

SIG 2

Tutorial

Choosing Discourse Types That Align With Person-Centered Goals in Aphasia Rehabilitation: A Clinical Tutorial

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ABSTRACT

Purpose: People with aphasia and their families want rehabilitation services that improve real-world communication. Thus, clinicians and researchers have increased focus on discourse-level interventions and outcome measures, most often using monologue tasks to assess discourse production and guide treatment planning. However, communication in everyday life usually involves participating in conversational discourse. This mismatch raises concern because the literature indicates that different types of discourse possess different linguistic and interactional characteristics and that the communication skills of people with aphasia vary across different types of discourse. In order to provide appropriate, client-centered services, speech-language pathologists (SLPs) need resources that outline the linguistic and interactional characteristics of each type of discourse. Few user-friendly materials of this sort exist. This tutorial aims to equip clinicians with essential foundational knowledge regarding features of narrative, procedural, and expository monologue, as well as conversation, to aid in the design of discourse-level interventions specific to each individual's discourse needs.

Method: This tutorial provides an overview of the research regarding the structure and function of commonly assessed and treated forms of discourse, along with findings regarding the varied and unpredictable communicative performance of people with aphasia across the different types of discourse. We then provide practical applied clinical examples to illustrate the literature findings.

Conclusion: Given the differences between types of discourse, when SLPs include discourse in a client's treatment program, the types of discourse activities the client wants to address should align very closely with the types of discourse assessed and treated in the clinic room.

People with aphasia and their families want rehabilitation services that improve their ability to converse with others on real-world topics of personal interest and relevance (Davidson et al., 2003; Wallace et al., 2017; Worrall et al., 2011). Consequently, in recent years, speech-language pathologists (SLPs) have shifted practice to include discourse (Arnold et al., 2020; Bryant et al., 2017;

Sirman et al., 2017), defined as activities requiring speakers and hearers to produce and interpret language longer than single sentences or turns that together cohere into larger units (Kess, 1992). Some forms of discourse such as picture descriptions or elicited narratives are independently produced by single speakers. Other forms of discourse such as conversation are produced by at least two people working together.

As the momentum to address discourse increases, the literature on how people without aphasia produce discourse can provide information to SLPs and researchers

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to aid in their discourse assessment and intervention choices. One important concept repeated throughout this foundational literature is that various types of discourse (narrative, procedural, and expository monologues, as well as conversation) possess different linguistic characteristics (Eggin & Martin, 1997; Halliday & Matthiessen, 2014; Longacre, 1996; van Dijk, 1980). In addition, there are considerable interactional differences between monologue and conversational dialogue (Heeschen & Schegloff, 1999). Consequently, language and cognitive demands vary across different types of monologue and conversation (Armstrong, 2000; Linnik et al., 2016). These varied demands lead to language performance that often varies in people with and without aphasia, for different subtypes of monologue (Fergadiotis & Wright, 2011; Shadden et al., 1991; Shnur & Wang, 2022; Stark, 2019; Stark & Fukuyama, 2021), and between monologue and conversation (Armstrong et al., 2011; Beeke et al., 2003; Dipper et al., 2018; Leaman & Edmonds, 2021a, in press; Mayer & Murray, 2003). The differences between elicited monologue and conversation are especially marked.

This literature suggests that a client's specific discourse needs may be best understood if the SLP assesses the type of discourse that the person wishes to improve. For instance, if the priority is to become better at giving a speech, expository discourse, used when a speaker wants to explain a concept, should be a part of the evaluation. If the person wishes to become better at conversing with others, assessment should include conversation. If the goal is to become better at sharing everyday stories, assessment should include narratives. If the goal is to become better able to list steps to complete a rote activity, then procedural discourse should be included. If there is a mismatch between the type of discourse chosen for assessment and the type of discourse needed in everyday life, therapy targets may be identified that are not relevant to the person's discourse goals (Beeke et al., 2003; Dipper et al., 2018; Leaman & Edmonds, 2021a; Shadden et al., 1991). Likewise, such a mismatch between assessment and therapy goals may overlook weaknesses in conversation that need attention to achieve the desired discourse-related therapy outcomes (Beeke et al., 2003; Dipper et al., 2018; Leaman & Edmonds, 2021a; Shadden et al., 1991).

Monologue language-sampling has long been used in the field because the tasks are expeditious to administer, have known language targets, and have established methods of measurement (e.g., Nicholas & Brookshire, 1993). While SLPs recognize the importance of conversation, they express a need for training in collecting and analyzing samples (Bryant et al., 2017). Additionally, until recently, SLPs had no tools for reliable measurement of conversation. However, this has recently changed, with development of measures and methods of assessment for

linguistic production (Herbert et al., 2012; Leaman & Edmonds, 2019a, 2019b, 2021a, 2021b), participation (Kagan et al., 2022), and interaction, including strategy use (Azios et al., 2021). Further, continued research supporting SLPs in discourse analysis is ongoing to establish more time efficient measures for both monologue (e.g., Dalton et al., 2022) and conversation (e.g., Obermeyer et al., in preparation), that are psychometrically sound and ecologically valid.

The research describing the linguistic and interactional characteristics of discourse is spread throughout the literature of multiple disciplines. Thus, although clinical decisions about discourse assessment impact rehabilitation, SLPs do not currently have a resource that integrates this literature with the aphasiology literature. Therefore, our aim is to provide SLPs with a practical resource they can use to inform discourse assessment choices, so they can deliver evidence-based, person-specific services to clients with aphasia who want to focus on discourse as a part of their aphasia therapy program.

This tutorial begins with an overview of the foundational literature describing the different linguistic structures of commonly assessed and treated types of discourse. Then, the different structures and functions of each type of discourse are presented, including interactional features of conversation. Lastly, we outline clinical implications and discuss why findings in one discourse context cannot be meaningfully extrapolated to understand discourse abilities in another. To illustrate the points made in the literature for the reader, we have chosen relevant clinical examples specifically for this purpose.

Discourse Structures

SLPs commonly assess and treat three subtypes of monologue (narrative, procedural, and expository) as well as conversation (Bryant et al., 2017). Each type of monologue has a "superstructure" or global format with essential components and fulfills a particular function (Kintsch & van Dijk, 1978; van Dijk, 1980). While conversations are constructed on a local, turn-by-turn basis, conversational discourse does not typically have a rigid superstructure. Certain subtypes of conversational interactions such as service encounters between shoppers and retail workers may be composed of mandatory and optional elements (Eggin & Slade, 1997), and segments within larger conversations (stories, gossiping) do include "standard" components, yet the social conversation format tends to be more flexible. Social conversation is usually the form of interaction that people with aphasia are interested in, so we focus on this genre here. Each of these types of discourse is described below.

Monologue-Level Discourse

Narrative Discourse

In narrative discourse, speakers express superstructure using temporal organization, an active agent (often expressed by first or third person constructions: “I/we,” “he/she/they”), various verb tenses describing the ongoing storyline (e.g., past progressive, “she *was sleeping*”) and to foreground important events (e.g., simple past, “when the dog suddenly *barked* and *woke* her up”), and personal reactions to the story (referred to as evaluation or stance, e.g., “she was *really* scared”).

Thus, in narrative discourse, the speaker needs to organize the discourse in a time-ordered manner (Longacre, 1996) and/or use lexical items indicating relative time between events (e.g., “before,” “last night,” “then”), use constructions with an agent (i.e., a subject; Longacre, 1996), use past and present verb tenses (Longacre, 1996; Olness, 2006; Stark & Fukuyama, 2021), and use lexical items that express stance on the unfolding events (Olness et al., 2010). Stance-taking about the events of the narrative often occurs through linguistic means (Labov, 1972); thus, expressing stance involves access to verbs indicating opinion, such as “I think” and “I feel” (Armstrong, 2001; Dipper et al., 2018; Halliday & Matthiessen, 2014). Further, Olness et al. (2010) describe the linguistic mechanisms for expressing stance, along with examples of the types of language used for this important aspect of narrative production: (a) slowing of the story with a side comment (*This is for real!*); (b) intensification using repetition (*It was **in church**. . . my stroke hit right here **in church***) or exaggerated lexicon (*idiot* or *careened*) or with modifiers (*so calm* or *very scared*); (c) irrealis (imagined or future events) using negation (*I **couldn't** use **none** of it*) or future tense (*It's **gonna** be hard*) or modals and conditional (*They **could've** killed her*); and (d) comparisons using “like” or “as” (*I knew that my son had not been **as** active **as** he had before*) or superlatives (*the **most scariest** time of my life*) or metaphors (*It's a **crash**shoot*).

