Review Article

autism

Autism
2015, Vol. 19(5) 517–526

DOI: 10.1177/1362361314537125
aut.sagepub.com
SAGE

Rethinking language in autism

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Abstract

In this article, we invite a rethinking of traditional perspectives of language in autism. We advocate a theoretical reappraisal that offers a corrective to the dominant and largely tacitly held view that language, in its essence, is a referential system and a reflection of the individual's cognition. Drawing on scholarship in Conversation Analysis and linguistic anthropology, we present a multidimensional view of language, showing how it also functions as interactional accomplishment, social action, and mode of experience. From such a multidimensional perspective, we revisit data presented by other researchers that include instances of prototypical features of autistic speech, giving them a somewhat different—at times complementary, at times alternative—interpretation. In doing so, we demonstrate that there is much at stake in the view of language that we as researchers bring to our analysis of autistic speech. Ultimately, we argue that adopting a multidimensional view of language has wide ranging implications, deepening our understanding of autism's core features and developmental trajectory.

Keywords

autism, Conversation Analysis, echolalia, language, linguistic anthropology, noncommunicative speech

Introduction

In this theoretically oriented article, we invite a rethinking of traditional views of language in autism. Given that a great deal of autism research draws on verbal behavior as evidence, there is much at stake in the view of language that we, as researchers, bring to bear on the design of studies and the interpretation of data. Our explicit theories or tacit notions about language invariably mediate our judgments about the competencies—or deficits—of the particular subjects we study, and what they reveal about the nature of autism more generally. We seek to demonstrate that broadening our view of language has the potential to impact the conclusions we make about children with autism based on what they say. Indeed, it promises to deepen our understanding of the characteristic communicative, social, and affective features of autism, as well as its pathogenesis.

We advocate a theoretical reappraisal of language in autism that offers a corrective to the dominant and largely tacitly held view that language, in its essence, is a referential system and a reflection of the individual's cognition. This view is not peculiar to autism research but reflects a longstanding theoretical trend in several other disciplines, notably linguistics (De Saussure, 1959). We seek to broaden this picture of language by making room for an appreciation of its interactional, praxeological, and experiential dimensions ("praxeological" referring to the idea of language as a form of social action). Neglecting these dimensions of language, we argue, has important consequences, sharply limiting what we can learn from studying the verbal behavior of children with autism.

Our treatment draws on two disciplines that have long been preoccupied with these dimensions of language: Conversation Analysis and linguistic anthropology. Conversation Analysis examines language in the natural communicative context of social interaction, showing how sentences are never isolated, self-contained entities that merely describe states of affairs in the world. Rather, they are typically shaped to perform social actions, and situated within specific interactional trajectories (e.g. Goodwin, 1981; Sacks, 1992). Utterances and turns of talk thus emerge, not solely as the products of an individual's cogni-

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tive processing, but as the outcome of an interactive process between interlocutors (e.g. Schegloff, 1995).

Our treatment also draws on linguistic anthropology, which has deepened our understanding of the relation of language to experience by discerning its phenomenological dimension (Briggs, 1993; Ochs, 2012). That is, language is more than a symbolic medium that, because it stands apart from experience, allows us to represent it. Language is also a constitutive component of our experience. Our apprehension of things in the world includes the very experiencing of those things as having certain linguistic denotations or being parts of certain language games (Wittgenstein, 1953).

To illustrate the power of the insights that these disciplines offer, we re-examine conventional wisdom concerning language phenomena typically associated with autism, notably incongruous responses, echolalia and noncommunicative speech. We revisit published data presented by other researchers that include instances of these language phenomena, giving them a somewhat different—at times complementary, at times alternative—interpretation. Our analyses aim to show that a multidimensional view of language provides a more complex and textured picture of children with autism in their use of language to communicate, interact, and experience others. Such a picture expands and deepens our appreciation for their personal agency and social sensitivity. At the same time, our analyses further delineate the ways that difficulties in social relatedness and identification reverberate across domains of psychological functioning. As such, our treatment corroborates an account of autism's pathogenesis that revolves around primary social-relational abnormalities with affective, interpersonal, as well as cognitive consequences. In particular, our perspective has affinities with Hobson's (2010, 2014; see discussion section) theorization.

