to the initiation of absent, remote or abstract topics, which both children and their parents do more successfully as the children get older" (p. 154). In addition, Bloom, Rocissano, and Hood (1976) noted a growth in contingent responses from young children from 16 to 38 months-of-age, which is an important element of topic manipulation. Ninio and Snow also explained that as toddlers mature into childhood, they grow in their capacities of "responding reliably to conversational topics, and taking the interlocutor's

topic, initiating conversational topics, and taking the interlocutor's point of view" (p. 161). These abilities correspond to the development of Grice's maxim of relevance (Grice, 1975), which Sirois and Dorval (1988) observed in the conversations of fifth-grade children. Children also become more proficient in other topic maintenance abilities as they mature. These abilities include using nonverbal behaviors (e.g., nodding and smiling), providing backchannel responses, asking and answering questions, and providing contingent responses (Turkstra, Ciccia, & Seaton, 2003). However, it is important to emphasize that although children experience similar developmental processes in regard to topic development, individual patterns may vary according to differing abilities, personalities, and life circumstances (Brinton & Fujiki, 1984). Tolchinsky (2004) described this phenomenon as divergence, explaining that language differences become more apparent across children as their language features are molded by their social and cultural experiences.

Specific aspects of topic management develop throughout childhood and into adolescence. In their study comparing the conversational content of 5-year-old, 9-year-old, and adult dyads, Brinton and Fujiki (1984) identified some major parameters of topic manipulation in conversation: topic maintenance, topic change, and topic shift or shading. Topic maintenance was recognized when an utterance met one of the following criteria: it matched the preceding utterance, acknowledged the preceding utterance, or added information to the preceding utterance. Topic change was noted either when a new topic was introduced or when a previous discussed topic was reintroduced. Topic shift (or topic shade) was also observed when the topic was not strictly maintained, although some connecting aspect of the topic was shared between the utterances. In addition, Keenan and Schieffelin (1976) described that topics are introduced by, "securing the listeners attentions, speaking clearly, and identifying referents" (p. 350). Topic

introduction, topic maintenance, topic change, and topic shading are all important elements that are used to piece topics together to create conversations.

Gan, Davison, and Hamp-Lyons (2009) explained, "the ability to stay on topic, to move from topic to topic, and to introduce new topics appropriately is at the core of communicative competence" (p. 331). Acquiring the ability to manage these aspects of topic manipulation is necessary for several reasons. Recognizing and manipulating topic in discourse allows speakers to organize, understand, and remember conversations (Brinton & Fujiki, 1989). In addition, as Kellermann and Palomares (2004) noted, topics are used to, "carry out conversational routines (e.g., starting and ending), fulfill communicative functions (e.g., informing), and achieve interpersonal agendas (e.g., comforting)" (p. 308). Because of the vast array of communicative functions that topics fulfill, it can be proposed that topics have the power to heavily influence relationships (Kellerman & Palomares, 2004; Palomares et al., 2006).

As Bedrosian (1993) noted, "topic is critical to how one is perceived as a communicator" (p. 38). Therefore, there may be social consequences when problematic topic management occurs. For example, because new acquaintances use initial conversations to present themselves (Svennevig, 2014), a listener may interpret the speaker's violation of expected topic patterns as social or cognitive incompetence (Brinton, Fujiki, & Powell, 1997). Individuals with a variety of disabilities may experience difficulty in topic management. To illustrate, Cummings (2011) observed the social impact of aberrant pragmatic behavior in conditions such as traumatic brain injury, autism spectrum disorder, and schizophrenia. Various behaviors that relate to topic management were identified in this study, including discourse deficits and failure to adhere to Grice's (1975) maxims in conversation. Cummings found that individuals with these difficulties oftentimes struggled with "employment prospects and occupational success, mental health status,

and social integration" (p. 26). Similarly, children with problematic pragmatics also experience difficulties. Mentis (1991) explained that problems in topic management can lead to poor academic and social development in children.

Several researchers have studied how topic manipulation skills differ in children with language impairment (LI). As an example, in a semi-structured topic task, Brinton et al. (1997), found that subjects with LI maintained topics introduced by an adult by providing some level of response, although children with LI contributed more inappropriate responses than did their typically developing peers. In addition, children with LI were better at maintaining topics that were introduced both verbally and with an object, as opposed to topics that were only introduced verbally. Typically developing children did not show this pattern. Bishop, Chan, Adams, Hartley, and Weir (2000) and Rosinski-McClendon and Newhoff (1987) found that children with specific language impairment (SLI) responded to conversational probes, although their responses were pragmatically inappropriate. Adams and Bishop (1989) found that children with LI and age-matched peers maintained topics, although these authors also found that children with LI were more likely than their peers to produce statements that did not require a response from the adult, which was identified as an immature strategy. A common theme that was found across many studies is that children with LI were responsive to their speaking partner's topic in conversation, but they were more likely to employ immature strategies or make inappropriate comments (Adams & Bishop, 1989; Bishop et al., 2000; Brinton et al., 1997; Rosinski-McClendon & Newhoff, 1987). Other researchers noted additional differences in conversational behavior among children with LI, Edmonds and Haynes (1988) found that children with LI differed slightly as they incorporated more topic reintroductions than their peers, which the authors suggested might be due to several possibilities, including immature linguistic skills and

difficulties with topic closure. Radford and Tarplee (2000) also found extensive use of topic introductions as a conversational behavior in their case study of a boy with pragmatic difficulties. It seems clear then, that children with LI exhibit differences when engaging in conversation in terms of inappropriate or atypical comments, and a higher occurrence of topic introductions and reintroductions.

The aforementioned studies all observed topic management behaviors of children when in the context of interaction with adults. With regard to peer interaction, children with LI have been found to display different behaviors in conversation when interacting with conversational partners of different skill levels. Bruce, Hansson, and Nettelbladt (2010) compared topic management behaviors (i.e., assertiveness, responsiveness, and reciprocity) in children with LI as they engaged in conversation with age-matched peers of a higher language level and younger, language-matched peers. These researchers found that the conversations with age-matched peers showed higher levels of responsiveness and coherence than did conversations with younger peers. Bruce et al. attributed this trend to the greater degree of assertiveness children with LI showed when interacting with younger children. In other words, when the children with LI led out in the conversation, the interactions were less sophisticated. A later study showed similar findings (Bruce, Nettelbladt, & Hansson, 2012). These studies suggested that children with LI were greatly influenced by the abilities of their conversational partners.

In order to further consider topic manipulation in children with LI, the current study investigated the ability of five children to maintain topics introduced by an adult in conversation. The following research questions were posed: Would the children with LI appropriately maintain the examiner's introduced topics? What pattern of topic maintenance, change, and shading would the children demonstrate in response to the introductions? Would the ability to maintain

and appropriately manage topic differ in response to topics introduced verbally and topics introduced both verbally and with an object?

Method

The data for this study were gathered as part of a larger project that evaluated the efficacy of a social communication intervention. Approval was obtained from the Brigham Young University Institutional Review Board for Human Subjects for all participant recruitment methods and study procedures. Five children who participated in the larger study also participated in this research, which considered the children's ability to manipulate topics in conversation. The graduate student clinician who provided the intervention for the larger social communication intervention also administered the topic manipulation probes that were used in this study. Two doctoral level speech-language pathologists from Brigham Young University and a certified school speech-language pathologist provided supervision throughout both studies.

Participants

One boy and four girls participated in this study. At the beginning of the study, participants' ages ranged from 5:11 (years:months) to 10:1. Of the four girls, three were biological sisters (M.K., Al.K., Ad.K.). The participants attended a public elementary school and were recruited by the school speech-language pathologist to participate in the intervention that was associated with the larger study, as previously mentioned. The speech-language pathologist selected children with LI who also exhibited social interactional deficits. General intellectual disability was ruled out by a school district psychologist, and all participants passed hearing screenings administered by the school speech-language pathologist. When the participants were selected, the speech-language pathologist contacted the students' parents to determine their

interest in their child's participation the intervention. Written permission and consent were obtained from the parents, and the names of the children were provided to the researchers.

The Clinical Evaluation of Language Fundamentals-5 (CELF-*5*; Semel, Wiig, & Secord, 2013) and the Children's Communication Checklist-2 (CCC-2; Bishop, 2006) were administered to each child. The CELF-5 was used to determine each child's general level of language, and the CCC-2 was used to document each child's social communication abilities. The children's scores on these measures are reported in Table 1. In addition, subtests from the CELF-5 can be found in Appendix A.

Table 1

Children's Communication Checklist-2 (CCC-2; Bishop, 2006) and Clinical Evaluation of Language Fundamentals-5 (CELF; Semel, Wiig, & Secord, 2003) Scores

	Participants				
Instruments	J.S.	M.K.	Ad.K.	Al.K.	S.S.
CCC-2[a] Subtests					
Speech	37	1	1	1	1
Syntax	2	1	1	9	0
Semantics	2	2	1	5	0
Coherence	2	2	16	2	1
Initiation	16	25	37	50	0
Scripted language	50	50	37	25	1
Context	3	2	16	25	1
Nonverbal communication	4	1	9	16	1
Social relations	6	1	37	16	5
Interests	11	25	91	50	1
GCC[b]	4	1	2	4	1
SIDI[c]-scaled score	7	12	36	15	5
CELF-5[d] Core percentile	7	14	23	8	2

Note. [a]Children's Communication Checklist-2 (CCC-2). [b]General Communication Composite. [c]Social Interaction Difference Index. [d]Clinical Evaluation of Language Fundamentals-5 (CELF-5).

J.S. (5:11). J.S., a Caucasian female, was initially identified with developmental delay[1], LI, and attention deficit hyperactivity disorder (ADHD). J.S. attended a special needs preschool at age 4, where she was evaluated and determined to have delays in cognitive ability, social/emotional development, and receptive/expressive language. At the time of the testing, J.S.'s diagnosis included LI, and she attended mainstream kindergarten and received pull-out services for both reading and speech and language intervention. J.S.'s goals in speech and language therapy focused on improving her articulation and language skills.

J.S.'s scores from the CCC-2 indicated she had difficulty with all subtests, with the exception of scripted language, interests, and speech. J.S. scored in the 2nd percentile of the syntax, semantics, coherence, and nonverbal communication subtests, and she scored in the 1st percentile in the context subtest. J.S.'s general communication composite (GCC) of the CCC-2 was in the 4th percentile. On the CELF-5, J.S. scored in the 7th percentile for the core language score.