Procedural Discourse

In procedural discourse, the superstructure is time ordered, with greater chronological rigidity than narrative discourse (Longacre, 1996; Ulatowska et al., 1981, 1983). Procedural discourse is goal oriented (Ulatowska et al., 1981, 1983) and is factually based, without sharing of opinion. The speaker is not required to state an agent (i.e., there is no subject), and the critical steps for the activity are often produced as a list (Alexander, 2006). For example, in the often-used clinical task to describe how to make a peanut butter and jelly sandwich, the speaker might say, “Get two pieces of bread, spread on peanut butter and jelly, put the bread together.” The

construction may include impersonal use of the pronoun “you,” although this is not required (e.g., “you put the bread together”). In clinical tasks, “you” does not suggest an intention for the listener to complete the task because there is no contextual reason to do so, and the objects required are not present. However, when giving instructions in conversation, “you” may be used to reinforce the speaker’s deontic rights, or their capacity for suggesting what actions the listener should take (Stevanovic, 2018).

Procedural discourse requires the present tense and imperative mood (i.e., commands; Armstrong, 2000; Longacre, 1996; Whitworth et al., 2015) and includes adverbs, adverbial clauses, and prepositions to provide locative and temporal information (Stark & Fukuyama, 2021). For instance, “First, get a loaf of bread *from the cupboard*; *then* you take out two slices; *next* take the peanut butter and jam *out of the refrigerator*,” and so forth. Note that this example includes a mixture of inclusion and omission of the impersonal second person, “you” (Longacre, 1996; Ulatowska et al., 1983; Whitworth et al., 2015). Inclusion and omission of locative and temporal information are both acceptable, and both formulations are used by typical speakers and speakers with aphasia (Ulatowska et al., 1983). Lastly, procedural discourse is characterized by low lexical diversity in comparison to narrative discourse (Fergadiotis & Wright, 2011). This is likely related to the superstructural features of procedural discourse in that there is no need for information about the agent, no expectation for stance, and no need for temporal markers because the procedure is organized in chronological order. Further, because procedural discourse is produced to instruct on a specific topic, there is a limited topical theme that circumscribes the number and variety of lexical items needed. For instance, describing how to make a peanut butter and jelly sandwich can be achieved using a few obvious lexical items: peanut butter, jelly, bread, knife, plate, and so forth.

Expository Discourse

Expository discourse is used to explain ideas and relationships, often in an academic manner, with focus on how concepts relate to one another (Longacre, 1996; Lundine & McCauley, 2016; van Dijk, 1980). This is not to be confused with expository narrative, a term recently used in some aphasiology literature to refer to picture-elicited narrative tasks (Kong, 2022; Stark, 2019; Stark & Fukuyama, 2021). Expository superstructure is not agent oriented, nor is it chronologically based (Longacre, 1996). Instead, expository discourse uses logic, reasoning, and relations between concepts to draw parallels between ideas as its internal organizational structure (Armstrong et al., 2013; Longacre, 1996; Lundine & McCauley, 2016; Whitworth et al., 2015). Consequently, to express relationships, expository discourse is

characterized by complex syntax and subordination (Lundine & McCauley, 2016; Nippold et al., 2005, 2008; Scott & Balthazar, 2010; Ulatowska & Chapman, 1994; Westby et al., 2010). Existential, abstract, and descriptive clauses are common (Longacre, 1996; Martin, 2011; van Dijk, 1980). Speakers need to use conjunctions such as “since,” “therefore,” and “because” to link concepts because temporal organization is not an inherent feature of expository discourse (Armstrong et al., 2013; Halliday & Hassan, 1976; Halliday & Matthiessen, 2014; Whitworth et al., 2015).

Pronouns are rarely used because expository superstructure is not premised on agency orientation. When speakers do specify an agent, it is typically in the third person (i.e., “he/she/they” or relevant nouns rather “I/we/you”). Lack of agency also results in frequent nominalization of verbs (Longacre, 1996; Lundine & McCauley, 2016; Ulatowska et al., 1981; van Dijk, 1980) and passive constructions (Scott & Balthazar, 2010). For instance, in an expository discourse about coral reefs, a typical construction might be, “Destruction of coral reefs has occurred globally over the last fifty years,” where the speaker chooses the noun “destruction” rather than the verb “destroy.” Further, the speaker does not state who the agent is that caused the destruction, resulting in the passive construction “has occurred.”

Expository discourse is characterized by a variety of verb tenses (Martin, 2011), although indicative present and future predominate (i.e., “the coral reef is destroyed”; future: “the coral reef will be destroyed”). Stative verbs “to be” and “to have” are often used to describe relationships between entities and topics, as seen in previous examples (Eggs & Martin, 1997; Halliday & Matthiessen, 2014; Longacre, 2006). Morphological complexity is observed in the written expository genre (Nagy et al., 2012; Nippold & Sun, 2008), which may be reasonable to expect in the spoken format as well, because lack of agency, passive voice, and nominalization together require more complex morphology. Lastly, low-frequency, technical lexical items are typically used to meet the demands of in-depth topic explanations (Lundine & McCauley, 2016), such as the words “coral” and “reef” in our example.

Conversational Discourse

Conversational structure is organized as an activity that always requires at least two people who take “turns” (Damico et al., 1999; C. Goodwin & Heritage, 1990; Hutchby & Wooffitt, 2008; Peräkylä, 2004; Psathas, 1995; Sacks et al., 1974). Speaking turns “fit together”; the current turn is informed by previous turns and also informs future turns (Heritage, 1989; Schegloff, 2007). When formulating turns, speakers must keep in mind previous turns, so they produce relevant utterances (Barnes &

Ferguson, 2015; Beeke et al., 2020; C. Goodwin & Heritage, 1990; Wilkinson, 1999). The turn-based nature of conversation requires that partners jointly develop the discourse they produce. Some of the elements that partners collaboratively agree on are “global” and influence interaction over the course of many or all turns within a conversation. For example, participants negotiate topics during conversation (Archer et al., 2018, 2019; Barnes, 2011; Button & Casey, 1985; Horton, 2007; Howe, 1991; Leaman & Edmonds, 2020; Leaman et al., 2022). Since the topic sets boundaries about what can and cannot be talked about during turns, topic may influence language and behavior during conversation.

In other cases, partners co-operatively use short, “local” structural sequences that can be completed in two turns. For example, when a speaker asks a question, usually the partner will provide an answer. These question–answer series constitute adjacency pairs, or structures in which “Part A” is usually followed by a relevant and expected “Part B” (Schegloff & Sacks, 1973). Adjacency pairs are usually built over the course of a few turns and require partners to contribute constitutive turns (Peräkylä, 2004).

The grammatical form that utterances take during conversation varies widely. Turn length and structure are determined by the local environment. The shortest turns at talk are hearership tokens, such as “uhmm,” “yeah,” or head nods (Heritage, 1989). These small words are produced quickly usually when a speaker pauses briefly. While these words have little to no interpretable semantic content, they inform the partner that the producer of the hearership token is attentive and willing to continue listening.