Before articulating our perspective, we provide an overview of main trends in research on communicative impairments in autism in order to situate our proposition vis-a-vis current understandings of autistic language.

Research on language in autism

We organize our review in three sections. The first is devoted to research that has identified characteristic features of autistic language. The second reviews studies that have demonstrated that these characteristic linguistic behaviors often serve cognitive and communicative functions. Finally, we describe studies showing how their occurrence is influenced by and responsive to contextual factors.

Toward a characterization of autistic language features

Since autism was first described, language deficit has been considered as one of its defining features. Kanner (1943, 1946) identified distinctive characteristics of autistic language, pointing to the prevalence of such phenomena as echolalia, pronominal reversal/avoidance, and literal language in the speech of those affected. These linguistic features were interpreted as manifestations of an underlying disorder located within the individual, generally characterized by social withdrawal, egocentrism, and an impairment of abstract thinking.

Continuing on with Kanner's observations, a large body of studies sought to identify the abnormal language features of autism. Initially, the majority of these studies were clinical and observational (e.g. Baltaxe and Simmons, 1977; Rutter, 1978; Simmons and Baltaxe, 1975), but more recently were often cross-sectional and experimental in design. Consistently, these studies have shown that the core and defining linguistic deficits in autism pertain to the domain of pragmatics (e.g. Frith, 1989; Tager-Flusberg, 1981).

In one of the first studies that extended the scope of the linguistic analysis beyond the grammar of individual sentences to examine discourse, Baltaxe (1977) identified three aspects of autistic deficiencies in pragmatic competence: (a) impairment in speaker–hearer role relationship, namely, a difficulty in role taking and shifting point of view in dialogue context; (b) impairment in rules of conduct governing a dialogue, namely, a difficulty in understanding conventions that sanction utterances as socially appropriate; and (c) impairment in foregrounding and backgrounding of information—that is, a difficulty in differentiating between new and old information in a conversational exchange.

Further delineation of the nature of pragmatic impairment in autism has been provided by cross-sectional studies in the late 1980s and early 1990s (e.g. Landry and Loveland, 1988; Loveland et al., 1990). Tager-Flusberg and Anderson (1991) compared the discourse abilities of six children with autism and six children with Down's syndrome matched on age and language level, and they found that children with autism produced fewer adjacent, contingent, and relevant utterances. Surian et al. (1996) found that children with autism were significantly more impaired in detecting violations of key conversational maxims (be informative but not redundant; be truthful, relevant, and polite) than both normally developing children and children with specific language impairment when matched for linguistic development.

The contribution of studies that have discerned the abnormal language features of autism cannot be underestimated. We find, however, that these studies are problematic in three regards: (a) overwhelmingly, they adopt a deficit perspective that does not sufficiently recognize that those very atypical features identified in the language of children with autism (e.g. echolalia) can serve them some functional needs; (b) the communicative deficits are considered as direct manifestations of underlying dysfunctions and of the

severity of the condition; and (c) they rely on a conception of context as an undefined or neutral interactional environment in which the pragmatic deficits manifest—this way, they fail to acknowledge that the context is structured in many different ways, which can differentially affect the child's linguistic performance.

In the rest of our review, we consider research that has departed from these typological studies of autistic language features in either of two significant ways. Some have challenged a deficit perspective on autistic communication by questioning the assumption that characteristic features of autistic language are inherently dysfunctional and pathological. Others have examined the effect of communicative context and the contribution of the interlocutor on the communicative performance of children with autism, thereby questioning the assumption that characteristic linguistic features should be understood as purely symptomatic of the affected individual's condition.