The clinician noted that J.S. inconsistently responded to questions and comments and that her responses were often off-topic. She sometimes had difficulty attending, and she required support to complete some tasks.

M.K. (6:7). M.K., a Caucasian female, was identified with LI and specific learning disability (SLD) at the age of 5:7. At the time of testing, M.K. attended the mainstream first grade classroom while also attending self-contained resource for written language and math (3 hour maximum). M.K. also received speech and language services through the school, and her

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[1] The school district used the diagnosis of developmental delay to quality children for early intervention services, which diagnosis was later changed as appropriate.

goals included language and articulation goals. In addition, M.K. received services to support her reading.

M.K.'s test scores from the CCC-2 indicated difficulty with most subtests. M.K. scored in the 2nd percentile in the semantics, coherence, and context subtests; and she scored either in the 1st percentile or lower in the speech, syntax, nonverbal communication, and social relations subtests. However, M.K.'s scores were within normal limits in the initiation, scripted language, and interests subtests. Overall, M.K.'s GCC was in the 1st percentile. On the CELF-5, M.K. scored in the 2nd percentile or lower on all subtests, and her core language score was in the 14th percentile.

M.K.'s clinician reported that she typically spoke softly in both the classroom and during therapy, and that M.K. rarely initiated verbal interactions. M.K. was also reported to express little emotion and was judged to have difficulty comprehending others' emotions. During typical interaction with the school speech-language pathologist, M.K.'s responses were often delayed, incomplete, and off topic.

Ad.K. (7:11). Ad.K., a Caucasian female, was identified with LI and SLD in kindergarten at age 6:4. At that time, she attended resource for written language and speech and language intervention. At the time of the study, Ad.K. attended second grade in the mainstream classroom and received services for articulation and language impairment. In addition, Ad.K. received additional reading intervention services at the beginning of second grade.

Ad.K.'s scores from CCC-2 indicated difficulty in several subtests. She scored in the 1st percentile in the syntax and semantics subtest, and she scored lower than the 1st percentile in the speech subtest. Ad.K. scored in the 9th percentile in nonverbal communication, and she scored in the 16th percentile in the coherence and context subtests. Ad.K.'s highest score was in the

interest subtest, where she scored in the 91st percentile. Ad.K.'s score was also within average limits in the initiation, scripted language, and social relations subtests. Her GCC score for the CCC-2 was in the 13th percentile. In the CELF-5, Ad.K.'s core language score was in the 23rd percentile.

The clinician described Ad.K. as a sociable and friendly girl. However, she generally was found to contribute little to conversation. The clinician hypothesized that this was the case due to her difficulty in interpreting and inferring information from her listeners' responses.

Al.K. (10:1). Al.K., a Caucasian female, was identified with LI and delayed phonological processes in first grade. At age 8;0, diagnostic testing indicated SLD, and Al.K. began receiving intervention for reading. Al.K. continued to receive speech and language services and reading intervention at the time of the current study.

In the CCC-2, Al.K. scored in the 1st percentile in the speech subtest, the 2nd percentile in the coherence subtest, and the 5th percentile in the semantics subtest. Al.K. also demonstrated difficulties with syntax, where she scored in the 9th percentile. In addition, Al.K. scored in the 16th percentile in the nonverbal communication and social relations subtests. Al.K.'s score was within normal limits in the scripted language, context, initiation, and interests subtests. Her GCC for the CCC-2 was in the 7th percentile. Regarding the CELF-5, Al.K.'s core language score was in the 8th percentile.

The clinician noted that Al.K. had friends and participated in social conversation, although she contributed little additional information to conversations and had difficulty inferring the emotional reactions of others.

S.S. (9:6). S.S., a Caucasian male, was homeschooled until second grade, when he was enrolled in a local public elementary school at age 8. He was initially diagnosed with high-

functioning autism at age 5 by his pediatrician. At age 8, a neuropsychologist at Primary Children's Medical Center in Salt Lake City, Utah, confirmed the diagnosis of autism, but his current educational team disagreed with the diagnosis as he displayed neither repetitive or stereotypical behavior nor an inability to self-monitor. At the time of the study, S.S. was identified with LI, and he was receiving speech and language intervention for language and articulation goals. At 9:5, S.S. was identified with SLD, and he began receiving services for written language, reading, and math.

S.S.'s subtest scores for the CCC-2 were either at or below the 5th percentile, and his GCC score fell in the 1st percentile. On the CELF-5, S.S.'s core language score was in the 2nd percentile.

The clinician noted that S.S. willingly interacted in conversation, although he had difficulty adjusting to topics that were initiated by others. The clinician also reported that S.S. was somewhat self-aware of his inappropriate behavior, although he was generally impulsive in the moment. Finally, S.S. was found to have difficulties with interpreting expressions, voice inflections, and nonverbal responses of his conversational partner.

Procedure

The topic tasks were presented to each child in a small quiet room in the elementary school during normal school hours. In individual interactions with each child, an adult examiner presented two topic introduction probes. For each probe, the examiner presented a topic and then allowed the child time to respond. During the interactions, each child was presented with both a verbal and nonverbal topic probe. This study followed a similar protocol to the Brinton, et al. (1997) study.

The interaction began with the examiner's statement, "I want to tell/show you something." When the child attended to the clinician's request for attention, the clinician introduced either a verbal or nonverbal (object-verbal) topic. The examiner then provided minimal contributions to the conversation to allow the child to manipulate the topic as he or she desired. The topic segment was then closed after three conversational passes (back channel responses or topic closure devices), a five-second pause for verbal topics or ten-second pause for object-verbal topics, or after 45 seconds of the child's first response to the topic probe. Afterward, the examiner introduced the next topic probe, and the child was allowed to respond. As before, the examiner ended the conversational interaction following the aforementioned criteria. Examples of object-verbal and verbal topic probes follow:

- Object-verbal: "My mother gave me this for my birthday. I don't know what it is!" *(Examiner places an unusual object on the table)*

- Verbal: "Yesterday I went to the drive through at Burger King. I got an ice cream cone. When I was driving away, I dropped it. I got ice cream all over myself!"

Analysis

The transcriptions of the interactions that proceeded from each topic probe formed the database of this study. The utterances were transcribed and divided using the conventions as described in Brinton and Fujiki (1984) and Smith (2015), which are provided in Appendix B. Each utterance was then analyzed to determine the relation to the initial topic probe by utilizing the conventions from Brinton et al. (1997) and Brinton and Fujiki. The various classifications that were used to distinguish each utterance were *topic maintenance, new topic introduction, topic shading,* and *back-channel response*. Utterances that did not fit in these categories were classified as *no response* or *other*. In addition, each utterance was also judged to be either

appropriate or *inappropriate*. The protocol used for topic category analysis is provided in Appendix C.

Topic maintenance. Utterances were considered to maintain the topic if they either collaborated with or incorporated elements of the topic introduced. Collaborating utterances were defined as utterances that either acknowledged or repeated the topic content without contributing additional information (collaborating discourse topic; Keenan & Schieffelin, 1976), and utterances that added new information to the topic were identified as incorporating (incorporating discourse topic; Keenan & Schieffelin, 1976). Examples of topic maintenance in collaborating and incorporating utterances follow:

Examiner: Oh, I like to watch TV.

Child: Oh, you like TV. (Collaborating)

Examiner: Last night I went to Walmart. I put some milk in my cart. There was a leak in the milk carton, and the milk got all over everything!

Child: Cause it have a hole because I think somebody got a pencil and poke! (Incorporating)

New topic introduction. Utterances that were unrelated to the topic probe were regarded as topic changes or new topic introductions. These topical changes occurred either through asking questions or by stating unrelated comments. An example of a topic introduction is provided below:

Examiner: The milk dripped all over everything!

Child: Cause it's a hole because somebody stab it.

Examiner: Is that what happened?

Child: Mm-hm.

Examiner: Hmm, okay.

Child: Do you know how to drive a car? (New topic introduction)

Topic shade. Utterances that shifted the topical focus of the conversation while maintaining an element of the preceding utterance were identified as topic shading (Keenan & Schieffelein, 1976). An example of topic shading is provided below. In this example, the child maintained an element of the original topic of attending the movie theater while shifting the focus of the conversation from watching the movie to eating treats at the theater:

Examiner: Oh, I went to the movies last weekend. I saw a really funny show.

Child: What it called?

Examiner: It was called Monkeys.

Child: Do you eat popcorn?

Back-channel response. An utterance was considered a back-channel response if it did not further the topic, if it added little or no information, or served as a "filler" in the conversation. An example of a back-channel response follows:

Examiner: Last week my brother took me to a movie. It was so scary!

Child: Mm-hm. (Back-channel response)

No response/other. An utterance was categorized as a "no response" when a child said "I don't know" or did not continue the conversation. An utterance was categorized as "other" when it did not fit within the other categories.

Examiner: There was a leak in the milk carton, there was a leak in the milk carton, and the milk dripped all over everything!

(9-second pause)

Child: I don't know. (No response)

Examiner: I found this in a drawer in my house.

Child: Ah! *(Child picks up light and drops it.)* (Other)

Appropriate. Utterances were identified as appropriate if they clearly referred to the current topic in a comprehensible, pragmatically acceptable manner. Both utterances that maintained or shaded the topic could be considered appropriate.

Inappropriate. Utterances were considered inappropriate if they did not acknowledge the topic, if they did not contain clear referents to the topic, or if they were socially inappropriate. In addition, utterances that were confabulated or incomprehensible were also judged as inappropriate (Brinton et al., 1997). An example of an inappropriate utterance is provided:

Examiner: So last night I went to the grocery store. I put some milk in my cart. There was a leak in the milk carton, and milk dripped all over everything!

Child: Hm. And, also I wasn't there like on Wednesday. In fact, I play on the computer for like um six hours. (New topic introduction with no reference to examiner's topic, referents are not introduced adequately.)

The following analyses were performed for each child. To address the question concerning the children's maintenance of the examiner's introduced topics, each child's response to the topic introduction was judged according to its appropriateness in maintaining the topic. Responses were considered appropriate if they adequately acknowledged and maintained the examiner's introduction.

