



Narrative Ability in Autism: Strengths, Weaknesses, and Links to Social Understanding



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The stories we tell about our lives, hear told by and about others, and those jointly constructed and transmitted within communities are a valuable resource through which we build and reinforce relationships and participate in shared cultural practices. A uniquely human capability, narrative is an important sociocultural activity through which our world encounters are organized, reflected upon, and continually reconfigured as they are integrated into dynamic personal and cultural accounts that forge connections between self and other, and tether the past to the present and future. Telling stories about our own and others experiences is one way in which we interpret our lives in culturally meaningful ways (Bruner, 1987, 1991, 1997; Bruner & Kalmar, 1998; Capps & Ochs, 2001; Crapanzano, 1996; Ochs & Capps, 1996, 2001; Polkinghorne, 1991; Schiffrin, 1996). Furthermore, in evaluating and integrating our experiences in narratives, we commit them to memory where they contribute to our sense of the continuity of our lives over time (Fivush, 1994; Fivush & Reese, 1992; Hermans, 1999; Neisser & Fivush, 1994; Nelson, 1990, 2001; Snow, 1990).

From children's playground encounters (Kyratzis, 1999) to dinner-table talk of the day's events (e.g., Ochs & Taylor, 1992), and indeed, even in the discussion of research findings in scientific laboratories (Ochs, & Jacoby, 1997), narrative is a ubiquitous, though oft unrecognized element of our daily lives. It is typically only in the absence or disruption of narrative that its vital roles in communication and self and social understanding become most profoundly apparent (Crapanzano, 1996; Greenberg, 1995; Meares, 1995; Neimeyer, 2000). For, according to Paul Ricoeur (1981), without narrative rendering of experience, our lives become inconsistent, with time experienced as "confused, unformed, and at the limit mute" (p.11).

Autism is a disorder involving a distinct

pattern of social, cognitive, and linguistic impairments that severely undercut narrative competence. In what follows, the nature and extent of autistic persons' narrative impairments are described to illustrate the ways in which these different impairments impose barriers to narrative activity, and consider the impact of autistic persons' limited narrative skills on social and communicative functioning. As a backdrop for more in depth consideration of the roots and consequences of the deficient narrative practices in autism, narrative development in typical populations is first described, followed by an account of the narrative difficulties observed across the autistic spectrum of ability.

Narrative in typical development

Children are immersed in narrative practices from the earliest periods of development and begin producing their own and participating in others' narrative constructions as early as their second year (Eisenberg, 1985; Fivush, 1994; Miller, 1999; Miller & Sperry, 1988; Nelson, 1989; Wiley, Rose, Burger, & Miller, 1998). As illustrated in Katherine Nelson's seminal work (1989), even a two year-old child resting in her crib employs simple narratives to reflect upon and make sense of recent events. With age, children engage in independent and co-constructed narratives more frequently and with greater competency. What were once grammatically and discursively simple accounts of temporally ordered events told to convey an attitude, soon become complex accounts that are causally and temporally related, extended, and integrated with their own and others' perspectives (Appelbee, 1978; Bamberg, 1991, 1997; Bamberg & Damrad-Frye, 1991; Berman & Slobin, 1994; Kuntay, 1997; Mandler & Johnson, 1977; Miller & Sperry, 1988; Nelson, 1986, 1989; Peterson & McCabe, 1983; see also Propp, 1968, Stein & Glenn, 1979).

As development proceeds, children become increasingly eager to involve others in their storytelling practices and at this point narrative becomes a powerful conduit through which social and cultural information is transmitted (Eisenberg, 1985; Fivush, 1991; Fivush & Reese, 1992; Minami, 1996; Mintz, 1995). As experiences are brought to conscious awareness, reflected upon, and reorganized through narrative interactions, they are subjected to social construal where their moral, emotional, and social significance are highlighted. In this way, children glean a wealth of information about their roles within family, peer, and broader communities, including how their experiences are evaluated within their social and cultural world.

Although narrative continues to develop and shape world views and relationships throughout our lives, these complex functions are realized at a surprisingly quick pace. The fluency and speed of children's narrative development belies the complexity of narrative practices so strikingly revealed in cases of narrative impairment. Autism is a developmental disorder involving serious impairments in language, cognitive, and social functioning (APA, 1994). Because autism disrupts the intricate stitchwork connecting these domains, it can provide a window into relationships that are often obscured when development proceeds normally. Studies of impaired narrative activities in autism have thus highlighted a broad repertoire of underlying skills and provided important insights into the nature and relationship between autistic children's vast difficulties in communicative and social-emotional realms.