Toward an understanding of autistic language functionality

Among the most distinctive and pervasive features of autistic language, echolalia was also traditionally considered the most clearly dysfunctional and noncommunicative (e.g. Carluccio et al., 1964; Rutter, 1978). Interestingly, however, it is precisely while focusing on echolalia that researchers began questioning the stereotypical interpretation of individuals with autism as withdrawn and uninterested in social interaction. Prizant and associates demonstrated that the majority of echolalic utterances produced by their subjects with autism served a communicative function. More specifically, through an analysis of sequential position, pitch contour, and latency of onset of immediate and delayed echoic utterances, Prizant and associates showed their significant variability, thereby disproving their assumed automaticity and lack of communicative intent. These researchers identified as many as seven functions of immediate echoes in four children with autism (Prizant and Duchan, 1981) and 14 functions for delayed echolalia in three children (Prizant and Rydell, 1984). In addition, they showed that echoes could also serve noncommunicative yet cognitively functional aims such as self-regulatory prompting to direct motor behavior, or as a processing aid and rehearsal strategy.

The study of the language of children with autism in everyday social interaction has afforded further insights on their communicative and social abilities (e.g. Wetherby and Prutting, 1984). Ochs and associates (Ochs and Solomon, 2005, 2010; Ochs et al., 2004) have delineated a *cline of competence* with respect to social functioning in the 16 children with high-functioning autism or Asperger syndrome who were part of their integrated ethnographic and clinical study. The children were observed to master conversational turn-taking and sequences in ways that demonstrated fine coordination with their interlocutors and the capacity for sustained attention and attunement to a conversational sequence. They displayed moderate success in recognizing and constructing situational scenarios; they were least successful in grasping socio-cultural indexes that engaged social roles, identities, institutions, and dispositions (Ochs et al., 2004: 159).

Toward an understanding of the contextual features that contribute to autistic language

As more studies delineating a range of communicative competencies appeared, a number of researchers turned to identifying contextual characteristics that could influence the child's speech and involvement in conversation. This strand of research identifies conversational contexts that make the appearance of perseverative speech, echoes, or the proffering of an answer more or less likely (Kremer-Sadlik, 2004; Muskett et al., 2010; Wootton, 1999).

Curcio and Paccia (1987) considered the contingent relationship between features of adult speech and the response appropriateness of children with autism within unstructured dyadic conversations. They found "consistent variation in children's response adequacy as a function of the number of positive features contained in adults' eliciting utterances" (Curcio and Paccia, 1987: 90). More specifically, the use of yes/no questions, conceptually simple questions, and those that were semantically contingent on the child's topic was shown to facilitate the children's adequate responding.

Similarly, Rydell and Mirenda (1991) examined the effects of specific characteristics of adult utterances on the verbal behavior of three children with autism in free play interaction (which were videotaped). Adult utterances were differentiated in terms of linguistic constraint and control exerted on the child. The authors found that high constraint utterances—such as imperatives or test questions, which heavily restricted the syntactic and semantic content of their responses—elicited more frequent child response in general (including a great number of echoes), whereas low constraint utterances, which maintained the ongoing topic of conversation and included understanding checks rather than questions soliciting new information, obtained fewer responses, albeit more generative and constraining ones—that is, responses that invited an uptake by the adult interlocutor. The distinctive patterns in responsiveness and echolalic versus generative answers were interpreted by Rydell and Mirenda as indicative of compensatory mechanisms, with the children using these devices in order to reduce cognitive demand in highly constraining contexts while remaining engaged in the interaction.

In an experimental study of immediate verbal imitation of a child with autism, Violette and Swisher (1992) designed four conditions to evaluate the effect of sociolinguistic

input on the subject's echolalic responses. They found that the child was differentially responsive to the experimental conditions and that a higher rate of immediate verbal imitation occurred "in response to unknown lexical words presented with a high degree of directiveness" (Violette and Swisher, 1992: 139). Violette and Swisher's study thus indicated that the child was not only sensitive to the information processing demands of the interlocutor's prompts but also to the interlocutor's interactional style.