To address the question regarding the children's topic management patterns, each utterance was judged and categorized according to the topic categories of topic maintenance, new topic introduction, topic shade, back-channel response, other, and no response. The total

number of utterances for each category was then converted to a percentage in order to depict the proportion of each child's usage of the various topic categories, thereby illustrating the pattern that each child employed in the topic probes.

Finally, each utterance was also judged on its appropriateness in order to determine if a difference existed between the topics presented with an object (object-verbal) and the topics presented only orally (verbal). In addition, the number and percentage of utterances across the topic categories was also calculated and compared between the object-verbal and verbal topic probes to illustrate differences.

Reliability

Two graduate students independently transcribed 20% of the transcripts. The agreement between the word-by-word transcriptions was calculated for 10% of the transcripts, and the remaining 10% of the transcriptions were used to calculate the utterance-by-utterance agreement. Using the formula A/N x 100, where A is the number of word agreements and N is the total number or words, the interexaminer reliability for the word-by-word agreement was 92%. The utterance-by-utterance agreement was 90%. In addition, two graduate students also analyzed 20% of the transcripts for coding the topic management categories and the appropriateness of the utterances, and agreement was 88% for the topic categories and 94% for the appropriateness of utterances.

<div align="center">

Results

</div>

The results from the analysis of each subject's performance in response to the topic elicitation probes are presented individually. Each child's initial maintenance of the topics introduced, topic management patterns, and utterances devoted to various topic manipulation categories are presented.

J.S.

Initial maintenance of topic probes. Table 2 shows that J.S. maintained 11/13 verbal-only probes and 12/13 object-verbal probes. J.S. introduced new topics only when responding to the verbal topic probes. In addition, J.S. shaded topics in both verbal and object-verbal topic probes, although she did this more frequently in response to the second object-verbal probe.

Topic manipulation patterns. Table 3 shows that J.S. devoted the greatest percentage of utterances to maintaining the topic probes introduced by the examiner. When J.S. introduced new topics in the verbal probes, she maintained those new topics only briefly. Likewise, when she occasionally shaded topics in both verbal probes and the first verbal-object probe, she maintained those shaded topics briefly. In the second verbal-object probe, however, she shaded the topic 5 times and 20% of her utterances were devoted to those shaded topics. She produced some back-channel responses in response to all probes, but these were more numerous in the verbal-object probes. In general, she produced approximately twice as many maintaining utterances in response to object-verbal topic introductions as she did to verbal topics. Similarly, she produced a higher percentage (98%) of appropriate utterances in response to object-verbal probes than she did to verbal probes (85%).

M.K.

Initial maintenance of topic probes. Table 4 shows that M.K. maintained 13/18 verbal-only topics across both trials and 17/18 object-verbal topics across both trials. M.K. introduced 11 new topics in response to the first set of verbal topic probes. She provided a few new topics across all other probes and occasionally shaded topics.

Table 2

J.S.'s Responses to Topic Introduction Probes

Topic introduction probe	Topics maintained /Total	New topics introduced	Shaded topics Introduced	Appropriate utterances /Total utterances
Verbal Probe 1	5/6	6	1	36/41 (88%)
Verbal Probe 2	6/7	2	1	35/42 (83%)
Obj-verbal Probe 1	6/6	0	1	45/45 (100%)
Obj-verbal Probe 2	6/7	0	5	67/69 (97%)

Table 3

J.S.'s Utterances Devoted to Topic Manipulation Categories

Topic introduction probe	Maintain	New topic	Shade	Back-channel
Verbal 1	18 (44%)	8 (20%)	1 (2%)	9 (22%)
Verbal 2	25 (60%)	4 (10%)	3 (7%)	9 (2%)
Object-verbal 1	37 (82%)	0 (0%)	1 (2%)	7 (16%)
Object-verbal 2	50 (72%)	0 (0%)	14 (20%)	3 (4%)

Note. Number in parentheses indicates the percentage of the topic category utterances given the total number of utterances.

Topic manipulation patterns. Table 5 shows that M.K. devoted the greatest percentage of utterances to maintaining the topic probes introduced by the examiner. In response to the first and second verbal probes, she devoted 34% and 23% of her utterances to new topics, and she produced few back/channel responses. In general, she produced more maintaining utterances in

response to object-verbal topic introductions than she did to verbal topics. In addition, as Table

4 shows, 61/79 (77%) of M.K's utterances were considered appropriate in the verbal topic probes

and 78/87 (90%) of her utterances were considered appropriate in the object-verbal topic probes.

Table 4

M.K.'s Responses to Topic Introduction Probes

Topic introduction probe	Topics maintained /Total	New topics introduced	Shaded topics introduced	Appropriate utterances /Total utterances
Verbal Probe 1	6/9	11	3	37/53 (70%)
Verbal Probe 2	7/9	2	1	24/26 (92%)
Obj-verbal Probe 1	8/9	2	3	46/53 (87%)
Obj-verbal Probe 2	9/9	3	1	32/34 (94%)

Table 5

M.K.'s Utterances Devoted to Topic Manipulation Categories

Topic introduction probe	Maintain	New topic	Shade	Back-channel
Verbal 1	25 (48%)	18 (35%)	9 (17%)	0 (0%)
Verbal 2	19 (73%)	6 (23%)	1 (4%)	0 (0%)
Object-verbal 1	37 (70%)	2 (4%)	9 (17%)	3 (6%)
Object-verbal 2	25 (74%)	2 (6%)	7 (21%)	0 (0%)

Note. Number in parentheses indicates the percentage of the topic category utterances given
the total number of utterances.

Ad.K.

Initial maintenance of topic probes. Table 6 shows that Ad.K. maintained all topics that

the examiner introduced in both trials. This was the case for topics introduced verbally or with

an object. Ad.K. introduced or shaded a few topics in each probe, but she did this most often in response to the first verbal probe.

Topic manipulation patterns. Table 7 shows that Ad.K. devoted the greatest percentage of utterances to maintaining the topic probes introduced by the examiner. In response to the first verbal probe, she devoted 23% of her utterances to new topics, and she produced fewer utterances that consisted of back/channel responses or shaded topics. In both probes, she produced more than twice as many maintaining utterances in response to object-verbal topic introductions as she did to verbal topics. Most of Ad.K's utterances were considered appropriate, with the exception of one utterance that was considered unintelligible.

Table 6

Ad.K.'s Responses to Topic Introduction Probes

Topic introduction probe	Topics maintained /Total	New topics introduced	Shaded topics introduced	Appropriate utterances /Total utterances
Verbal Probe 1	9/9	6	1	44/44 (100%)
Verbal Probe 2	9/9	2	1	25/25 (100%)
Obj-verbal Probe 1	9/9	1	3	62/62 (100%)
Obj-verbal Probe 2	9/9	0	2	56/56 (100%)

Al.K.

Initial maintenance of topic probes. Table 8 shows that Al.K. maintained all of the topics with exception to one topic in the second object-verbal probe. Al.K. did not introduce any new topics across all probes and topic types, and she shaded few topics in response to both the verbal and object-verbal topic types.

Table 7

Ad.K.'s Utterances Devoted to Topic Manipulation Categories

Topic introduction probe	Maintain	New topic	Shade	Back-channel
Verbal 1	23 (52%)	10 (23%)	3 (7%)	8 (18%)
Verbal 2	20 (80%)	2 (8%)	2 (8%)	1 (4%)
Object-verbal 1	50 (81%)	2 (3%)	4 (6%)	6 (10%)
Object-verbal 2	53 (95%)	0 (0%)	2 (4%)	1 (2%)

Note. Number in parentheses indicates the percentage of the topic category utterances given the total number of utterances.

Topic manipulation patterns. Table 9 shows that Al.K. devoted the greatest percentage of utterances to maintaining the topic probes introduced by the examiner. In response to the first and second object-verbal probes, she devoted 26% and 28% of her utterances to shading the topic. She produced very few back-channel responses. In each probe, Al.K. produced the same number of utterances in response the verbal and object-verbal probes (13 in the first probes and 18 in the second probes). Most of Al.K's utterances were considered appropriate, with the exception of one utterance in the second object-verbal probe.

S.S.

Initial maintenance of topic probes. Table 10 shows that S.S. maintained 11/17 topics introduced in the verbal probe trials and 16/17 topics introduced in the object-verbal trials. S.S. often introduced new topics in the verbal topic probes, but he introduced no new topics during the object-verbal topic probes. In addition, S.S. shaded the topic across both verbal and object-verbal topic probes. However, S.S. shaded the most during the first object-verbal topic probes and did not shade the topic at all in the second verbal topic probe.

Table 8

Al.K.'s Responses to Topic Introduction Probes

Topic introduction probe	Topics maintained /Total	New topics introduced	Shaded topics introduced	Appropriate utterances /Total utterances
Verbal Probe 1	6/6	0	1	16/16 (100%)
Verbal Probe 2	7/7	0	1	20/20 (100%)
Obj-verbal Probe 1	6/6	0	2	19/19 (100%)
Obj-verbal Probe 2	6/7	0	1	24/25 (96%)

Table 9

Al.K's Utterances Devoted to Topic Manipulation Categories

Topic introduction probe	Maintain	New topic	Shade	Back-channel
Verbal 1	13 (81%)	0 (0%)	2 (13%)	1 (6%)
Verbal 2	18 (90%)	0 (0%)	1 (5%)	1 (5%)
Object-verbal 1	13 (68%)	0 (0%)	5 (26%)	1 (5%)
Object-verbal 2	18 (72%)	0 (0%)	7 (28%)	0 (0%)

Note. Number in parentheses indicates the percentage of the topic category utterances given the total number of utterances.

Topic manipulation patterns. Table 11 shows that S.S. devoted the greatest percentage of utterances to introducing new topics in the verbal topic probes, and he devoted the greatest percentage of utterances to maintaining the topic probes in the object-verbal probes. S.S. devoted 74% of his utterances to new topics and 14% of his utterances to maintaining the topic in the second verbal topic probe. In the second object-verbal topic probe, he devoted 48% of his utterances to maintaining the topic and 35% of his utterances to shading the topic. S.S. provided

some back-channel responses in one verbal probe and both object-verbal probes. In addition,

79/107 (74%) of S.S.'s utterances to the verbal trials were considered appropriate, and 97/108

(90%) of S.S.'s utterances to the object-verbal trials were considered appropriate.