In addition, sometimes speakers produce single words, if a one-word turn is implicated by the prior turn (i.e., an elliptical utterance; Sacks, 1992). For example, “What kind of ice cream do you like?”/“Coffee.” Similarly, elliptical utterances may consist of phrases implicated by the ongoing interaction, such as, “I went to Italy last summer”/“Me too.” The availability of elliptical structure in conversation allows for opportunities to express ideas with a lower syntactic load than in monologue because monologues generally require production of independent utterances containing a greater extent of syntactic structure and morphology. Single-word turns in conversation are a part of the entire integrated discourse. Such single-word turns are dissimilar to single words produced in confrontation naming tasks because when woven into conversation, all turns carry meaning, purpose, and intention that can only be specifically and fully understood within the context of the unfolding discourse.

Many of the turns in conversation are formulated as clauses (i.e., subject with predicate) or clause complexes (i.e., at least two cohered clauses; Drew, 2013; Eggs,

2004; Eggins & Slade, 1997; Sacks et al., 1974). Speakers can manipulate internal clause structures and the way in which they cohere clauses into complexes in order to produce commands, statements, or questions (Eggins & Slade, 1997; Halliday, 2004; Hutchby & Wooffitt, 2008; Sacks et al., 1974). In other instances, speakers use clause forms that are highly standardized across conversations. For example, the opening moments of many conversations will feature greetings and inquiries about participants, such as, “How are you?” (Schegloff & Sacks, 1973). Clauses such as these are usually produced as indivisible wholes, and speakers rarely deviate from the usual forms. Similarly, speakers may use clichéd utterances lacking originality and which function as remarks that summarize a previous stretch of conversation (Drew & Holt, 1998). Conversation partners orient to such phrases like, “That’s the way it goes,” as constituting a topic boundary, and routinely suggest and pursue new topics after turns of this sort are produced (Drew & Holt, 1998).

In addition to verbalizations, speakers and listeners in conversations draw on knowledge of a wide range of other resources when composing and interpreting turns. Hand gestures (C. Goodwin, 2000); eye-gaze (C. Goodwin, 1981); body posture (C. Goodwin, 1981); facial expressions (M. H. Goodwin et al., 2012); household objects (C. Goodwin, 1995); artifacts such as newspapers, which are “sedimented in meaning” (C. Goodwin, 2003, p. 237); and nonsense syllables produced with strategic intonational patterns (C. Goodwin, 1995) are all exploited as meaning-making devices by interactants with and without aphasia.

Discourse Functions

Each of the three subtypes of monologue discussed above fulfills a specific purpose (Kintsch & van Dijk, 1978; van Dijk, 1980). For instance, narrative discourse is used to tell stories and uses a story grammar superstructure including components such as the setting and characters, complicating event, and resolution (Labov, 1972). In contrast, procedural discourse is used to provide instructions and occurs with a superstructure organized as a list of sequential steps (Halliday & Matthiessen, 2014); expository discourse is used to explain concepts and has a superstructure that introduces a specific subject (Ulatowska et al., 1981) and establishes relationships between ideas using logic and reasoning (Armstrong et al., 2013; Longacre, 1996; Lundine & McCauley, 2016; Whitworth et al., 2015).

Importantly, much of the research that defines expected superstructures is based on elicited monologue language samples (e.g., Labov, 1972), rather than on occurrences of each type of discourse as it arises

spontaneously in conversation. This is critical to consider when evaluating language samples because the purpose of elicited language and conversation are dramatically different, which can lead to marked differences in the language produced in each (Eggins & Martin, 1997; Halliday & Matthiessen, 2014). The interactional purpose of monologue production in the clinical assessment context is to comply with the examiner. The client producing the language sample does so without interaction from the examiner and is often describing a picture (or activity) about which the examiner has full knowledge (e.g., when both can see a picture that is being described). In elicited tasks, the speaker is expected to produce a prototypical example, such as a story that includes all story grammar elements (Labov, 1972).

In contrast, when narrative, procedural, or expository discourse occurs spontaneously in conversation, the speaker has a very different interactional purpose. For example, the person may be transacting novel information, such as directions (procedural discourse) to an uninformed listener (i.e., if the listener had the information already, communication would not be necessary). In this conversational setting, the listener often asks for clarifications or additional information, creating an interactive telling of the procedure. When stories are told in conversation, they are often co-constructed, and superfluous story grammar elements are often omitted (Ochs & Capps, 2001), with the speaker sharing only those aspects that are necessary. Further, conversational storytelling is often done to make a point, which speakers achieve through expression of stance (Ochs & Capps, 2001). Thus, although conversation contains procedural, expository, and narrative components, these are often realized in vastly different ways than in elicited monologue tasks. Consequently, ability in producing an elicited monologue context may differ from the ability to produce the same genre in a spontaneous conversational, “in vivo” context.

Conversation serves a wide variety of functions. Face-to-face interaction allows interactants to establish, participate in, and maintain a wide variety of social relationships (Damico et al., 1999; C. Goodwin, 2007; Leaman & Archer, 2022; Schegloff, 2006; Shadden, 2005; Shadden & Agan, 2004). In addition, because conversation allows speakers to share information, talking to one another enables people to plan and coordinate action to pursue complex endeavors. Conversation is a highly collaborative endeavor; thus, the events and achievements that occur during conversation can be seen as social actions (Enfield & Sidnell, 2017). Beginning a period of sustained face-to-face interaction (Goffman, 1959), determining a topic for discussion (Button & Casey, 1985), carrying out repairs when communication breakdowns take place (Schegloff et al., 1977), and concluding a period

of interaction (Schegloff & Sacks, 1973) are some of the social actions that participants engage in during conversation. People with aphasia may develop unusual but highly functional strategies that empower them to remain social actors in these processes, in spite of their linguistic processing deficits. For example, Beeke et al. (2007) present data gathered from a man with nonfluent aphasia in conversation with his daughter. In this participant's case, his aphasia left him unable to produce verbs. Accordingly, he could not use "typical" methods for shifting topics (i.e., producing a fully formed clause with a subject and predicate). Instead, he would produce turns consisting of an initial noun and an adjective, creating a "topic-comment" structure. His interlocutor oriented to these turns as though they constituted structurally typical attempts to shift topics.

Lastly, conversation allows people to share ideas about themselves, their perspectives, and their experiences, expressed through stance (Ochs & Capps, 2001) and the information speakers choose to share. Talk thus plays a central role in staking out and reinforcing a distinct sense of identity (Eggins & Slade, 1997; Kovarsky et al., 2007; Shadden, 2005; Yu & Wu, 2021). The similarities and differences that allow humans to forge social bonds and networks are most often explored and negotiated via conversation (Antaki, 2013; Berger & Luckmann, 1966; Damico et al., 1999; Eggins & Slade, 1997).

Clinical Implications

In this section, we discuss why being aware of the mismatch between monologue and conversation can be helpful for SLPs when planning treatment. We will provide samples from people with aphasia to illustrate a few clinical implications of this disparity and suggest guidelines for how SLPs can focus on both monologue and conversation. Our analysis is informed primarily by concepts drawn from the field of conversation analysis (Schegloff, 2007). Examples come from (a) AphasiaBank, an online repository available for research that provides video and transcriptions per the website protocol (MacWhinney et al., 2011), and (b) data collected by the first author from two studies (Leaman & Edmonds, 2021a, 2023). The first study was approved by the institutional review board (IRB) of Teachers College, Columbia University. Continued oversight is provided by the first author's current institution, The University of Kansas Medical Center (KUMC). The second study was approved by the IRB of KUMC. Language samples were transcribed by the first author while viewing video recordings. Segmentation of utterances was guided by syntactic structure (for details, see Leaman & Edmonds, 2021a). Interrater reliability for transcription,

including utterance segmentation, was conducted on 30% of the data with 91.2% agreement. All conversations involve a person with aphasia and an SLP. Conversations with other partners may vary, although research suggests similarity in linguistic skills and overall success between SLPs and close family members/friends (Leaman & Edmonds, 2019a).

Clinical Implication 1: Some Clients Do Better in Monologue Tasks Than in Conversation

Below is an elicited narrative monologue, the picnic scene description from the Western Aphasia Battery–Revised (WAB-R; Kertesz, 2006), provided by Will, a man with mild conduction aphasia (i.e., aphasia quotient [AQ] = 81.3 on the WAB-R). The transcriber's remarks are in curly brackets; gestures and other types of non-verbal communication are italicized; and filled/unfilled pauses are in parentheses, as are false starts, which are also marked with an asterisk. Unintelligible utterances are marked with "XXX."