Qualitative studies informed by Conversation Analysis nuanced further the examination of the interactional context and its influence on the child's communicative engagement and performance. More specifically, they examined the interplay between language-related cognitive factors and social and interpersonal contextual characteristics.

In a case study of immediate echolalia, Local and Wootton (1995) showed that the interlocutors often designed their utterances so that the child's use of repetition could be an appropriate response. Such repetition triggering initiations and apposite echoes occurred predominantly within identifiable language games, such as labeling toy objects or book images. In addition to functional and apt repetitions, Local and Wootton's focal child was observed producing *inapposite repetitions*—those that are functionally opaque and with uncertain communicative content. The authors demonstrated, however, that even this unusual form of repetition regularly presented distinctive linguistic, rhythmic, and prosodic characteristics, and also tended to occur in a conspicuous sequential context, that is, after an adult question not associated with a familiar language game. By being produced in a specific sequential position within a discernible course of action, even those echoes that seemed unambiguously "parasitic and autonomic" (Local and Wootton, 1995: 178) no longer could be assumed to be indiscriminate automatic reactions. While still representing a significant and noncommunicative preoccupation of the child, they were highly synchronized with surrounding talk, thus demonstrating close monitoring of his interlocutors' behavior.

In a case study that combined discourse and acoustic analyses, Sterponi and Shankey (2014) offered additional evidence of the orderliness and context sensitivity of autistic repetitive speech. More specifically, the authors showed that the child configured echoes in various ways in relation to different interactional contexts. They also highlighted that within these contexts, the repetitive speech was not simply context-shaped but also context-transformative; the child mobilized echolalia to divert, redirect, and negotiate courses of action set up by the adult interlocutor.

The research reviewed above has demonstrated that characteristic features of autistic speech cannot be assumed to be automatic, noncommunicative, and indifferent to context. In other words, they reflect more than the deficits associated with the condition. Against the background of this finding, we now articulate a theoretical argument that proposes a multidimensional perspective on language in autism. Such a perspective, we maintain, has the potential to transform verbal data into a richer source of insight into the core features and pathogenesis of autism.

Elaborating a multidimensional perspective on language in autism

Our theoretical argument is articulated in three sections, each expounding a dimension of language previously neglected in autism research: language as interactional accomplishment, language as social action, and language as experiential mode. Within each section, we discuss key scholarly contributions that elucidate each dimension of language, and we then consider data extracts from published studies to illustrate the analytical purchase such conceptualizations of language offer.

Language as interactional accomplishment

Language, as system of signs, can be conceptualized as a cognitive tool that enables humans to represent reality—the actuality of phenomena in the outside world, as well as the somewhat more ephemeral world of inner thoughts and feelings. From this perspective, what a person says is often regarded as an isolated production, a transparent window into the person's cognition and emotion. Furthermore, an individual's utterances are assumed to provide straightforward evidence of his or her language development and linguistic competence.

We maintain that this decontextualized view does not take into account the inseparability of language from communication, and communication from interaction. Drawing from Conversation Analysis, we assume that interaction is the primordial scope and domain of language (Schegloff, 1989). Interaction is a social ecology of mutual influence (Erickson, 2010) in which individuals continually monitor and adjust to each other. Sentences in communicative exchanges therefore emerge as the product of a collaborative process between speaker and hearer, accomplished over time and incrementally (Goodwin, 1981).

Scholarship in Conversation Analysis has demonstrated in great detail how turns of talk in a verbal exchange both respond to what came before and constrain what follows. These ideas are encapsulated in the notion of an *adjacency pair*, for example (Sacks, 1992; Schegloff, 2007). Many types of utterances in talk-in-interaction conventionally come in pairs: question–answer, greeting–greeting, invitation–acceptance/rejection, and so on. The production of the first part of an adjacency pair establishes an expectation that the recipient will produce a reciprocal action ("second-pair part") at the first possible opportunity, following the completion of the first part. The production of the expected response is indicative of the recipient's understanding of the first-pair part as such—that is, as a

certain kind of initiation invoking a certain kind of response. If the second-pair part is not offered, its absence will not pass unnoticed and will likely become the object of remedial effort.