Table 10

S.S.'s Responses to Topic Introduction Probes

Topic introduction probe	Topics maintained /Total	New topics introduced	Shaded topics introduced	Appropriate utterances /Total utterances
Verbal Probe 1	8/9	6	3	45/57 (79%)
Verbal Probe 2	3/8	8	0	34/50 (68%)
Obj-verbal Probe 1	9/9	1	5	47/56 (84%)
Obj-verbal Probe 2	7/8	1	2	50/52 (96%)

Table 11

S.S.'s Utterances Devoted to Topic Manipulation Categories

Topic introduction probe	Maintain	New topic	Shade	Back-channel
Verbal 1	15 (26%)	20 (35%)	13 (23%)	9 (16%)
Verbal 2	7 (14%)	37 (74%)	0 (0%)	6 (12%)
Object-verbal 1	30 (54%)	5 (9%)	14 (25%)	6 (11%)
Object-verbal 2	25 (48%)	2 (4%)	18 (35%)	7 (13%)

Note. Number in parentheses indicates the percentage of the topic category utterances given the total number of utterances.

Discussion

The ability to manipulate topic in conversation is an essential element in felicitous social interaction (Bedrosian, 1993; Gan et al., 2009; Goodenough & Weiner, 1978; Palomares et al., 2006). Children with LI may have difficulty managing topic in conversation and thus appear to be less responsive and accommodating to their conversational partners (Adams & Bishop, 1989; Bishop et al., 2000; Brinton et al., 1997; Rosinski-McClendon & Newhoff, 1987). This study described the responses of five children with LI to topic probes introduced by an adult in conversation. Each child responded to two types of topics, verbal topics that were presented only orally and object-verbal topics that were presented both orally and with an object. Each participant's responses were then analyzed for appropriateness and categorized into topic management categories. The participants' results will be discussed individually, and general trends will be described.

Individual Participant Findings

J.S. Although J.S. appropriately responded by maintaining most of the verbal and object-verbal topics, she was unresponsive to two verbal topics and one object-verbal topic. For example, in response to one verbal topic, she responded as follows:

Examiner: Last week my brother took me to a movie. It was so scary!

J.S.: Mm-hm. (Back-channel response)

J.S.: Mmm. (Back-channel response)

On the occasion that she did not maintain an object-verbal topic, she commented on the object, without any mention of the problem that was associated with the object as follows:

Examiner: My sister wants me to wear these. I don't know about that. *(Examiner presents a pair of gorilla boots.)*

J.S.: Monsters. Monster feet. *(J.S. explores the boots.)*

J.S. typically responded to the examiner's topic probe with a maintaining statement that acknowledged the probe, and after the examiner's response to her conversational turn, J.S. either provided new topics or back-channel responses in order to continue the conversation with the examiner. However, even though J.S. maintained most of the topic probes, she devoted twice as many utterances to object-verbal topics than she did to verbal topics. That is, she was able to maintain object-verbal topics longer by examining the object and making comments or asking questions about the object. In addition, a greater percentage of her contributions to object-verbal topics were appropriate in comparison to verbal topics.

M.K. M.K.'s topic patterns showed some variability across the first and second probes and across the verbal and the object-verbal probes. In the first verbal probe, M.K. usually maintained the examiner's topic with a question and then followed the examiner's neutral response with new topic introductions or with topic shading (although shades occurred less frequently). Because of this pattern, M.K. provided more new topics in the first verbal probe as compared to the first object-verbal probe. It is notable that M.K. also produced the highest percentage of inappropriate responses in the first verbal probe. This was due in large part to structural or speech sound modifications. An example of a typical interaction in the first verbal probe is provided:

Examiner: I went running in the park yesterday, and I saw a dog, and it almost bit me!

M.K.: What the dog kind of?

Examiner: What kind of dog?

Uninterpretable utterances were much less frequent in the other probes. It was observed that M.K.'s structural and speech sound difficulties improved in the second verbal and verbal-

object probes. Overall, however, the presence of the physical object facilitated M.K.'s ability to provide appropriate utterances and maintain the topic.

Ad.K. Ad.K. appropriately maintained all topic introductions, and she produced appropriate utterances across all topic probes. However, she provided twice as many utterances in the object-verbal probe compared to the verbal probe.

Ad.K. generally responded readily to the verbal probes by asking for additional information or clarification and then suggesting a course of action or offering an explanation. After the examiner's response, Ad.K. usually did not continue the topic and would either introduce a new topic or wait for the examiner to comment. An example of a typical interaction is provided:

Examiner: Last night I went out for pizza. Well, I dropped it all over the floor!

Ad.K.: What happened?

Examiner: I dropped it on the floor!

Ad.K.: And?

Examiner: It just splattered!

Ad.K.: You shoulda bought another one .

Examiner: Hm.

(Brief pause)

Examiner: Yeah.

Ad.K.: I want candy.

In object-verbal probes, Ad.K. responded to the examiner's introduction by exploring the objects and asking questions and making comments about them. With the presence of the object, Ad.K. contributed more in these interactions as compared to the verbal probes.

Al.K. Al.K. maintained all topic introductions with appropriate utterances across all probes, with the exception of one utterance in the second object-verbal probe. On that occasion, Al.K. commented only on the object but did not address the examiner's statement. Unlike the other participants, she produced the same number of utterances across the verbal and the object-verbal topic probes. It was notable that Al.K. responded to the initial topic probes by providing maintaining or back-channel responses, she never introduced new topics, and she infrequently shaded topics. She did devote more utterances to her shaded topics in the object-verbal probes when compared with the verbal probes. A typical interaction with Al.K. is provided below:

Examiner: I was crossing the street in the crosswalk, and a car came really fast! It almost hit me!

Al.K.: Why wasn't you on the sidewalk?

Examiner: I was crossing in the crosswalk

Al.K.: Oh.

Al.K.: Guess he didn't see you.

Examiner: I guess so.

S.S. S.S. maintained most of the topics introduced with exception of the second verbal probe. He provided many more appropriate utterances in response to the object-verbal probes in comparison to the verbal probes, and a greater proportion of his utterances were appropriate when discussing object-verbal topics.

S.S. typically responded to the verbal probes with either a maintaining utterance or a back-channel response. After the examiner's conversational turn, S.S. often introduced a new topic, frequently without establishing any referents. Consequently, his new topic introductions were sometimes unclear. An example of S.S.'s response to a verbal probe follows:

Examiner: So last night I went to the grocery store. I put some milk in my cart. There was a leak in the milk carton, and milk dripped all over everything!

S.S.: Hm.

S.S.: And also I wasn't there like on Wednesday.

S.S.: In fact, I play on the computer for like um six hours.

Examiner: Hm.

S.S. demonstrated a different conversational pattern in the object-verbal probes. He generally responded to these probes by exploring the object and making comments about it. S.S. also introduced fewer new topics than he did in response to the verbal topic probes, and he consequently produced fewer unclear referents. However, S.S. did demonstrate difficulty with inappropriately shading the topic. This typically occurred as he would explore the object while providing a sort of monologue, and an example is provided:

Examiner: I found this yucky thing.

S.S.: I think it's play dough.

Examiner: Hm.

C: With nuts in it

S.S.: Hm.

Examiner: Really?

S.S.: Yeah.

S.S.: It looks like cookie dough.

Examiner: Ah.

S.S.: Oh no the nut, oh no the nut is melting! (*S.S. plays with the object.*)

S.S.: "Nehhh!" it squeaks that. (*S.S. is referring to the object.*)

Examiner: Ha-ha

S.S.: Now he's (one syllable), and now he's gone forever.

S.S.'s responses reflect findings reported by Brinton et al. (1997). They noted that 6 to 7-year-old children with LI would go beyond the topic's parameters and contribute inappropriate utterances after acknowledging the topic. In this respect, S.S.'s behavior was not responsive to his conversational partner.

General Implications

In general, the children were responsive to most of the topic probes. However, only one child, Ad.K., maintained all of the topics. The other children maintained a greater proportion of the object-verbal topics than the verbal topics. In addition, most of the children had more to say about object-verbal topics than they did about verbal topics. For example, S.S., Ad.K., and J.S. produced more than twice as many utterances in response to verbal-object topics than they did to the verbal-only topics.

When responding to object-verbal topics, the children relied on the physical object to help them relate to the examiner, which subsequently extended the conversation. In response to verbal-only topic introductions, the children generally maintained the initial topic for one or two conversational turns and then produced only back-channel responses or introduced new topics.

This pattern reflected findings by Brinton et al. (1997) who found that 6 to 7 year-olds with LI produced a greater proportion of appropriate utterances in response to object-verbal topics than they did to verbal topics. It should be noted, however, that Brinton et al. (1997) did not observe a similar trend for typically developing 4 to 5-year-olds or 6 to 7-year-olds. It may be the case that children with LI are particularly dependent on the shared focus on a physical object when maintaining topic.

The findings of these case studies underscore the importance of topic manipulation in discourse. When the children did not acknowledge topic introduction or produced unclear or otherwise inappropriate utterances, they appeared nonresponsive to the examiner, and the conversational exchange seemed awkward. With the exception of Ad.K., the children in this study demonstrated immature topic manipulation patterns that could be expected to have negative social ramifications.

Limitations and Suggestions for Future Research

The current study described a series of case studies. Although all of the participants were identified with LI, they comprised a heterogeneous group of children with varying ages and abilities. Generalizability of the current findings to a wider population of children with LI has yet to be established. In addition, both the verbal and object-verbal topic probes presented may have elicited varying levels of interest from the participants, which may have influenced their conversational behavior. Future research is warranted to determine the clinical usefulness of semi-structured verbal and object-verbal probes such as the one employed in this study. In addition, further research is needed to design and implement intervention procedures to improve the ability to maintain topic appropriately in conversations.