Narrative in autism

Although the onset of language is delayed, and is in fact a primary criterion in the diagnosis of autism, individuals within the high-functioning minority generally develop phonologically, morphologically, and syntactically well-formed language (Bartolucci & Pierce, 1977; Bartolucci, Pierce, & Streiner, 1980; Bartolucci, Pierce, Streiner, & Eppel, 1976; Boucher, 1976; Pierce & Bartolucci, 1977; Tager-Flusberg, 1985). It is in the social functions of language where autistic persons demonstrate their greatest difficulties. Autistic persons' use of language tends to be excessively literal, generally bereft of affective stance, and insensitive to interlocutors' needs for contextual information, all of which severely compromise discursive interactions in general and narrative activities in particular (Baltaxe 1977, 1984; Frith, 1989; Loveland, et al 1988; Tager-Flusberg & Anderson, 1991).

In contrast to the seemingly effortless narrative musings of a typically developing child, individuals with autism struggle to execute coherent narratives. Although narratives are impoverished across the autistic spectrum, the extent of their difficulties vary with children's cognitive and linguistic competence, with lower functioning, mentally retarded groups demonstrating greater narrative impairments than high-functioning individuals. Of the relatively few in depth investigations of narrative ability in autism, the majority have focused on lower functioning groups with mental retardation.

Findings from this body of work are reminiscent of the early communicative profile

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in autism, in which children rarely orient or respond to others' communicative bids (Werner, Dawson, Osterling, & Dinno, 2000) or initiate their own attempts to direct attention or share interests with others (Charman, 1997; Leekam, Baron-Cohen, Perrett, Milders, & Brown, 1997). Overall, lower functioning groups produce quite impoverished narratives, often peppered with bizarre and irrelevant comments, and lacking a general awareness of underlying themes and informational needs of the listener (Bruner & Feldman, 1993; Capps, Losh, & Thurber, 2000; Loveland, McEvoy, Tunali, & Kelley, 1990; Tager-Flusberg, 1995; Tager-Flusberg & Sullivan, 1995). Moreover, they seem to lack a basic inclination to share experiences through narrative, very seldom producing narratives in daily interactions (Capps, Kehres, & Sigman, 1998).

A number of investigations have employed story re-telling tasks to mine narrative skills of lower functioning autistic groups. For instance, Katherine Loveland and her colleagues showed a group of autistic children stories presented in a video sketch or enacted by puppets and later asked children to re-tell the stories. Relative to accounts produced by chronological and verbal-mental age-matched children with Down Syndrome, the autistic group's renditions failed to acknowledge central themes or motivations for protagonists' behaviors. These disconnected and incoherent accounts lead investigators to suggest that children with autism lack the fundamental appreciation for narrative as a tool for organizing experiences in coherent and meaningful ways (see Bruner & Feldman, 1993; Loveland and Tunali, 1993; Sigman & Capps, 1997 for similar views).

Investigations using wordless picturebooks to elicit narrative re-tellings suggest that illustrated narrative stimuli may facilitate autistic persons' narrative production to some extent. Using the wordless picturebook *Frog, where are you* (Mayer, 1969), Helen Tager-Flusberg (1995) found that children with autism were able to identify the story's theme, although they produced shorter stories lacking resolutions, and were less inclined to convey causal relationships, including the causes of protagonists' psychological states, thoughts, and feelings, than were language-matched comparison children.

Findings that mentally retarded autistic individuals are less apt to explain the causal circumstances surrounding characters' thoughts and feelings have been confirmed in two subsequent studies using a different picturebook (Capps, Losh, & Thurber, 2000; Tager-Flusberg & Sullivan (1995). Whereas both typically developing children tend to frame protagonists thoughts and feelings within elaborate causal frameworks (i.e., "the boy was upset because his frog is missing"), children with autism are less inclined to do so, instead mentioning internal states in descriptive fragments. Moreover, Capps et al. noted among children with autism the tendency to describe the behavioral

manifestations and visually perceptible features of characters' feelings (e.g., "he made his mouth sad"), perhaps attesting to autistic persons' widely documented theory of mind impairments (see Baron-Cohen, 2001 for review).

In line with this suggestion, findings indicate that among mentally retarded autistic groups, deficient narrative abilities are linked to children's restricted understanding of mental states. In particular, children's ability to extend and elaborate their narratives through descriptions of protagonists' inner states, evaluations of causal relationships, and their use of complex syntactic constructions used to organize narrative were all associated with their ability to pass false belief tasks (Capps et al., 2000; Tager-Flusberg and Sullivan, 1995). Thus, a rudimentary understanding of mental states, and ability to use such knowledge to predict behavior, seems a necessary building block for successful narrative communication. Gauging interlocutors' knowledge and engagement, adjusting message form and content accordingly certainly draw upon an understanding of mental states. What might explain, then, the narrative impairments of high-functioning autistic individuals who demonstrate such knowledge, passing standard false belief and even more advanced assessments of theory mind (e.g., Happe, 1995)?