While the adjacency pair organization only comprises a relatively narrow range of conversational actions, the underlying mechanism is germane to a much wider range of conversational actions: turns in conversation are inherently interlocked; a current action projects a next relevant action and often responds to a prior action. Thus, interlocutors create opportunities for—and at the same time constrain—each other's actions in conversation (Goodwin, 1986).

The interactional nature of turns in conversation cautions us from evaluating a child's utterances in isolation, and compels us to think about child language not solely in terms of cognitive and linguistic development. A child's verbal contribution to a communicative exchange does not only relate to her developing cognitive capacities and linguistic competence, but also to the specific contingencies of interaction in which she is engaged (Gardner and Forrester, 2010). By extracting utterances from the context of occurrence and judging them as self-standing entities—as individual productions that reflect an underlying linguistic capacity (or lack thereof)—we might attain inaccurate evaluations.

Indeed, the methodologies often employed in research on autistic language fail to take into account the interactional context of the child's utterances, which undermines the validity of the conclusions. A few studies of autistic language, for instance, are based on interview data: in these studies, the child with autism is introduced to a researcher, with whom most often the child is unfamiliar and who poses him a number of questions, one after the other. The nature of this type of atypical interaction and the kind of questions the researcher asks exert an influence on the subjects' involvement in the exchange and the responses they produce; in most cases, however, the analysis of the subjects' answers does not take such influence into account. In Baltaxe (1977), we find the following interview extracts (among others) presented as illustration of the way the adolescent subjects in her study tended to provide "vague" and "depersonalized" answers (p. 178), suggestive of deficits in pragmatics:

> *Q*: What are you planning for? *A*: Just looking ahead in the future for all I care.

> *Q*: Is that what you would do when you get married? *A*: Yes, that's exactly what people would do when they get married.

In considering these exchanges, we are reminded of a maxim offered by Conversation Analysts Heritage and Raymond (2012): "little questions get little answers" (p. 184). In the same vein, one might also say that notably vague questions get vague answers, and impersonal questions get impersonal answers. Indeed, the questions of the interviewer—whom the subjects had never met—are both vague and not specific to the interviewees as individual persons (it is likely that at least some of the adolescent subjects in the study were not projecting themselves as getting married in the near future). While aspects of the subjects' responses may be pragmatically atypical, decontextualizing these responses and interpreting them as purely representative of underlying deficits obscures the interlocutor's contribution to the apparent conversational (in)competence of the individual with autism (see also Fasulo and Fiore, 2007).

In a recent work, Hobson et al. (2012) offered an important corrective to this decontextualized and monological treatment of autistic speech by examining verbal exchanges between individuals with autism and adult conversational partners in terms of *dialogic resonance*. Dialogic resonance "refers to discourse patterns that arise when participants in conversation construct their utterances by selectively reproducing aspects of the linguistic structure of an utterance produced in the immediately prior discourse" (Hobson et al., 2012: 2720). We emphasize that in considering the accomplishment of dialogic resonance, equal analytic weight should be given to the second-pair part that reproduces aspects of what preceded it and to the opportunities for resonance provided by the first-pair part. Treated in this way, Hobson and associates' proposition to take dialogic resonance as a measure of felicitous verbal communication allows us to bring to full fruition an interactional perspective on autistic language.

Language as social action

There is an intuitive plausibility to the idea that the essential function of linguistic utterances is to make statements about some state of affairs in the world, which can be true or false to varying degrees. This intuitive view finds sophisticated expression in a great deal of 20th-century philosophy, which was motivated by a concern with fundamental questions of truth and meaning—questions like "How is knowledge possible?" and "What is the relationship between language and truth?" Such questions were pursued from the assumption that language is a referential system, and that statements embody logical propositions derived from the meaning of their constituent parts and the relations between them (Carnap, 1952). Closely related to this line of inquiry is a view of communication as an exchange of information (Shannon and Weaver, 1949), predicated on the linguistic system's capacity to articulate and convey propositional content. If we take naturally occurring everyday conversation as our focus of analysis, however, we find that another essential property of language takes prominence in shaping the *meaning* of utterances: its capacity to implement social actions. Thus, in analyzing language in use, it is critical to consider not only

utterances' propositional content but also what actions they are doing. Undoubtedly, in everyday exchanges, language is mobilized *to do things*—to request, invite, excuse, defer, greet, and so on, as well as to inform.