1.1 Will's Picnic Scene Sample (Narrative Monologue)

The picture shows a couple having a picnic by a house near a lake. A woman pours wine, and a man reads a book. A dog chases a boy flying a kite, and a girl builds a sandcastle. A man is fishing, and two people wave from a sailboat.

1. W: So, the man is (:03) reading a book.
2. W: And the (w*) the (um) the wife or or woman is pouring a (:06 um :02) well is wine.
3. W: And there's a (um) boy.
4. W: He's (e*) flying a (kly*), a (ki*), a kite.
5. W: (:02) and then there's a (um) man that's fishing.
6. W: And then there's a house.
7. W: There's I mean, I can't explain it.
8. W: Oh, and there's a there's a (um) a girl that's (uh :04 do* uh) there's a girl that's (uh) making sandcastles.

Will often uses syntactically intact sentences with canonical subject–verb–object structure and produces up to 10 words per utterance. He uses appropriate articles and function words (*a, the, or, then*) and bound morphological markers (*-ing* present tense verb morpheme, possessive "s" morpheme). He demonstrates use of referential cohesion, producing the noun "boy," and then appropriately referring to "he." In line 5, Will constructs a complex sentence when he uses the relative pronoun "that" to

join the subordinate clause “is fishing” to the prior main clause; he produces this structure again in line 8.

Will produces a range of content words including high- and low-frequency nouns (high frequency: *man, house, book*; low frequency: *kite, sandcastles*; Brysbaert & New, 2009), light verbs conveying little meaning (“making”), and more specific heavy verbs (“pouring,” “reading”; Halliday & Matthiessen, 2014). Considering macrostructure, his sample has high global coherence, and he refers to the critical content depicted in the scene. The sample indicates frequent lengthy pauses, and conduite d’approche errors typical of conduction aphasia, such as “kly” and “ki” produced successively before the target “kite” and “w*” and “wife” prior to “woman.” Overall, this sample suggests that Will has relatively intact verbal production abilities, although production is slower than is typical with frequent false starts.

Following is an excerpt from a conversation between Will and an SLP collected on the same day as the picnic scene. In this sample, Will demonstrates difficulty with expressing basic information about his job. His turns are short and demonstrate difficulty with syntax and lexical retrieval. He uses few verbs to explain his job, omits the required verb in line 16, and uses the light verb “doing” (line 37), which does not provide specific details about his job. He uses a heavy verb twice, in the rote phrase “I can’t explain it,” but does not elaborate upon what is difficult to explain. He demonstrates difficulty with cohesion, when he states, “they were doing it,” without referent nouns available to clarify “they” and “it” (line 37). He uses simple sentences, elliptical utterances, and utterances that fit neither category (i.e., lines 16, 22, 39). No complex utterances are produced (although such construction is not required, explanations often include complex sentence construction; Nippold et al., 2005). Lastly, in this sample, he produces only five nouns. Overall, his paucity of language and reduced syntax diminish the coherence of his explanation. While able to produce sentences of appropriate length with sufficient semantic content when talking about the picnic scene, Will struggles when similar forms are needed in the following conversation with an SLP whom he has recently met. Their interaction is typical of “first encounter” conversations in which partners often ask each other questions and share information about themselves as they seek to establish commonalities on topics such as work and hobbies/interests (Maynard & Zimmerman, 1984).

1.2 Will’s Conversation Sample

1. SLP: Were you doing that also while you were working in finance *{he had mentioned another job}*?
2. W: Yep *{nods}*.
3. SLP: You were doing like double duty, two jobs.
4. W: I got (th*), I was three *{holds up three fingers}* jobs.
5. SLP: You got three jobs!
6. W: Yep *{nodding}*.
7. W: I was a *{unintelligible}*.
8. W: I mean, but I was liking that.
9. SLP: You liked that.
10. W: Yeah.
11. W: And just now (s*) I’m bored.
12. SLP: Yeah.
13. SLP: That was a busy day, huh *{having three jobs}*.
14. W: *{Nods}*.
15. SLP: So (i*), for the bank job, that must’ve been I’m assuming like normal business hours.
16. W: My (f*) my no, my (uh) my home.
17. SLP: Uhhuh?
18. W: That (nm*) that was (n*) my business.
19. SLP: Oh, oh! For the finance.
20. W: Yeah.
21. SLP: Oh, it was your own business?
22. W: No, no *{shakes head}* just home.
23. SLP: Ok, when you worked from home?
24. W: Yeah *{nods}*.
25. SLP: You worked from home?
26. SLP: Ok and that was even before COVID?
27. W: Yep *{nods}*.
28. SLP: Because now everybody works from home, right?
29. W: Exactly.
30. SLP: What were you doing, like making, processing loans, or setting up loans for people?
31. W: No no *{shakes head}*.
32. SLP: No?
33. W: Just (uh) well, yes, and no, but I can’t explain it.
34. SLP: Ok.
35. W: Finance.
36. SLP: Yeah.

37. W: And they were, they were, they were doing it. I can't explain it, I can't.
38. SLP: Was it corporate, or for like individual people?
39. W: (I* d* u*) corporate and individuals.
40. SLP: Oh, you did both.
41. W: Yeah.
42. SLP: But you could do it from home.
43. W: Yeah {*nods*}.
44. SLP: Oh well, that's, did you like that? I think it's awesome!
45. W: Yeah {*nodding*}.
46. SLP: But maybe you didn't.
47. W: Oh yeah {*nodding*}.
48. SLP: You liked it?
49. W: Yeah, yeah {*nodding*}.

In this segment, two communication breakdowns and repair sequences occur. The first one likely happens because Will's answer in line 16 cannot be interpreted as being an answer to the SLP's prior question. Specifically, the missing verb makes the relationship between "home" and the SLP's question unclear. Another breakdown occurs in line 33 when Will struggles to answer the SLP's question about the nature of his work. His turn in line 35 is very short and does not provide enough content to completely answer the SLP's question. During the ensuing repair sequence, he provides minimal information, such as "finance," which does not add information to the exchange as it has already been established that his work was in the finance industry. Further, Will comments twice that providing a more detailed explanation is not possible, even for this familiar autobiographical information. In response, the SLP uses an "or" question to suggest her candidate understanding of what she has understood so far and to contribute to the joint-repair effort. The repair sequence concludes in line 41 when Will confirms that the SLP's candidate understanding of his work that he "set up loans for individuals and corporations" is correct.

Will's turns in this conversation are characterized by reduced specificity causing breakdowns regularly. Further, he and his partner spend a relatively large amount of time carrying out conversational repairs because the vague utterances that Will produces do not provide the SLP with the information she needs to speedily understand Will's meaning. Thus, Will's marked limitations in language production during conversation (even when discussing a highly personally relevant topic) result in much time spent

in repair rather than in building turns on topics of interest to move the conversation forward.

Since there are marked differences between Will's communication during picture description and conversation, data from one task cannot be used to infer abilities in the other. If the clinician were to gather only monologue data without observing Will in conversation, it is likely that the assessment would overestimate his language abilities during conversation. Consequently, goals based on the picture description might focus on reducing pauses time, eliminating false starts, retrieving low-frequency words, or development of more complex language involving more varied conjunctions (e.g., "if/then," "because," "meanwhile"), or expanding use of subordinate clauses and/or verb and noun phrases.

Meanwhile, goals based on Will's conversational needs would likely revolve around producing more meaningful language in simple constructions related to his personal history, persisting in communicative attempts rather than limiting interactions by stating, "I can't explain it," focusing on improved coherence of his turns to the ongoing interaction, and using alternative communication resources (e.g., gestures, drawing, description). Pausing and false starts do not appear to be as of great a concern as it seemed in the structured task; thus, such goals would likely not be addressed. Lastly, if discourse assessment included only the picture description task, the opportunity to teach Will and his communication partners individually tailored strategies for avoiding breakdowns would be missed.