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Among higher functioning individuals with autism who are not mentally retarded, narrative practices are impaired, though more subtly so than among lower-functioning groups, particularly in highly the structured storybook contexts discussed above. In a detailed investigation of high-functioning autistic children's ability to produce narratives across different discourse contexts, Losh and Capps (2003) elicited narratives from very high-functioning children with autism in both a structured storybook context and a more flexible, conversationally-based personal storytelling interaction, during which children were asked to tell the experimenter about personal experiences with friends, family, pets, and special occasions. Though demonstrating some difficulties, the autistic group performed surprisingly well in the structured storybook task, producing narratives comparable in length and thematic elaboration to those produced by verbal IQ and age-matched typically developing children. Moreover, autistic children often seemed to enjoy the storybook tasks, as evidenced by their overall engagement in storytelling and frequent comments implying they had taken some pleasure

in the experience (e.g., "neat story"). This relative strength contrasted starkly with children's performance in the conversational personal storytelling activity. Children with autism required significantly more prompts to launch and sustain their personal narratives, and exhibited difficulty causally relating and coherently elaborating on narrative themes, failing to give narrative voice to their experiences even when provided with highly structured support and scaffolding from experimenters.

Investigators further explored this profile by examining associations between children's narrative difficulties and indices of cognitive, verbal, and social-emotional functioning, including theory of mind and emotional understanding. Examining children's concepts and recognition of simple and complex emotions in video vignettes, investigators discovered that children's emotional knowledge was tied to both the structural and thematic features of their storybook and personal narratives, including the ability to identify themes, elaborate coherently along a storyline, and employ complex syntax to establish temporocausal relationships. Similar results emerged from a recent examination of high-functioning autistic children's understanding of their own emotional experiences (Losh, 2003). In this study, children were asked to discuss personal memories of experiences with a range of both simple and complex emotions, and contextual appropriateness of these accounts was examined in relation to an independent index of narrative skill. As in the previous investigation, findings revealed a strong association between narrative competence and the ability to relate contextually appropriate accounts of emotional experiences. In each of these studies, associations between narrative and measures of emotional knowledge were independent of age, IQ, and knowledge of mental states as assessed through advanced theory of mind tasks.

Raising important questions concerning the basis of autistic persons' narrative impairments, these findings compel critical evaluation of how narrative skill and social-emotional knowledge might fortify one another in typical development and thus, reciprocally undermine one another when impaired. Our knowledge emotions — how to express them in conventional ways, interpret the facial, gestural, and postural affective signals of others, and coherently attribute meaning to affectively charged experiences — undergird skills ranging from our most basic capacities for attending to socially relevant stimuli to more sophisticated knowledge of complex social interactions and relationships (Fischer, Shaver, & Carnochan, 1990; Gordon, 1989; Hobson, 1993; Levy, 1984; Russel, 1989; Stein & Levine, 1999; Stipek & DeCotis, 1988; Thompson, 1989; Trevarthen, 1992; Underwood, 1997). As a result, the contributions of emotional knowledge to communication, and narrative in particular,

cannot be ignored. The very inclination to narrate and share our experiences with others must certainly be grounded in our knowledge of emotions and drive for emotional connectedness (e.g., Ricoeur, 1981).

An equally important, though less oft explored possibility concerns the ways in which emotional knowledge may be fostered by narrative activities. In line with studies of typical development, which richly illustrate the importance of communicative practices to emotional functioning (Cutting & Dunn, 1999; Dunn, 1988; Dunn, Brown, Slomkowski, Tesla, & Youngblade, 1991; Fivush, 1994; Hughes & Dunn, 1998), these findings suggest that narrative ability may be an important ingredient in the development of emotional awareness. Narrative is a pervasive and powerful mechanism for reflecting upon and making sense of the emotional hues of experiences and relationships in relation to the sociocultural contexts in which they are imbedded. Organizing experiences and evaluating their emotional significance through narrative helps to consolidate them in memory where they add texture and continuity to our inner worlds (Fivush & Reese, 1992; Neisser & Fivush, 1994; Nelson, 1990; Ochs & Capps, 1996, 2001; Polkinghorne, 1991). Furthermore, engaging in narrative activities affords opportunities for the exchange of thoughts, feelings, and experiences to negotiate shared understandings and build connections with others.

When taken together with the profile displayed by lower functioning autistic groups, the strengths and weaknesses of very high-functioning children with autism underscore both the complexity of autistic impairment and the multitude of skills and propensities underpinning and stemming from narrative activities. Both clinically and theoretically, pinpointing the factors at play in the disruption of autistic persons' narrative practices is of critical importance for advancing current knowledge of the pall this serious disorder casts upon development. Reciprocally, detailing the repercussions of delays and dysfunction in autism greatly enriches efforts to disentangle the interrelated mechanisms of narrative and social-emotional growth in typical populations. ♦

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