It is beyond the scope of this article to trace the development of the praxeological perspective of language, a lineage that—even if cursorily outlined—would need to span across disciplines to include Malinowski's (1923) anthropological writing, Wittgenstein's (1958) Philosophical Investigations, and Austin's (1962) speech act theory. Language as action is a fundamental tenet of Conversation Analysis, a central theoretical framework in this article. We shall thus unpack further this general view of language with reference to Conversation Analysis in particular.

Students of conversation have posited "the omnirelevance of action" for talk-in-interaction (Schegloff, 1995): utterances are produced by their speakers and attended by their recipients for the actions they implement. For instance, utterances like "do you know what happened to me"—and generally turns with the syntactic format of "do you know + [embedded WH-question]"—are routinely treated as pre-announcements, despite their structure as polar questions (Schegloff, 1988). Thus, they are usually answered with a repeat of the question word included in the pre-announcement ("what?" or "what happened to you" rather than "no"), which moves the sequence forward and gives the go-ahead for the announcement proper. In other words, talk-in-interaction is first and foremost constructed and interpreted as action—in fact, sequences of action—which are responsive to prior actions and implicative for following actions.

Approaching language as social action offers an important dimension of intelligibility to the verbal communication of children with autism. Turns that might be perceived as inapposite—because topically irrelevant, syntactically incongruent, or alternatively as too literal or formulaic—may be sensible and fitting with respect to discernible courses of action that the child is pursuing. Of course, the linguistic modus operandi of individuals with autism may remain atypical even under a praxeologically informed analysis. However, such an analysis uncovers orderliness and purposefulness which traditional interpretation overlooked.

In his case study of delayed echoing in an 11-year-old boy with autism, Wootton (1999) shows that even those echoes that are noncommunicative—that is, not designed to maintain or initiate involvement with another—are synchronized with surrounding talk. Specifically, Wootton illustrates that these echoes are positioned at discernible junctures within the unfolding course of action, demonstrating that the child takes into account the interactional trajectory in which he and his interlocutor are involved.

By focusing on the praxeological dimension of language, we can further enrich Wootton's analysis of his focal child's speech. The following extract, from the same article mentioned here above (Wootton, 1999), captures an exchange between the focal child Kevin and his parents.

1. Mother: And what did you pi:n:ch,
2. (1.1)
3. Father: What did you: pi:n:[ch.
4. Kevin: [↑Tha::t's a::(n)?
5. (0.8)
6. Father: What are you, (.) Eh?
7. Kevin: (A) pai:n in the bu:m. (Wootton, 1999: 367).

Wootton explains that Kevin's turn in line 4 is recognizable to those familiar with the child as the first part of a recurrent echo, "that's a naughty boy." Given the incomplete rendering of the echo and the lack of uptake by either parents, Wootton posits that Kevin's echo does not accomplish a communicative function, even though the author acknowledges it to be thematically related to mother's and father's immediately prior questions (lines 1 and 3). Without countering Wootton's interpretation, we suggest that additional nuance becomes evident by considering how both the parents' and Kevin's turns are implementing determinate actions while also being oriented to the consequences of those actions. Mother's and father's questions, in lines 1 and 3, convey an implicit accusation (of stealing food from the kitchen earlier in the day, Wootton informs us) and foreshadow a reprimand. Kevin displays perceptive understanding of this course of action by anticipating an admonitory formula ("That's a naughty boy") that his parents frequently use to implement gentle reproaches toward him. The question and answer in lines 6 and 7 develop the sequence further along this same line of action, the father's question soliciting from Kevin a mea culpa and the child offering one via another recognizable formula ("A pain in the bum") with playful and teasing connotations.