Clinical Implication 2: Some Clients Do Better in Conversation Than in Monologue Tasks

Gwen, a woman with moderate transcortical aphasia (AQ = 68.0), produced this monologue:

2.1 Gwen's Picnic Scene Sample (Narrative Monologue)

1. Reading a book.
2. And wine (um) wine (:02).
3. And a bottle.
4. And radio on.
5. And sandals (:03).
6. And tree.
7. And kite.
8. And fishing.
9. And dog (:02).
10. And sandcastle.
11. And boat.

In this sample, Gwen produces one unequivocal verb, “reading,” in a clause without an agent. She says “fishing,” but it is unclear whether this is a present progressive verb or the gerund (i.e., a noun). She produces no other verbs or thematic roles. All of the short phrases she produces consist of “and” + noun. She produces a variety of low- and high-frequency nouns, yet does not mention any of the humans, even in the routinized list format, nor does she remark on the gist of the picture. Overall, Gwen’s verbal language is quite limited in this sample, consisting mostly of nouns. There is no evidence that she can assemble utterances using verbs to govern arguments (e.g., agents, themes, goals, experiences), suggesting that she would likely struggle significantly to participate meaningfully in conversation. However, the conversation samples below collected on the same day as the picnic scene indicate otherwise.

2.2 Gwen’s Conversation Sample #1

1. G: (Um) and cat and (um) son and cat and dog.
2. G: And (uh) son comes to see me (uh um :04 um) oh week to week.
3. SLP: Mhm, okay. Every week he comes?
4. G: Well, just about.

2.3 Gwen’s Conversation Sample #2

1. G: So (um) Maya is son’s cat.
2. G: And then and then my cat.
3. SLP: Ok, so Maya is your son’s cat.
4. SLP: And then Oliver is your cat?
5. G: Yeah.
6. SLP: Did Maya have a baby?
7. G: Well, no.
8. SLP: Oh.
9. G: But spayed and neutered soon.

Gwen constructs much more varied and complex syntactic forms than those in the picnic scene. In Conversation Sample 1, line 2, she uses an appropriately inflected verb (“comes”) with two arguments (“son”-agent, “me”-benefactor). In the same line, she pauses and appears to be thinking of how often her son visits and then quickly states the phrase “oh week to week.” This expression may be used by speakers with and without aphasia when they cannot give a precise assessment (in this case, how often Gwen’s son comes to visit) and are providing an approximate estimate. Gwen effectively uses this term to express that the exact frequency is not essential while maintaining the speaking floor. Further, in Conversation Sample 2,

line 1, she produces a sentence with an agent, verb, and theme (“so Maya is son’s cat”). Here, the theme is composed of a phrase in which Gwen uses the singular third person possessive morpheme to link “son” to “cat.” Then, she continues her thought by using “and” to join an adverbial phrase (“and then my cat”). In line 9, she employs “and” to link two verbs together. These samples display a much greater ability to construct and manipulate syntactic forms than was evident from her picture description sample.

Gwen displays more communicative skill when she engages in conversation than during the picture description task. In everyday, casual conversation, speakers have more latitude to steer the conversation toward topics that interest them than is the case when they are asked to describe pictures or produce language within preset parameters. This factor likely makes participation in everyday conversation inherently more personally relevant than structured, clinician-driven connected speech tasks.

The data presented here suggest that Gwen produces longer, more complex utterances when taking part in conversation. If Gwen and her clinician opt to make increasing the length and complexity of verbal utterances therapeutic goals, they could harness this finding by basing some of her services around conversational activities. Including conversation in her therapy program could help her practice producing utterances in a personally relevant communicative environment. Crucially, if evaluation of Gwen’s discourse abilities was based on the elicited monologue sample, without consideration of conversation, the treatment plan would likely result in goals underestimating her abilities in real-world conversational contexts. Similarly, because this monologue task is not sensitive to the extent of Gwen’s language capacity, it may not be a sample capable of discerning posttreatment changes.

Clinical Implication 3: Monologue Tasks Do Not Consider or Measure Nonverbal Communication

Structured, elicited monologue task instructions and measures seldom evaluate nonverbal communication, despite the fact that all people use a range of verbal and nonverbal communicative resources in everyday life (C. Goodwin, 2007). Paper/pen are not provided to allow for writing, and frequently used measures ignore gestures (e.g., correct information units; Nicholas & Brookshire, 1993; the global coherence scale; Wright & Capilouto, 2012; for an exception, see Leaman & Edmonds, 2021a, for a multimodal measure of communicative success in structured monologue).

People with aphasia regularly expand on the functional communication system that we all use in everyday communication to actively participate in meaningful

conversation (C. Goodwin, 2006; Hengst, 2020). Thus, non-verbal skills are critical in understanding communication strengths and limitations. An example of such a functional system, which includes the interlocutors and objects in the environment, was described by Archer et al. (2021). Two people with severe nonfluent aphasia successfully suggested new topics in group therapy despite extremely limited verbal skills. Both directed the facilitators' attention to particular stories and lines of text in newspapers present in the room and requested the facilitators to read selected lines aloud. By constructing and controlling a functional system composed of an artifact and another person's language abilities, each was able to nominate new topics.

To illustrate the consequences of assessment that only measures verbal production, we provide transcripts of monologue tasks and a conversation involving Miguel, a man with mild anomia (AQ = 77.2).

3.1 Miguel's Picnic Scene Sample (Narrative Monologue)

1. M: (Um) the couple is (:04) sitting down and (um) picnic (:04).
2. M: The boy I mean man is reading a book.
3. M: And (:04) hurzhorf {trying to say shoes off} shoes off and (uh).
4. M: I mean glasses (:04).
5. M: The woman is pouring a drink and listening music (:03) (w*).
6. M: Yeah (um).
7. M: The radio (:03).
8. M: (Um) the boy {pointing towards the man} I mean man is (:02) slippers off on (:04) sippers.
9. M: (Um) the boy is (:02) running on (uh) (:03) the boy is running on (:04) boy the boy is running and (f*) flying a kite.
10. M: The dog is chasing the boy.
11. M: (:05) The girl is (:03) making (:03) sandcastles.
12. M: (:08) The fisherman is catching the (f* f*) (:05) fish and wearing (:03) wearing (glas*) I mean hat.
13. M: (:03) And (w*) the fisherman is (:03) ten I mean standing in (:03) pier.
14. M: (:04) And the (:03) people is sailing a boat.

In this sample, Miguel produces many present progressive sentences each with a subject, verb, and object, along with articles and prepositions, and the conjunction "and." Miguel's word retrieval difficulty is apparent as characterized by false starts, "(f*) flying a kite" (line 9),

self-corrections prefaced with "I mean" (e.g., lines 2, 8, 12, 13), pauses, and a semantic paraphasia (line 8, "slippers" for "sandals"). Despite this difficulty, he produces low-frequency ("pier," "picnic," "sandcastle") and high-frequency ("man," "wine," "book") nouns, and light ("making") and heavy ("wearing," "fishing") verbs. All utterances are coherent to the picture and comprehensively include the people, objects, and actions. Throughout the task, he does not use gestures, nor does he point to the pictures.

Contrast this sample to the two following samples extracted from a single 11.5-min conversation sample taken on the same day with an SLP. In Conversation Sample 1, Miguel and the SLP have been discussing football, but Miguel has difficulty initiating the topic of conversation about Tom Brady. His language is markedly different than that in the picnic scene sample. In the conversation, he produces many short utterances that are often incomplete and very few nouns and verbs, and it is unclear what he is referencing when he states "twenty one" and "last night." Unlike his picnic scene description, there are no pauses, but similar to that task, he uses no gestures, with the exception of line 24.