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APPENDIX A:

Individual Participant CELF-5 Subtest Scores

Table 12

Participants' CELF-5 Subtest Test Scores

Subtests	Participants				
	J.S.	M.K.	Ad.K.	Al.K.	S.S.
Sentence Comprehension	8	8	-	-	-
Word Structure	6	11	-	-	-
Recalling Sentences	4	7	7	7	4
Formulated Sentences	6	3	7	6	3
Word Classes	-	-	13	7	7
Semantic Relationships	-	-	12	5	4

APPENDIX B:

Rules for Dividing Utterances

Brinton, B., Fujiki, M. (1984). Development of topic manipulation skills in discourse.
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A. Utterances are major or minor sentences:
    a. Major sentences: subject-predicate structure, simple or multiple clauses
    b. Minor sentences: social phrases ("hi"), interjections, and back channel responses (murmurs of agreement, brief restatements- things that keep a conversation going but don't really add anything)
B. Any repetition of part of a longer utterance is considered as part of that utterance (i.e. "Yesterday Bob went, Bob went home."
C. A false start is part of the utterance it attempted to start (i.e. "Bob went, Bob went home later").
D. If the utterance is so incomplete that you can't tell what the speaker was going to say, you would transcribe it but not count it as an utterance (count syllables- put # in parenthesis).
E. When two or more speakers are talking at the same time, each utterance is counted separately.
F. Utterance boundaries occur at the end of a phonemic clause also marked by
    a. Drop in pitch or loudness across the entire clause or the final syllable
    b. A final rise in pitch, or question inflection
    c. An unfilled pause (2 seconds)
    d. Lengthening of the final syllable
    e. The use of a stereotyped "ending expression" (such as "you know", "or something")
    f. The completion of a grammatical clause with a subject-predicate combination
    g. The end of a word
    h. Gesture

Additional conventions for utterance division
1. If a conjunction does not link topically related clauses—count each clause as a new utterance with no deletion (all different topics stringed together with "and").
2. By convention: "and, and…" Keep the first "and" even if no deletion, if clauses seem to go together topically. Then if the subject continues "and, and, and" count as separate utterances.
3. Stacked <u>back-channel utterances</u> are considered separate utterances if 1 second separates them (all other utterances must have a 2 second pause to be divided on the basis of pause length).
4. Affirmation and negation occurring at the beginning of an utterance are considered separate utterances if there is a one-second pause or elongation of the word.

5. Tags (with upward intonation) are considered a separate utterance if at least a one second pause precedes the tag.
6. "I see" is considered a separate utterance.
7. Back-channel utterances which overlap a pause within the conversational partner's utterance are considered one utterance. (Back-channel utterances are the filler that generally shows you are listening and interested, e.g., yeah, uh-huh, hmm, okay.)
8. Choice questions (if conversational partner is given less than 2 seconds to respond) are considered as part of the same utterance.
9. In cases in which the meaning suggested by intonation conflicts with syntactic information, intonation overrides syntactic formation.

APPENDIX C:

Protocol for Topic Category Analysis

1. Back-channel
    a. Does not maintain
    b. Little or no information
    c. "Conversation stopper"
    d. Examples: "Woah" "Let's see" "Hm" "Yep"
2. Maintain
    a. Collaborating
        i. Maintains
        ii. No new information
        iii. Example: "That's so cool"
    b. Incorporating
        i. Maintains
        ii. Adds information central to topic
        iii. Example:
            1. E: Last night I went to Walmart. I put some milk in my cart. There was a leak in the milk carton, and the milk got all over everything! C: Cause it have a hole because I think somebody got a pencil and poke!
3. Shade
    a. Must contain a repeated element of the previous utterance
    b. Shared reference
    c. The focus shifts
4. Introduce New Topic
    a. New topic
    b. Is not related or does not maintain the previous topic
5. Appropriateness
    a. Appropriate if: responses are comprehensible, socially appropriate, and contain referents. "New topic introductions that are clear and socially appropriate are always considered appropriate." (Brinton, Fujiki, Powell 1997).
    b. Inappropriate if: clearly confabulated, unclear referents, socially inappropriate, or uninterpretable.
    c. Also inappropriate if a new topic is introduced immediately after the examiner's introduction with no acknowledgement.
6. No response
    a. **NR**
    b. Ex: "I don't know"
7. Other "**O"**

APPENDIX D:

Annotated Bibliography

Adams, C., & Bishop, D. V. (1989). Conversational characteristics of children with
semantic-pragmatic disorder I: Exchange structure, turntaking, repairs and cohesion.
British Journal of Disorders of Communication, 24(3), 211-239.

Purpose of the Work

This study was created to determine conversational features that differentiate children
with LI and children with semantic-pragmatic disorder from typically developing children. In
addition, this study also aimed to assess if there are developmental trends in conversational
features that exist in children with typically developing language.

Method

Participants. There were 57 children, ages 8 to 12 years, with specific language
impairment and 67 control children, ages 4 to 12 years, that participated in the study. Of the
experimental group, 14 of the children were also diagnosed with sematic-pragmatic disorder.
Procedures. Each child worked with an adult examiner on an individual basis. Each
child was shown a set of photographs and then was encouraged to share a similar experience that
he or she had. The conversations were then tape-recorded and transcribed.

Analysis and Results

The transcriptions were then analyzed using a conversation analysis that showed the
relationship between the sequential utterances. The results found that although children with LI
maintained topics, they were less cohesive in conversation and produced utterances that did not
require a response from their conversational partner. In addition, this study found that children
with semantic-pragmatic disorder produced more initiations than the other children.

Conclusions

The authors concluded by proposing that conversational analysis may be a more effective
tool in identifying linguistic abnormalities in children with semantic-pragmatic disorder than
conventional language tests.

Relevance to the Current Work

This work is relevant because it provides a description of its findings of the topic
management patterns of children with LI.

Bedrosian, J. L. (1993). Making minds meet: Assessment of conversational topic in
adults with mild to moderate mental retardation, *Topics in Language Disorders, 13*(3)*,
36-46.

Purpose of the Work

This article provided information on assessing the topic management behaviors of adults with intellectual disabilities.

Summary

The article explained that topic is a fundamental component of conversation. Several functions that topics perform were described, some of which include coordinating actions, regulating conversations, expressing needs, etc. Because topic fulfills so many essential communicative purposes, the use of topic affects how the speaker is perceived as a communicator. The author provided a framework that can be used to assess a speaker's use of topic and described how to assess conversations according to the speaker's use of topic initiations, topic maintenance, and topic changes.

Conclusions

The author concluded that assessing topic manipulation and treating it in intervention is worthwhile because the lack of proficient skills in this area could lead to social difficulties. Treating this could lead to greater independence, greater participation in the community, and improved relationships.

Relevance to the Current Work

This article stressed the importance of topic in conversation and described the assessment of topic manipulation in conversation.

Bishop, D. V. M., Chan, J., Adams, C., Hartley, J., & Weir, F. (2000). Conversational responsiveness in specific language impairment: Evidence of disproportionate pragmatic difficulties in a subset of children. *Development and Psychopathology*, *12*(2), 177-199. doi: 10.1017/S0954579400002042

Purpose of the Work

This study was designed to assess the conversational responsiveness of children with specific language impairment (SLI).

Method

Participants. Eighteen children with SLI, ages 6-8, were compared with 9 children that matched for chronological age and nonverbal skills (CA) and 9 children matched for language level (LA).

Procedures. Each child interacted with an unfamiliar adult examiner who presented three picture prompts that were used to engage the child in conversation. The conversations consisted of approximately 150-220 conversational turns and lasted 7-12 minutes.

Analysis and Results

Each interaction was videotaped, transcribed, and coded for level of conversational responsiveness. This study found that the children in the SLI group were less responsive to adult solicitations than the CA children and they produced fewer nonverbal responses than the LA group. In addition, the analysis found that the SLI group had a lower rate of adequate responses, and their utterances were less appropriate than all other groups.

Conclusions

The authors concluded that although children with SLI can exhibit immature conversational behavior, there is a subgroup that displayed more general communicative difficulties. These children were shown to have a preference for verbal responses that were characterized by pragmatic inappropriateness.

Relevance to the Current Work

This study described differences in conversational behaviors in children with SLI compared to their peers. This study also emphasized how underlying pragmatic problems affect conversational interactions.

Bloom, L., Rocissano, L., & Hood, L. (1976). Adult-child discourse: Developmental interaction between information processing and linguistic knowledge. *Cognitive Psychology, 8*(4), 521-552.

Purpose of the Work

The purpose of this study was to analyze how children form contingent responses to adult input.

Method

Participants. Four children (all aged approximately 19 months at the beginning of the study) participated in the study.

Procedures. Each child was visited for approximately 8 hours every 6 weeks beginning from age 19 months until 36 months, with the exception of one boy who was visited for 5 hours every 3 weeks. The children's utterances were recorded and later examined in relation to the adult's utterances.

Analysis and Results

The children's utterances were analyzed for the presence of semantic or formal relations to the prior adult utterances in addition to other discourse categories. The results found that the children were more likely to produce adjacent speech, and their contingency in responses increased over time. In addition, linguistically contingent speech was found to occur more frequently after questions than statements or comments.

Conclusions

The authors noted that although contingency did increase with age, the child's responses were a product of the child's memory, the child's linguistic processing, and the child's immediate consciousness; and the authors addressed how these factors affected whether a child produced a contingent response. In addition, the authors noted that the adult's input in conversation changed as the children grew older.

Relevance to the Current Work

This article is cited in the current work in the description of development of topic in children in regard to children's increasing capacity to provide contingent responses in conversation.

Brinton, B., Fujiki, M. (1984). Development of topic manipulation skills in discourse. *Journal of Speech and Hearing Research, 27*, 350-358.

Purpose of the Work

The purpose of this study was to evaluate the development of topic manipulation skills in discourse by studying children and adults of various ages.

Method

Participants. The sample included three dyads of males and three dyads of females that represented three age groups: 5:0-5:11, 9:0-9:11, and adult.
Procedures. Each dyad was video- and audiotaped for a 30-minute period after given the instruction to "just talk for a while." The conversations were then recorded, transcribed, and coded for topic manipulation patterns.

Analysis and Results

The number of topics discussed and the mean number of topic reintroductions were found for each dyad, and a large amount of variation was found within each group. The researchers also found that the groups exhibited overlap in all areas. However, trends were noted, and the data showed a decrease in topic introduction and an increase of topic shading with age. In addition, the study found that the ability to utilize topic to continue the conversation increased with age.

Conclusions

The researchers noted developmental patterns in topic manipulation as well as the variation among dyads.

Relevance to the Current Work

This study provided information on the nature of topic manipulation at specific developmental periods. This is important as the current research assesses elementary children across many age levels. In addition, the current work uses this research as an example of topic analysis in discourse.