Language as experiential mode

Drawing from recent theoretical formulations of linguistic anthropologist Elinor Ochs, we would like to infuse a phenomenological appreciation of language into autism research. In this section, we argue that recognition of the "saturated entanglement of experience and language" (Ochs, 2012: 143) can further illuminate key features of autistic language and what they afford the child with autism.

Across many disciplines, the conventional wisdom has been that language stands apart from experience, and that this language–experience divide is what allows language to function as a means of symbolizing the world. Being inherently outside of the realm of things and experiences, language forms can refer to them and take on meaning in the process. The essence of language, in this view, lies in

its symbolic function, supplying arbitrary sign with which to refer to the outer world of non-linguistic objects and the inner world of subjective experiences (see Jakobson, 1960, for an influential early critique of the *referential supremacy*).

While not denying the symbolic function of language, recent scholarship in linguistic anthropology has supplied an expanded view, stressing the capacity of language to also be "experience-near" (Briggs, 1993; Urban, 1988). Citing Agamben, Ochs (2012) provides a simple but illustrative example. Take any concrete noun—the word "shoe" will suffice. Ochs observes that the word "shoe" inevitably becomes part of how we experience the objects to which this linguistic form conventionally refers. What it is like to produce and hear the acoustic contours of the word is a constitutive part of our experience of the object—much in the same way as its visible appearance and tactile contours. In this sense, the linguistic form gives us access to some aspect of the object we are contemplating—its "shoeness." And because this is so, language has the capacity to function like our senses, allowing us to explore the object of our attention as if with sight or touch or taste, drawing us in. And what we explore with the experiential mode of language both depends upon and is itself the saturated entanglement of language and experience.

The experiential affordances of language are also foregrounded in poetic uses of language, when "language is perceived in itself and not as a transparent or transitive mediator of something else" (Todorov, 1982: 272). In poetic forms of language, the semiotic value of the sign vehicle *in itself* communicates. As Jakobson (1960) contended, rhymes, alliteration, punning, metaphors, and other poetic uses of language are not exclusively the domain of the verbal artist, but rather permeate quotidian speech. We are thus compelled to always consider that everyday language has a reflexive and non-referential potential, whereby additional forms of signification are realized.

There is yet another, related sense in which we interact with language as an experiential mode, which we would like to highlight here, as it is especially germane to autistic language. It is commonplace to say that the words of others give us access to their experience. However, this capacity of language is also traditionally thought of as a process of constructing a mental connection with others across an inherent and ultimately unbridgeable divide. A phenomenologically infused perspective on language suggests that it is through the interpenetration of language and experience that language affords more intimate contact with the perspective of the interlocutor. Thus, by appropriating and reanimating the words of another, one can in a sense *try on* another's perspective.

With this perspective in mind, we now turn to its possible implications for re-conceptualizing prototypical features of autistic language. In this section, our focus is on the general category of noncommunicative speech, widely documented in autism, initially interpreted by researchers as eminently dysfunctional behavior (e.g. Carluccio et al., 1964; Rutter, 1978) and later as bearing some functionality (e.g. Prizant and Duchan, 1981). Specifically, Wetherby and Prutting (1984) argued that children with autism sometimes deployed language with no communicative purpose but as emotional reaction or self-stimulatory device.