3.2 Miguel's Conversation Sample #1

1. M: I hated. I mean like I was (um) last I think (:02) twenty one (hun*). I mean twenty one.
2. SLP: Hmm.
3. M: I think, I think.
4. SLP: Yeah. The year?
5. M: I think is, I mean.
6. SLP: Oh (tw*).
7. M: No no no.
8. SLP: Year.
9. M: Yeah, (um um).
10. SLP: Two thousand eleven?
11. M: I think so.
12. SLP: Ok.
13. M: Well last night, I mean.
14. SLP: Last year?
15. M: I think it was, yeah, I think (um) (:06).
16. SLP: Yeah.
17. M: Yeah. (Um) Birdy {intending 'Brady', for Tom Brady}?
18. SLP: Oh yeah.
19. M: I was little bit last night.

20. M: I was like oh ok (um).
21. SLP: Before the deflating of the balls and all that kind of stuff?
22. M: Yeah.
23. SLP: Before that scandal?
24. M: Yeah, and I was like *{shakes head, does sudden gesture across neck}*.
25. SLP: I think a lot of people were.
26. M: Yeah.
27. SLP: (Um) just (ri*) a little bit ridiculous.
28. M: I it's I don't know *{very quiet}*.
29. M: It's hating it.

The second sample comes from the same conversation, 4 min later. Here Miguel explains that he was recently in a bar watching basketball on an overhead TV and mixed martial arts on his phone while his friend was also trying to talk to him. Miguel includes factual details about the events, as well as his emotional reactions. In this sample, his language is similar to Conversation Sample 1. However, in Conversation Sample 2, he uses many gestures that are critical for expressing his story. Importantly, this range of conversational ability is evident within one conversation, with the same partner, and was collected within a 5-min time frame embedded in a conversation that was only 11.5 min long. Consistent with previous research (Boles & Bombard, 1998), this suggests that even a short conversation sample is adequate to illustrate interactional strengths and weaknesses meaningful for treatment planning around everyday conversational needs.

3.3 Miguel's Conversation Sample #2

Miguel's utterances are bolded in this sample to aid with ease of reading.

1. **M: I was (um) I was (um) I was bar.**
2. SLP: Mhm.
3. **M: And** *{gestures holding an imaginary phone to watch the game just in front of himself on the table}* **watching a game phone. I was** *{he mimes sitting back, crossing arms, and widening eyes as if he is intently watching the game on the imagined phone}*.
4. SLP: So what so you were watching M M A *{mixed martial arts}* *{points to imaginary phone}*?
5. **M: Yeah.**
6. SLP: On, at the bar *{gestures vaguely upward to TV, as if TV is over a bar}*?

7. **M: Yeah.**
8. SLP: And then watching what on your phone *{points to the imaginary phone again}*?
9. **M: (Um) no no no no** *{correcting his response in line 7; saying no to line 6 instead of yeah}*.
10. **M: I was watching phone** *{gesturing to himself, touching chest}*. **And I was** *{points upwards to left corner of the room where SLP indicated a TV; he indicates it near the ceiling as if it is ceiling mounted over a bar}* **my March March Madness** *{the college basketball tournament}*?
11. SLP: Oh yeah.
12. **M: Watching there** *{touches his eyes with index fingers on each hand, then extends arms and points fingers at the imaginary TV over a bar}*. **And I was** *{pretends to hold a phone with both hands, using exaggerated expression with grin and wide eyes as he pretends to watch the M M A event on his phone}* **phone M F C** *{he means M M A}*.
13. SLP: Got it. So, you could do both at the same time.
14. **M: And I was (um) I was (um) friend** *{gestures with both hands to his right, just next to himself as if a friend is sitting by him}*.
15. SLP: Yeah.
M: Watching the game *{gestures imaginary friend talking at him while trying to watch game}*. **"Oh!"** *{pretends to respond to friend by gesturing come here}*. **"What"** *{looks at imagined friend to find out what he wants}*. **"What"** *{enacts this in a distracted way to the friend, with a quiet uninterested tone, sitting back pretending to watch the game on the imaginary phone}*. **"No no"** *{puts up hand to imagined friend as if telling him not to talk; points at imaginary phone and uses exaggerated facial expression with wide eyes while focusing attention on the phone instead of the friend. Effectively letting the friend know he can't talk because he's watching the game}*.

In constructing this narrative, Miguel makes use of several communication modalities. In line 3, he gestures action in the vicinity just in front of himself where he watches the game on his cellphone and points toward a distant location to indicate that he was also watching a TV. Here, the object and locations indicated by gesture communicate the intended arguments of the verb "watch"; his gesture indicating himself expresses that he is the agent and his pointing toward the imagined TV indicates that the TV was the theme. In line 14, he states "friend" and engages in pantomime, turning to gesture to his friend to join him, and then enacts their interaction. He then voices

a part of the conversation with his friend, asking “what” and gesturing for him to stop talking so he can watch the game on the phone uninterrupted.

Miguel skillfully combines speech, gesture, and pantomime to tell an abstract, complex story, removed entirely from the immediate environment. He is clearly an adept communicator, despite his aphasia. Since monologue protocols typically do not request or measure nonverbal data, his SLP might not realize that Miguel has areas of communicative strength if everyday conversation is not assessed.

Clinical Implication 4: Conversation Provides Information About How Partners Interact

Monologue tasks elicited in clinical settings are concerned with how the person with aphasia produces language without interaction from another person and thus cannot provide any information about how the person uses language within interaction. To illustrate the need to consider conversational interaction during assessment, below we provide an example of communication repair, an activity that is frequently achieved collaboratively through a sequence of turns. The following sample comes from a conversation between Maurice, a man with moderate Broca’s aphasia (AQ = 51.7), and an SLP (MacWhinney et al., 2011). In the excerpt, Maurice attempts to communicate where his grandkids live.

4.1 Maurice’s conversation sample

1. SLP: Boy, where in Texas?
2. M: (Uh) Texas. Long time. Long long.
3. SLP: (Lo*) long way away?
4. M: Yeah yeah.
5. SLP: Long way away.
6. M: (sh*).
7. SLP: Let me let me guess. Is it a big city?
8. M: Yeah.
9. SLP: Okay tell me if I’m right. If I’m not I’ll quit. And (uh) Dallas?
10. M: Nah nah.
11. SLP: South {*SLP points downwards*}? Houston?
12. M: (Uh).
13. SLP: Doesn’t really matter but it’s fun to play around with this {*SLP writes something down on a piece of paper*}. How ‘bout this one {*SLP points at something on piece of paper*}?
14. M: Yes {*Maurice points at piece of paper*}.

15. SLP: San Antonio?
16. M: Uhuh.
17. SLP: Got it, got it.
18. M: Yep.
19. SLP: Very good.

In line 2, Maurice’s utterance cannot be interpreted as being an answer that “fits” the question asked by the SLP. Consequently, communication breaks down and the partners lose intersubjectivity (they stop being “on the same page”; Wilkinson, 1999). They then work together to repair communication.

Like some of the repair sequences that have been described in the literature (C. Goodwin, 1995; Kagan, 1999), this sample resembles a game of “twenty questions.” In line 7, the SLP asks a “general” question, which helps to narrow down the options for the next guess. In line 8, Maurice produces an answer that indicates that the SLP has offered correct information. At this point, they both understand that the range of choices for the next guess is greatly reduced. The SLP’s guesses in lines 9 and 11 are much more specific and refer to members of the category (Texas) that she and Maurice had agreed upon. In lines 10 and 12, Maurice’s answers indicate that the SLP has not yet guessed the correct city. In line 13, the SLP writes San Antonio, and Maurice points to the paper to communicate that the SLP is correct.

The data presented here show that Maurice has the linguistic skills needed to collaborate with his partners during communication repair. Given how often breakdowns occur between people with aphasia and their common partners, it is beneficial for clinicians to understand how individuals and their usual partners manage repairs. Assessment of these important interactions can only occur during authentic conversations because of the collaborative and cooperative nature of conversation. Partners work together to choose and pursue topics and to construct sequences (like questions and answers) and thus can only be understood within context. Monologue tasks never require interaction with other speakers (i.e., comments departing from the task and that address the examiner are penalized; Nicholas & Brookshire, 1993) and therefore cannot provide insights critical for understanding everyday communication with other people.