Brinton, B., & Fujiki, M. (1989). Topic manipulation: Theory and normal development. In K. C. Butler (Ed.), *Conversational management with language-impaired children* (pp. 43-62). Rockville, MD: Aspen.

Purpose of the Work

The purpose of this chapter was to provide a definition of topic and to show how topic is used in conversation. In addition, a description of topic development in children was provided.

Summary

Many definitions of topic were provided, but perhaps the most applicable definition of topic was "a subject of discussion." Topics arise from a myriad of sources (surroundings, previous discourse, and shared information, etc.). To introduce a topic, the speaker must secure the listener's attention, speak clearly, and identify the referents and their sematic relations. Speakers then continue topics by either providing collaborating or contributing discourse. Topics are discontinued when either speaker refuses to contribute additional information or the topic changes. Other essential elements in topic manipulation include cohesion (when the utterances form a unified idea) and coherence (when the conversational turns relate back to the overriding goal). Finally, the development of topic manipulation in children was discussed.

Conclusions

The authors emphasized the central role of topic in conversation as well as developmental patterns.

Relevance to the Current Work

This chapter provided a definition of topic in addition to other explanations regarding the use of topic. The current study used these definitions and explanations to evaluate our subject's topic manipulation skills.

Brinton, B., Fujiki, M., & Powell, J. M. (1997). The ability of children with language impairment to manipulate topic in a structured task. *Language, Speech, and Hearing Services in Schools, 28*(1), 3-11.

Purpose of the Work

The purpose of this study was to compare the responses of children with specific language impairment (SLI) and those of typically developing children in a structured topic maintenance task.

Method

Participants. The study compared three groups of children. The groups included (1) ten children with SLI, ages 6:4-7:4; (2) ten typically developing children, ages 6:4-7:4; and (3) ten typically developing children (ages 4:3-5:4) whose language abilities were similar to those of the children with SLI.

Procedures. An examiner introduced six topics to each child. Three of the topics were introduced by showing the child an object and making a verbal comment, and the other three topics were initiated by making only verbal comments. The examiner then allowed each child to develop the topic.

Analysis and Results

Each interaction was video- and audiotaped and transcribed. The first two minutes of each topic introduction were coded. The structured topic task was a useful method to encourage children with SLI to exhibit their topic manipulation skills in that the children in the group with SLI were not reticent to participate in comparison to the CA and LS group. In addition, this study found that children from all three groups appropriately maintained topics that the examiner introduced. However, the research also found that children with SLI often went beyond the parameters of appropriateness by contributing twice as many inappropriate utterances as the other two groups, and children with SLI had greater difficulty with verbal topics than their peers.

Conclusions

The authors concluded that children with SLI did not talk less than their peers, but they produced more inappropriate utterances than their peers, and had more difficulty with verbal-only topics.

Relevance to the Current Work

This research compared topic manipulation skills of children with LI to children matched for CA and LS. The current study employed a similar task and analysis system.

Bruce, B., Hansson, K., & Nettelbladt, U. (2010). Assertiveness, responsiveness, and reciprocity in verbal interaction: Dialogues between children with SLI and peers with typical language development. *First Language, 30* (3-4), 493-507. doi: 10.1177/0142723710370523

Purpose of the Work

The purpose of this study was to compare the assertiveness and responsiveness of children with specific language impairment (SLI) when interacting with age-matched peers with typical language development (TLD) and language-matched peers with TLD.

Method

Participants. Ten children with SLI (mean age 4;3), 10 age-matched TLD children (mean age 4;6), and 10 language-matched TLD children (mean age 3;4) participated in the study.

Procedures. Each child with SLI interacted with an age-matched peer and a language-matched peer for 10-15 minutes per interaction, and the children were provided a small set of toys with which to play.

Analysis and Results

Each interaction was recorded, and then the recordings were transcribed and analyzed for conversational characteristics including their responsiveness and coherence.

The results indicated that the age-matched peer was more dominant when interacting with the child with SLI, and the child with SLI displayed more responsiveness and coherence during the dialogue. When interacting with the language-matched peer, the children with SLI were more dominant and were less responsive and coherent in conversation.

Conclusions

The authors concluded that conversational behaviors of children with SLI were dynamic and context-dependent. Children with SLI assume different roles in conversation depending on the support they receive from their conversational partners.

Relevance to the Current Work

This study concerned topic manipulation behaviors of children with SLI interacting with different partners.

Bruce, B., Nettelbladt, U., & Hansson, K. (2012). The relationship between language
    skills and interactional skills in children with language impairment. *Journal of
    Interactional Research in Communication Disorders, 3*(2), 195-219. doi:
    10.1558/jircd.v3i2.195

Purpose of the Work

The purpose of this study was to compare the language and interactional skills of children with language impairment (LI) when interacting with age-matched typically developmentally children (TLD) and younger TLD children at two different times.

Method

  Participants. Nine preschool children with SLI, 9 age-matched TLD children, and 9 younger children with similar language levels participated in the study.

  Procedures. Each child with SLI interacted with an age-matched peer and a language-matched peer for 10-15 minutes per interaction, and the children were provided a small set of toys with which to play.

Analysis and Results

  Each interaction was recorded, transcribed, and coded for various conversational properties included responsiveness and coherence. The results found that the dialogues with the age-match peers yielded more coherence and mutual influence in the conversation, and the dialogues with the younger children produced more assertiveness in the children with LI.

Conclusions

  The authors concluded the study by addressing the benefits that arise in both interactional contexts, and they proposed that intervention for children with LI should provide more opportunities to interact with peers of different ages.

Relevance to the Current Work

  This study is relevant to the current work because it shows how interactional behavior changes in children with LI when they are in different conversational contexts.

Cummings, L. (2011). Pragmatic disorders and their social impact. *Pragmatics and
   Society*, *2*(1), 17-36. doi: 10.1075/ps/2/1/02cum

Purpose of the Work

  This article addresses the communicative difficulties of those with pragmatic impairments.

Summary

  Four specific populations with known pragmatic difficulties are discussed in detail: ASD, schizophrenia, traumatic brain injury, and right hemisphere damage

Conclusions

  Deficits in pragmatic disorders have serious implications, including occupational prospects and success and social integration. Children with pragmatic difficulties reported higher loneliness and depressive symptoms and provided fewer reports of friendship.

Relevance to the Current Work

This article examines the social implication of pragmatic disorders. This is relevant to the current study as topic management is an important element of pragmatics, and this study supports the importance of examining pragmatics in communication.

Eckerman, C. O., Davis, C. C., & Didow, S. M. (1989). Toddlers' emerging ways of
achieving social coordinations with a peer. *Child Development*, *60*(2), 440-453.

Purpose of the Study

This study observed the developmental changes in children's social coordination.

Method

Participants. Fourteen dyads of children, ages 16, 20, 23, 28, and 32 months of age participated in the study. There were four male-male dyads, five female-female dyads, and five male-female dyads.
Procedures. A dyad was observed and video- and audio-recorded in a play setting for 16 minutes. Their mothers were also in the room, but were instructed to chat among themselves and only intervene to prevent physical harm.

Analysis and Results

The children's actions and verbalizations were transcribed, and the children's acts and verbalizations were then judged in relation to the previous actions and verbalizations from the play partner. The results found an increase in coordinating and imitative behavior in correlation to the increase oh age in the children.

Conclusions

Imitative acts were identified as a core behavioral strategy for preverbal children in play with peers.

Relevance to the Current Work

This is study is cited by the current work in regards to the developmental process of imitation in the development of topical interactions.

Edmonds, P. E., & Haynes, W. O. (1988). Topic manipulation and conversational
participation as a function of familiarity in school-age language-impaired and normal language peers. *Journal of Communication Disorders*, *21*(3), 209-228.

Purpose of the Study

The purpose of this study was to assess the abilities of children with LI in terms of topic manipulation and conversational participation.

Method

Participants. This study compared 8 kindergarteners to first-grade children (ages 5:6-7:11) with LI to typically developing peers matched for age and ability.

Procedures. The assessment was conducted by leaving a dyad of one child with LI with a matched typically developing child for 15 minutes with the instruction to talk about whatever they like, and this procedure was completed twice for each dyad.

Analysis and Results

Each interaction was audio-recorded, and the recording were transcribed and divided by utterances. The utterances were then categorized according to various topic categories. Afterwards, a content analysis was conducted to assess the children's topic manipulation.

The data analysis found that children with LI were generally not statistically different in their topic manipulation skills. However, one difference that arose was in topic reintroduction; results showed that children with LI reintroduced more topics than their counterparts.

Conclusions

This study offers several explanations for its findings. One explanation offered is that the difference had no clinical importance. Another reason could be the attributed to linguistic immaturity of children with LI, or perhaps that children with LI have difficulty with topic closure. The final hypothesis is that the difference may exist because of the study's methodology.

Relevance to the Current Work

This study compares the conversational behavior of young children with LI to typically developing peers. This study is cited in the current study's literature review in the explanation of the existing findings of children with LI's conversational behavior.

Gan, Z., Davison, C., & Hamp-Lyons, L. (2009). Topic negotiation in peer group oral assessment situations: A conversation analytic approach. *Applied Linguistics, 30*(3), 315-334. doi: 10.1093/applin/amn035

Purpose of the Work

This study provided a description of topical conversation in classroom negotiation.

Method

   Participants. Four secondary ESL students that spoke Cantonese as a their primary language participated in this study.

   Procedures. The group was given an oral assessment class assignment. Their assignment required that the students provide a brief summary of the story of a historical fiction movie, think of a gift that would be appropriate for a main character in the film, and provide rationale to support their decision.

Analysis and Results

   The students' group discussion was audio- and video-recorded, and the discussion lasted approximately eight minutes. The recordings were then transcribed and a conversational analysis was conducted that specifically assessed the topical content of the interaction, including topic initiations, shifts, and closings.

   The results found that the students used transitions to initiate topics in conversation. In addition, the authors found that the students continually monitored the topic of the ongoing discourse. Finally, the participants were observed to have no difficulty handling topic shifts, and they were able to signal upcoming topic shifts in conversation.