Clinical Implication 5: Conversation Is a Venue Where People Engage in Identity Formation

One of the critical differences between monologues and conversation concerns the functions of these two forms of discourse. During clinical monologue tasks, the

examiner determines what topics the person with aphasia should talk about (even when the person with aphasia is asked to produce a narrative, examiners often request specific narratives, such as the Cinderella story or a specific personal event such as information about where they live). In this context, people with aphasia have no choice, and few opportunities for talking about matters of interest to them. Moreover, because the person with aphasia cannot freely introduce topics that are personally relevant to themselves, the capacity for doing identity work during monologue tasks is highly constrained (if it exists at all). By contrast, in conversation, people with aphasia can introduce a wide range of topics. This allows people with aphasia to direct the topic (Archer & Leaman, 2022; Leaman & Edmonds, 2020; Leaman et al., 2022) and spend more time communicating about themselves and topics of interest, essentially staking out and enacting elements of their identities, in ways similarly accomplished by all people (Eggins & Slade, 1997). Below are samples of two people with aphasia who each construct and share important aspects of their identities in conversations with SLPs. They both have mild anomia (AQs = 92.7 and 88.5).

5.1 Jim's Conversational Sample

1. SLP: Like when we when I was in school, we would always go down to City University to hang out.
2. J: Well. Yeah.
3. J: When I was a I was (s*) sophomore or junior I was (uh) renowned for stealing the University mascot *{told with very flat affect}*.
4. SLP: *{Laughing}* down at City University?
5. J: Yeah.
6. SLP: Did you ever get in trouble for that?
7. J: Yes *{quick very matter of fact response, continued flat affect}*.
8. SLP: How did they catch you?
9. J: They caught me *{with emphasis, a grin and laughter, expressing a sense of pride about the event}*!

6.1 Reggie's Conversational Sample

1. SLP: Did you hear on the news this morning they did (uh) they bombed (um) an island where a bunch of (um) the Taliban members were.
2. R: Yeah, it's it's (it*) it's it'll never end *{furrows brow}*.
3. (0'03" omitted, comprising 4 turns, during which they briefly mention the history of the fighting)
4. R: It's it's terrible, so.

5. SLP: Yeah.
6. R: But I put in nine good years. A lot of it was instruction. I I I I did teaching in different places *{gestures spots on the table}* and stuff like that. (W*) went to sea for four *{shows four fingers, intonation rises, emphasizes number of times}* patrols. I made four runs with this kind of thing so.
7. SLP: Wow!
8. R: I enjoyed it.
9. SLP: How boring was that?
10. R: (Eh) no.
11. SLP: Not too bad?
12. R: Well yeah. But we're always running drill *{smiles}* drills to see if we're ready to go.

In these samples, Jim and Reggie successfully introduce new topics (Jim, line 3; Reggie, line 6). In the first sample, the SLP laughs in her next turn. In the second, the SLP produces an animated exclamation with upward inflection ("Wow!"), indicating that she is pleasantly surprised about the accomplishments Reggie has shared (Clift et al., 2009). Both SLPs display positive affect toward these topic-initiating turns, signaling agreement to pursue the offered topics (Button & Casey, 1985). Both Jim and Reggie choose to initiate topics relaying autobiographical facts about their lives. Jim describes a prank he pulled in college, and Reggie discusses the job he held for many years. As people do in conversation, Reggie and Jim are telling their partners about themselves and their personal histories. These interactions in which speakers spend time getting to know one another play a vital role in helping human beings enact and reinforce their identities (Antaki, 2013; Goffman, 1974; Shadden, 2005) as well as in helping us (re)constitute the bonds that tie us to our friends and families (Schegloff, 2006).

Comprehensive Case Illustration

In our final example, we share multiple samples from Lance, a man with severe nonfluent aphasia (AQ = 38.8; MacWhinney et al., 2011). Our aim here is to integrate our discussions thus far with a single comprehensive case. First, we provide three monologues produced by Lance. Next, we provide a representative excerpt from a 10-min conversation between Lance and an SLP, collected on the same day.

7.1 Lance's Refused Umbrella Picture Sequence Description (Narrative Monologue)

This multi-panel picture sequence depicts a boy refusing to take an umbrella from a woman (assumedly his mother) when he goes out on a rainy day

1. L: Mhm. Alrigh. Alright.
2. L: (Um) the (um um um um) the the (um). My (um) father {referring to the mother in the picture} and son (uh) the (um um um) the (um br*).
3. L: And the (um) the (um) the (um um).
4. L: Wuhtbaier {*approximation of umbrella, L laughs here*}.
5. L: (Buh* buh*) beherkuh {*approximation of umbrella*}.
6. L: (Uh) a glass.
7. L: (Uh) cold cold. The cold.
8. L: And (um um um) cold cold cold oh cold.
9. L: (Uh) a boy and girl.
10. L: And (um um) put down (uh uh uh p* um m*) the (um) the (um uh m*).
11. L: Wait.
12. L: Oh sorry.

7.2 Lance's telling of the Cinderella story (narrative monologue)

1. L: (Um) Cinderella (um s*) cold and.
2. L: (r*) right?
3. L: It's (ve*) it's he's a very dangerous man.
4. L: And (um) Cinderella is she's (uh uh) very good very good.
5. L: It's (um) Cinderella (um k*) kerz very talented.
6. L: And it's a very (uh) dynamic.
7. L: And at the inderella {*approximation of 'Cinderella'*} is (um uh) the (um).
8. L: Cinderella the (um) the (um uh) the (um) gloves.
9. L: And (um) she's good.
10. L: But it's this is a very good person.
11. L: But it's (uh um) Cinderella it's it's (uh).

7.3 Lance's description of how to make a PBJ sandwich (procedural monologue)

1. L: (Uhhuh) (s* huh).
2. L: (Um) the (um) the (uh) bread.
3. L: (Uh) and (um um) toast and jelly.
4. L: And it's (i* um) it nice.
5. L: And then (uh um) take it (wi*).

6. L: (Uh um) sandwich.
7. L: And it's it's a very, this very good
8. L: Thank you.

In these samples, Lance has difficulty using grammatical rules when forming utterances, as suggested by his verbalizations consisting mostly of single words and short phrases, although several simple sentences occur in the Cinderella story. Most utterances are relatively simple two-word forms consisting of a determiner + noun (e.g., picture description, line 7, “the cold”), or qualifiers and adjectives (Cinderella, line 4, “very good”). Lance also appears to have difficulty with pronoun use, demonstrated in the Cinderella story where he inserts “he,” “it,” and “this” without first providing the antecedents required for the pronouns to have meaning. In the procedural task, he lists objects involved with the task without verbs, and in line 7, he leaves out the verb “is,” resulting in an ungrammatical clause (“this very good”).

Word retrieval also appears to be challenging for Lance. The samples feature both semantic and phonemic paraphasias. For example, in line 2 of Refused Umbrella, he substitutes “father” for “mother” and produces neologisms (or phonemic paraphasias) in lines 4 and 5 that may be approximations of “umbrella.” Likewise, he produces “kerz” in line 5 of the Cinderella story, without an identifiable target. The utterance in line 3 of the Cinderella story (“he’s a dangerous man”) appears to include a paraphasia, as none of the characters match the phrase “dangerous man.” In all three samples, his speech is characterized by many filled pauses (“um”), contributing to the slow and hesitant quality of his utterances.

Overall, these difficulties detract from Lance’s ability to produce monologues that are successful, and he does not achieve the aims commonly required by these tasks. For example, Lance’s retelling of the Cinderella story does not effectively communicate details about the characters, setting, and resolution. Further, in these monologue tasks, Lance does not convey critical relevant concepts. Following is a conversational sample between Lance and an SLP (their relationship is not described in AphasiaBank). The sample includes planning an upcoming trip and narrative discussion of his leisure interests.

7.4 Lance's conversation sample

1. SLP: So (uh) what are you up to? Are you doing any house hunting these days?
2. L: (Uh) no no no it's (n*) not there you know (be) cause it (y*) {*L takes piece of paper out of shirt pocket and shows it to SLP, presumably introducing concept of New Jersey*}.

3. SLP: Oh, you're gonna because of because of New Jersey.
4. L: Yeah yeah New Jersey.
5. SLP: Yeah and (uh) then when you get back from New Jersey you can (re*).
6. L: (G* m*) house house.
7. SLP: Yeah, by then the market will probably have dropped bottomed out totally.
8. L: Oh, I know, so.
9. SLP: (Uh) so when are you going?
10. L: (Uh uh uh) {*L writes M J J A S and 3 dates*}. That's a course w and.
11. SLP: May, June, July, August? {*SLP reads what is written on the paper*}.
12. L: No {*laughs*}.
13. SLP: (Uh).
14. L: (Eh).
15. SLP: Yeah May.
16. L: Yeah.
17. SLP: Okay so you're going gonna go in May.
18. L: Yep.
19. SLP: And you're gonna be there in June.
20. L: Yep.
21. SLP: Be there in July.
22. L: Yep yep.
23. SLP: come home August twentieth.
24. L: Yeah, xxx the course course. (1'36" omitted, comprising 44 lines; partners discuss writing/drawing as a strategy; Lance writes out more months; he confirms he likes the sporting event he attended the day before)
25. SLP: have you been doing anything interesting over the weekends or anything?
26. L: Oh yeah (uh uh the um uh) the (um) I'm good (re*) yeah (eh) {*L pats leg*}.
27. SLP: Are you are you doin(g) a lot of walking?
28. L: Walking, walkin(g), walking. And tai chi chi chi.
29. SLP: and oh, how is that going?
30. L: Oh, she's akse I'm I'm good. She's good. And (uh uh f) is this good. I'm I'm done.
31. SLP: So, when is when is the tai chi over?
32. L: (Um um) one (mo*) more and then maybe (uh) two {*L writes something*}.
33. SLP: Okay so you have it you have a little more time that you can spend in it .
34. L: Eh yeah yeah yeah.
35. SLP: And then can you continue to do that?
36. L: (Ye*) yes yes.
37. SLP: And will you continue?
38. L: Yep. Is it good (be)cause it's (ho*) it's very.
39. She's akse {*intended word, per AphasiaBank: 'excellent'*}, but you know it's so good.
40. But it's hard but it's good.
41. SLP: Hey .
42. L: It's insane.
43. SLP: You sound like you really like it.
44. L: Oh it's akse {*intended word, per AphasiaBank: 'excellent'*} (t*) she an(d).
45. SLP: Is Nancy doing it too?
46. L: Yes yes.
47. SLP: and (h*) is Rod?
48. L: (Uh) I don't know.
49. L: It (ye*) yeah yeah, I think so.

In contrast to the monologues, during this conversation sample, Lance consistently produces relevant and informative lexical items (although "excellent" is an approximation) without semantic paraphasias or neologisms. Further, unlike the monologues, he uses conjunctions to combine two clauses into a complex (line 39: "she's akse {excellent} but you know it's so good"; line 40: "it's hard but it's good"). From a macrostructural perspective, although Lance has difficulty achieving objectives that speakers aim for in his structured monologues, in conversation, he is much more communicatively successful. He conveys complex, abstract information throughout his conversation with the SLP. Between lines 1 and 24, the reason he will not be house hunting in the city in which the conversation occurs is established. Similarly, between lines 26 and 49, he communicates that he routinely participates in two weekend recreational activities, namely, walking and tai chi. He also expresses stance about his interests when he describes that he finds tai chi beneficial (lines 38 and 39, use of "very" and "so" as intensifiers and "excellent" as an emphatic vocabulary choice), that he will continue to

participate in this activity for a while longer, that he thinks his teacher is excellent, that a third party (line 46: Nancy) is also doing tai chi, and that he is not sure whether a different third party (line 48: Rod) attends classes.

The differences in performance across tasks may be related to the highly context-bound nature of human learning. Previous research has demonstrated that if humans practice skills in a particular context, they become adept at using skills in similar contexts (Nadeau, 2015). Generalization to other more varied contexts tends to be difficult to achieve. In everyday life, conversation is a much more commonplace activity than picture description, stand-alone narrative production, or procedure recitation. Lance has likely had few opportunities to practice syntactic processing in the context of monologue tasks, but a wealth of experience practicing syntactic processing during conversation. Further, factors present in conversation but not structured elicited tasks such as personal relevance, complexity, and agency (i.e., volitional behavior) contribute to a rich communicative environment (Hengst et al., 2019) essential for neuroplasticity (Kleim & Jones, 2008). These differences between tasks including the amount of practice within specific contexts may contribute to cross-task differences in Lance's language production.

Like Miguel, Lance uses nonverbal resources that help him remain an effective communicator, despite the fact that he struggles to produce grammatically complete utterances. In line 2, instead of verbally producing the needed words, he uses an external artifact (a piece of paper that indicates "New Jersey") that he points to in order to convey relevant information. In line 10, he switches to a different modality (writing) to let his partner know about his upcoming plans. Lastly, in line 26, he uses a gesture (patting his leg) to indicate that he enjoys walking. Throughout the sample, Lance discusses topics of importance to his life, thereby choosing which aspects of his identity to share with the SLP. As in the examples from Jim and Reggie concerned with expression of identity, here Lance chooses what to share and how to share his opinions and reactions. In the conversational context, Lance controls the sharing of self, critical for renegotiating and rebuilding one's sense of self following catastrophic live events, such as a stroke (Frank, 1995), and exerts influence over how he wishes the SLP to know and understand him.

If Lance's SLP assessed only monologue-level discourse, his skills in conversation would not be evident, and his therapeutic program could not include his range of strengths and challenges. By assessing conversation, the SLP could discern that Lance produces more complex syntactic processing in this context. If Lance and his SLP opt for goals to increase complexity of verbal language, they could harness this finding by developing his intervention around conversation.

Concluding Thoughts

Research concerning people with and without aphasia indicates differences in discourse production across monologue subtypes and conversation. The differences between the elicited monologues produced in the therapy room and the conversations that clients have in everyday life are especially large. According to the literature, differences between different discourse genres preclude using performance in one context (e.g., picture description) to predict performance in another (e.g., conversation) (Armstrong et al., 2011; Beeke et al., 2003; Dipper et al., 2018; Fergadiotis & Wright, 2011; Leaman & Edmonds, 2021a, in press; Mayer & Murray, 2003; Shadden et al., 1991; Shnur & Wang, 2022; Stark, 2019; Stark & Fukuyama, 2021; Ulatowska et al., 1981).

In this tutorial, we have illustrated these points with language samples from people with various presentations of aphasia. Miguel, Lance, Gwen, and Maurice demonstrate greater difficulty in monologue than in conversation. Many of our clients with aphasia and many of those discussed in the literature display similar profiles (Beeke et al., 2003, 2020; C. Goodwin, 2004, 2010; Heeschen & Schegloff, 1999, 2003; Olsson et al., 2019; Wilkinson et al., 2010). Conversely, some people, such as Will, demonstrate stronger abilities in monologue (Beeke et al., 2003; Dipper et al., 2018; Leaman & Edmonds, 2021a, in press; Mayer & Murray, 2003). Because there is no way to predict a client's relative abilities, clinicians need to be aware that these kinds of mismatches exist in many clients.

Consequently, we can better meet the needs of our clients and support them in participating more fully in everyday life by adopting discourse assessment practices that specifically align with their discourse needs and interests. Notwithstanding the needs of specific clients, most often, people with aphasia select conversation as the form of discourse they want to focus on (most likely because conversation is the most common form of discourse people produce and understand in everyday life). Clinicians can thus benefit their clients by equipping themselves with the genre-specific knowledge and skills they need to rehabilitate client abilities across a range of discourse genres.

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