Conclusions

   At the conclusion of this paper, the authors asked if it is possible for an unstructured, student-led group discussion to provide an accurate picture of the participants' language competence. The authors affirmed that the authenticity of this context does provide a genuine representation of the students' interactional abilities. The authors also asserted that investigating ESL students' discourse skills may provide teachers with valuable information regarding problematic areas that should be addressed in the classroom.

Relevance to the Current Work

   This study is relevant to the current work because it emphasizes the crucial role of topic in conversation. This research also specifically observed elements of topic management that the current study similarly analyzed.

Goodenough, D. R., & Weiner, S. L. (1978). The role of conversational passing moves in
   the management of topical transitions. *Discourse processes*, *1*(4), 395-404.

Purpose of the Work

   This study analyzes nuances of topic manipulation including topic shifting and passing turns, and the purposes of the study was to determine if two consecutive passing turns occurred at topic boundaries.

Method

Participants. Forty college women participated in the study.

Procedures. Each subject participated in three conversations, and each conversation was with another subject in the study. The subjects were presented with a problem with two courses of action, and they were instructed to discuss and solve the problem. The conversations were approximately 25-30 minutes.

Analysis and Results

The transcripts were coded for topical transitions, and the results found that showed that conversational shifts were likely to occur after consecutive passing turns. This finding partly supported the researchers' hypothesis that passing turns were used to manage topic shifting.

Conclusions

The authors' addressed the need to modify their initial model, that topical boundaries are not dependent on passing move pairs, although the "OK-alright" statement does indicate a topic shift. The authors concluded that their new findings of transitional sequence in discourse should enable the examination of how topical boundaries can affect the comprehension and recall of dialogue.

Relevance to the Current Work

This study explains components of topic manipulation that the current study uses to evaluate our subjects' conversation. Relevant definitions include topic shading, passing turns, and back-channel responses. The information on consecutive passing turns may also be relevant to the current study because the examiners were instructed to provide limited new information to the subjects, which may cause the subjects to maintain topic for shorter durations.

Grice, H. P. (1975). Logic and conversation. In P. Cole & J. Morgan (Eds.), *Syntax and semantics, 3: Speech acts* (pp. 41-58). New York, NY: Academic press.

Purpose of the Work

This work was created to describe the maxims that must be upheld in order to maintain cooperative conversation.

Summary

The author presents the cooperative principle in conversation and asserts that conversation is a cooperative effort. The author explains that although conversations may vary widely in purpose and construct, not all conversational moves are appropriate. Four maxims are presented, and these maxims must be followed in order to maintain appropriate conversation. These maxims include quantity, quality, relation, and manner. The quantity maxim asserts that contribution must provide complete information, although the contribution should not include

more information than necessary. The quality maxim upholds that all contributions should be true. The relation maxim states that all contributions should be relevant to the unfolding conversation. Finally, the manner maxim requires the speakers to present information with appropriate pragmatics.

Conclusions

The author explains that some of the maxims are more important than others, and that there are other maxims that could also be added that would improve conversations (e.g., politeness). The author also explains that these maxims were created only for the purposes of speech and that the maxims would need to be generalized in order to apply to influencing the actions of others.

Relevance to the Current Work

This article is relevant to the current work because it emphasizes the importance of relevance in conversation, which the current work analyzes as maintaining or shading in conversations. In addition, the current work also referred to this article in the discussion on the development of topic management in children by citing Sirois and Dorval (1988), who observed that the conversational maxim of relevance developed in children by the fifth grade.

Hay, D. F., Payne, A., & Chadwick, A. (2004). Peer relations in childhood. *Journal of Child Psychology & Psychiatry, 45*(1), 84-108). doi:10.1046/j.0021-9630.2003.00308.x

Purpose of the Work

This article described the development of normal peer relations and the processes that contribute to problems with peers that occur in childhood.

Summary

The development of relationships with peers was described, and several processes that underlie children's ability to interact with peers were described. These processes included communicative gestures, contingency in responsiveness, and cooperation in interactions. As children begin to form friendships, they rely on joint attention, emotion regulation, inhibition, imitation, causal understand, and language to establish relationships. The implications for children with developmental disorders were described, and children's individual differences during interactions were also discussed. The effect of peer relations in disorders was described, and the converse effect of peer relations as a protection from disorders was also discussed.

Conclusions

The authors concluded with an overview of the development of peer relations, and the connection between peer relations and disorders was revisited. The authors called on psychologists and psychiatrists to seriously consider the role of play in the development of healthy peer relations.

Relevance to the Current Work

This article provided information of the developmental process of intersubjectivity, which the current study considered as an important milestone of topic development.

Keenan, E. O., Schieffelin, B. B., (1976). Topic as a discourse notion: A study of topic in the conversation of children and adults. In C. N. Li (Ed.), *Subject and topic* (pp. 335–384). NewYork, NY: Academic Press.

Purpose of the Work

This chapter provided a definition of topic in discourse and discussed the prerequisites that are necessary to establish topic.

Summary

Discourse topic was defined as "a proposition or set of propositions expressing a concern (or set of concerns) the speaker is addressing" (Keenan p. 343). Definitions and examples of continuous discourse and discontinuous discourse were provided. Four prerequisites for establishing topic were also provided: (1) obtain listener's attention, (2) speak clearly, (3) identify referents, and (4) provide semantic relations between referents.

Conclusions

This chapter suggested that appropriately establishing topic is a fundamental component of successful communication.

Relevance to the Current Work

The current study draws from this chapter to define many terms such as discourse topic, collaborating discourse, incorporating discourse, topic introduction, topic reintroduction, etc.

Kellermann, K., & Palomares, N. A. (2004). Topical profiling emergent, co-occurring, and relationally defining topics in talk. *Journal of Language and Social Psychology*, *23*(3), 308-337. doi: 10.1177/0261927X04266811

Purpose of the Work

The purpose of this study was to profile topics that occur in everyday conversations.

Method

Participants. This study involved 274 undergraduates from a large university.
Procedures. Participants completed inventories about their recent conversations with people from various relationships.

Analysis and Results

The inventories completed by the participants were analyzed, and 90 different topics were found in the participants' conversations. Topics that were central to the subjects' lives occurred most frequently (e.g. family, education, work, relationships). Other frequent topics that were found were ones used to "check in" (greetings) and "check out" (good-byes). This study also identified co-occurring topics and found that co-occurring topics were used to fulfill conversational routines, to act as communicative functions, and to serve interpersonal agendas. Finally, this study also found that the speakers' relationship determined the topics that arose.

Conclusions

The three major findings included the following: (1) different topics arise with differing frequency, (2) topics co-occur for a variety of purposes, and (3) relationships determine which topics are used.

Relevance to the Current Work

This study showed how topics are used to connect with others. The premise of our research is supported by this study because it shows the essential role of topic in conversation and relationships.

Mentis, M. (1991). Topic management in the discourse of normal and language-impaired children. *Journal of Childhood Communication Disorders,* 14(1), 45-66.

Purpose of the Work

This article explained the role of topic management in discourse and discussed how it affects children with language impairment.

Summary

The author discussed the importance of topic in coherent discourse, developmental patterns of topic development, and how topic management can be disrupted in children with language impairment. Parameters for assessing various aspects of topic management in conversation were also described.

Conclusions

The author described topic management as an essential element of discourse that influences academic and social development. The author encouraged further examination of topic management by placing topic management in the framework of other features of communication. She also called for further research to study the interaction between topic management and semantic-syntactic language structures.

Relevance to the Current Work

This article described topic manipulation in children.

Mentis, M., & Prutting, C.A., (1991). Analysis of topic as illustrated in a head-injured
and normal adult. *Journal of Speech, Language, and Hearing Research, 34*(3), 583-595.

Purpose of the Work

This study was created to develop a reliable system that would be sensitive to patterns
and problems in topic management.

Method

Participants. One adult with a closed head injury and one typical adult matched for age,
sex, and education level participated in the study.
Procedures. Both subjects engaged in six dialogues with a familiar speaking partner. The
dialogues were characterized by three discourse conditions: unspecified topic, concrete topic,
and abstract topic. Both subjects also engaged in four monologues, with either concrete topic or
abstract topic discourse conditions.

Analysis and Results

All dialogues and monologues were videotaped, transcribed, and coded for various topic
management characteristics. The results found that the subjects demonstrated differences in
topic initiation and maintenance.

Conclusions

The authors concluded with potential of using this method of analysis to quantify
differences and difficulties in topic management.

Relevance to the Current Work

This is study as it provided a working definition of topic and supported the rationale for
addressing topic management in social interaction.

Ninio, A., & Snow, C. E. (1996). Children as conversationalists. In J. Kagan (Ed.),
Pragmatic development (pp. 143-170). Boulder, CO: Westview Press, Inc.

Purpose of the Work

This chapter presented a series of essays that described various aspects of children's
conversational behavior.

Summary

This chapter contained research regarding several topics that relate to children's conversational behavior and their management of conversation. These topics included turn-taking, listening behavior, and repair strategies. The chapter also contained research that described various facets of topic in conversation, including topic selection, topic initiation, and initiation maintenance.

Relevance to the Current Work

This chapter presented research regarding the development of topic in conversation.

Palomares, Nicholas, A, Bradac, J. J., & Kellermann, K. (2006). Conversational topic along a continuum of perspectives: Conceptual issues. In C. S. Beck (Ed.), *Communication Yearbook 30* (pp. 45-97). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

Purpose of the Work

This chapter provided an in-depth analysis of topic in conversation.

Summary

The authors identified several viewpoints of topic that exist along a continuum. At the beginning of the continuum, topic was presented as a noun phrase. The next notion of topic was described as a bounded unit of a phrase. Then, topic was described as the speaker's perception of the topic. At the end of the continuum, topic was described as the subject matter of the conversation.

Conclusions

The authors noted the vast literature and various conceptualizations regarding topic. They explained that the existing definitions of conversational topic exist along a continuum with fuzzy boundaries, and the authors presented their own definition of topic that originated from their understanding of the existing definitions of topic.

Relevance to the Current Work

This chapter supported the current study as it describes how conversation wholly relies on topic. Several ways of viewing topic were provided.

Radford, J., & Tarplee, C. (2000). The management of conversational topic by a ten year old child with pragmatic difficulties. *Clinical Linguistics & Phonetics, 14*(5), 387-403. doi: 10.1080/02699200050051092

Purpose of the Work

The purpose of the study was to analyze the topic management and topic initiation of a boy with pragmatic difficulties and provide practical implications.

Method

Participants. David, 10-year-old boy with pragmatic difficulties, was the main participant in the study. He also had difficulties with communication, receptive language, and other related learning difficulties. Five male peers also participated in the study, and each boy was either a classmate from David's language unit or from David's mainstream school. The boys from the language unit had specific language difficulties, and the boys from the mainstream school had no language or learning difficulties.

Procedures. David participated in eight conversations with each of his peers, and the conversations were video-recorded. The boys were not given any toys and were instructed to carry on as normal. Each session lasted between 6-13 minutes. In addition, a conversation between two typically developing boys was video-recorded in order to compare David's interactions.

Analysis and Results

A conversational analysis was utilized to analyze the video-recordings in order to determine how the speakers negotiated the topics during the interaction.

David used several conversational strategies to manage topics, including his extensive use of introducing new topics. In addition, David was also found to have difficulty collaborating with conversational partners, which referred to his ability to contribute to the current topic of discussion.

Conclusions

After presenting their findings, the authors pointed out how David's conversational patterns were similar to those of his teacher and therapist in the classroom. An environment theory was proposed that suggested that children with conversational difficulties adopt the behaviors that adults use with them.

Relevance to the Current Work

This article provided a description of conversational patterns that were found in a child with language difficulties.

Rosinski-McClendon, M. K., & Newhoff, M. (1987). Conversational responsiveness and assertiveness in language-impaired children. *Language, Speech, and Hearing Services in Schools, 18*(1), 53-61.

Purpose of the Work

The purpose of the study was to observe the conversational characteristics of responsiveness and assertiveness in children in with LI.

Method

Participants. This study analyzed the conversation responsiveness of 10 children with LI (ages 4:1-5:9) compared to 10 typically developing children matched for language ability (ages 2:8-4:2).

Procedures. The study was conducted by a clinician who engaged the children in play and probed for various conversational skills. The conversational measures included the following: (1) response to questions, (2) topic continuation following no response, and (3) topic maintenance after topical change. Probe 1 related to the children's conversational responsiveness and probe 2 assessed the children's conversational assertiveness.

Analysis and Results

The conversations were audio-recorded, transcribed, and scored for either levels of responsiveness and assertiveness according to the probe number.

Data analysis found that the children with LI showed significantly poorer performance in conversational responsiveness and no significant difference in conversational assertiveness.

Conclusions

The authors concluded by emphasizing the importance of assessing conversational difficulties and incorporating the treatment of discourse deficits into therapy objectives when they are found. In addition, the authors proposed that primary caregivers should be instructed how to support their children in increasing responsiveness as part of the language training program.

Relevance to the Current Work

This study provided an analysis of the conversational behavior of children with LI..

Sirois, P., & Dorval, B. (1988). The role of returns to a prior topic in the negotiation of topic change: A developmental investigation. *Journal of psycholinguistic research, 17*(3), 185-210.

Purpose of the Work

This study investigated how topics were organized in conversation in regard to the role of returns to a prior topic. In addition, this study also observed how this conversational behavior changed with age.

Method

Participants. Groups from the following grades from were selected: second, fifth, ninth, twelfth, and college. Each group was comprised of three males and three females. The students were selected randomly from lists of participating classrooms from Durham County Schools and Durham Technical Institute in North Carolina.

Procedures. The various groups met twice per week for a total of 12 meetings. The subjects were instructed to conduct discussions in order to get to know each other better.

Analysis and Results

All discussions among the groups were audiotaped, and the eighth discussion was transcribed for analysis. There were three major findings from the analysis. First, returns to the topic were used by all individuals of all ages as a method to prevent topic change. Second, all ages were found to use the same methods for negotiating topic change, although there was a marked difference across the ages in how these methods were carried out. Finally, consensual orientation to topic negotiation was acquired during childhood.

Conclusions

The authors concluded by presenting a model of topic negation that described how topics were closed and revisited through the speakers' negotiation. In addition, the authors also provided a description of the ages when topic negation changes and develops in childhood.

Relevance to the Current Work

This study is relevant because it addresses the development of relevance in conversations, which the current study describes as an important milestone of topic development.

Smith, A. (2015). *The Efficacy of a Social Communication Intervention to Increase Syntactic Complexity in Narratives of Children with Language Impairment* (Master's thesis). Retrieved from http://scholarsarchive.byu.edu/etd/5269

Purpose of the Work

This study was created to determine if a change in grammatical complexity in narratives would occur as a result of enrollment in a social communication intervention.

Method

Participants. Five children with language impairment (ages 6-10) participated in the study.

Procedures. Each child received individualized interventions twice a week. The interventions included reading a story and discussing emotions, re-enacting the story and acting out emotions, playing card games with emotion pictures, and writing in a journal.

Analysis and Results

Each child received baseline and follow-up testing in conjunction with the interventions using story retells of wordless picture books. The participants' syntactic complexity was then assessed using the children's narratives that were elicited from the storybooks.

The results found that three of the participant's syntactic complexity did not change, and one participant showed a decrease of syntactic complexity. However, this same participant demonstrated more creativity in her language output. In addition, one participant showed an increase in syntactic complexity.

Conclusions

The author concluded that the findings were equivocal. However, the author addressed many factors that may have influenced the results of the study, including the duration and intensity of the interventions and also the children's eventual fatigue with the wordless picture books.

Relevance to the Current Work

The rules for dividing utterances that are used in the current work are the same as those used in this study.

Svennevig, J. (2014). Direct and indirect self-presentation in first conversations. *Journal of Language and Social Psychology, 33*(3), 302–327. doi: 10.1177/0261927X13512307

Purpose of the Work

This study analyzed and described the conversational patterns that exist in speakers' first conversations with each other.

Method

Participants. Five pairs of university students, ages 18 to 38 years, participated in the study.

Procedures. Each pair of university students was audio recorded when engaging in a conversation for the first time. Each conversation was staged in a setting that would promote sociable conversation, and the researcher was not present during the conversations.

Analysis and Results

The conversations ranged from 35 to 63 minutes. An analysis was performed that combined both described and interpreted the conversations. The researcher found that self-presentation occurred in initial conversations as speakers took turns inviting each other to present personal information about themselves. As the speakers discovered common interests or characteristics, the speakers would then leave the interviewing style of conversation to pursue the topic of the shared interest. In addition, the researcher also descried another format in which the

speakers discussed a shared topic and provided personal background information as the conversation unfolded. The researcher found that the goals of initial conversations include gaining familiarity, maintaining solidarity, and creating affection.

Conclusions

The author summarized the main patterns that were observed in order to explain the goals of initial conversations.

Relevance to the Current Work

This work provided one major example of how conversations can be used to create and form relationships, which supports the current study's argument of the importance of appropriate conversation management.

Tolchinsky, L. (2004) The nature and scope of later language development. In R. Berman (Ed.), *Language development across childhood and adolescence* (pp. 233-247). Philadelphia, PA: John Benjamins Publishing Company.

Purpose of the Work

This chapter provided a description of the different theories of later language development.

Summary

Descriptions of three major developmental theories of later language development were provided. The first theory is that these developmental changes that occur around age five are caused by cognitive underpinnings that influence language. Another theory suggests that language development increases due to the child's increasing experience with language. The author also described a theory that asserts that children's participation in discourse reorganizes the child's linguistic systems, which increases language development. The final theory that was provided is that literacy is a driving force in this later-occurring language development.

Conclusions

The author proposed that the theories of later language development are interrelated. In addition, the author suggested that later language development occurred due to the opposing needs of appropriateness and divergence.

Relevance to the Current Work

This chapter was cited in the current work regarding its description of the differences that emerge during the development of language that occur due to the social and cultural experiences that are unique to each child.

Turkstra, L., Ciccia, A., & Seaton, C. (2003). Interactive behaviors in adolescent
     conversation dyads. *Language, Speech, and Hearing Services In Schools, 34*(2), 117-127.

Purpose of the Work

The purpose of this study was to analyze the conversational behaviors of typical adolescents. This study was conducted in order to provide comparison data for adolescents with communication disorders.

Method

Participants. Fifty typically developing adolescents, ages 13-21, participated in the study. Twenty-four females and 26 males participated in the study, and both African American and Caucasian ethnicities were included.

Procedures. The participants were each instructed to talk to a conversational partner of his or her choice for about three minutes, and the participants were told to spend about one minute on each topic. The participants selected their own topics, and topics were suggested when the participants had difficulty thinking of one.

Analysis and Results

The conversations were videotaped and then transcribed. The effects of race and sex on the speaker were analyzed and it was found that males took more turns than females, and African American females asked fewer direct questions (although this difference was not statistically significant). All other measures across sex and race were not significant.

The results also noted several high frequency behavior in during conversation, including appropriately looking at the conversational partner; nodding and showing neutral or positive facial expressions; using back-channel responses; and contingently responding. Infrequent behaviors included the following: a display of negative emotions, turning away from the conversational partner, or failing to answer the speaking partner's questions.

Conclusions

The authors emphasized the importance of the ability to appropriately manage conversations. In addition, the authors provided a brief review of the conversational behaviors that were more frequent and more rare in conversations, and they also highlighted their finding that race, age, and sex had little effect on the interactive behaviors of adolescents.

Relevance to the Current Work

This study described developmental expectations for the conversational behaviors of typical adolescents.

Westby, C. (2009). Social-emotional bases of communication development. In B. B.
     Shuman & N. C. Capone (Eds*.), Language development: Foundations, processes, and
     clinical applications* (pp. 135-176). Sudbury, MA: Jones & Bartlett Learning.

Purpose of the Work

This chapter provided a description of communication development, and the chapter also explained how this development is influenced by social and emotional factors.

Summary

In this chapter, the social and cognitive processes that are the foundation of language and communicative competence were described. The various factors that influence the development of social and communicative competence were also described, including the child's individual characteristics, disabilities, and environmental factors. Assessment and intervention for social-emotional communication were also discussed.

Conclusions

The author emphasized the importance of social-emotional competence. Although appropriate vocabulary and grammar may be in place, a child will have difficulty in social interaction and academics if he or she does not have social-emotional competence.

Relevance to the Current Work

This chapter is relevant to the current work because it provides a description of the development of intersubjectivity and joint attention, which are foundational developmental milestones for the development of topic manipulation.