We would argue that the forms of noncommunicative speech delineated by Wetherby and Prutting can be thought of as language-based modes of experience, linguistic devices deployed by the child to access the world—enter in contact with it and feel it—rather than predicating upon it or representing it. The experiential affordances of language may offer the child with autism a resource for *being-in-the-world*, a device for experiencing the self in relation with the world and the other in ways that typically developing children may attain in a more immediate fashion (Gallagher, 2001; Hobson, 2010). This perspective on autistic language adds intelligibility and nuance to traditional as well as current interpretations of noncommunicative speech. Consider, for instance, data from Kanner. In an article published in 1946, Kanner examined phrases produced by children with autism that were typically interpreted as "irrelevant" or "nonsensical." Kanner's perceptive analysis revealed that those utterances could in fact be traced to earlier origins in the child's experiences, which would give them "definite meaning":

> "Peter eater" was another of Paul's "nonsensical," "irrelevant" expressions. It seemed to have no association with his experiences of the moment. His mother related that, when Paul was two years old, she once recited to him the nursery rhyme about "Peter, Peter, pumpkin eater," while she was busy in the kitchen; just then she dropped a saucepan. Ever since that day Paul chanted the words "Peter eater" whenever he saw anything resembling a saucepan. There was, indeed, in the playroom a toy stove on which sat a miniature pan. It was noted then that Paul, while saying these words, glanced in the direction of the stove and finally picked up the pan, running wildly around with it and chanting "Peter eater" over and over again. (Kanner, 1946: 242)

One might be inclined to think of Paul's behavior in this episode as simply a conditioned response; he had come to associate a saucepan with the phrase "Peter eater" as the result of a salient experience at home, and the sight of a saucepan in the psychiatrist's office triggered the response. Without denying that some form of association is functioning in the production of such odd utterances, we propose a more complex and subtle analysis. Kanner himself contended that the meaningfulness of such atypical repetitions was to be found in their metaphorical nature, in that they produced "a transfer of meaning […] in a variety of ways" (Kanner, 1946: 244). A phenomenological appreciation of language adds further nuance to Kanner's interpretation by

offering an explanation as to *why* those utterances are produced—what needs they are serving and what affordances they have for the child. We would argue that language is offering the child an opportunity to engage with the environment and give it intelligibility with respect to the child's lifeworld. For example, the uncharted setting of the psychiatric encounter can be rendered more familiar by way of chanting a well-known rhyme, which brings into relevance a recognizable element in the environment (i.e. the saucepan) and produces reverberations of familiar experiences with it.

The perspective we are proposing in this section is related to but not the same as the idea that children with autism engage in vocal or verbal behavior for sensory stimulation and self-regulation (Prizant and Rydell, 1984; Wetherby, 1986). Indeed, using Kanner's example, the child invokes a familiar experience through his utterances, and by repeating them again and again, he might achieve a calming effect for himself. Repetition and musicality are features typical of lullabies and spiritual healing rituals (Briggs, 1994). However, we distinguish our perspective from a solely self-stimulatory or regulatory account. While we consider it valid to characterize these utterances as controlling sensory input or directing motor actions, we think it important to recognize that they may also articulate and negotiate social, interpersonal, and affective experiences. In this sense, our experiential reinterpretation of Kanner's data highlights the socio-emotional valence those noncommunicative utterances may carry.

Discussion

In this article, we presented a perspective on autistic language that foregrounds its interactional, praxeological, and experiential dimensions. We articulated this perspective in three parts. First, we showed how understanding language as interactional accomplishment motivates us to consider the specific contingencies of interaction in which the child is engaged, alerting us to the ways in which the child's interlocutor constrains and enables her contributions. This consideration problematizes inferences about competence we might tempted to draw from the child's utterances alone, and it has the potential to reveal contextual appropriateness that would otherwise be obscured. Second, the understanding of language as social action prompts us to investigate the courses of action the child is pursuing or resisting, even when these actions are being performed through the use of atypical language features such as echoes. This may reveal dimensions of intelligibility and purposefulness that would otherwise be missed. Finally, an appreciation for language as mode of experience shows us how the child with autism may draw on language to navigate her lifeworld and process past experiences. This view urges us to consider even those utterances that appear most self-directed, or free from content relevant to the immediate interaction, as potentially having social or affective import for the child. Such utterances, therefore, may be potentially important resources upon which the child can draw to facilitate her being-in-the-world and with others. Through the lens of such a multidimensional perspective on language, we have re-examined prototypical features of autistic speech—incongruous responses, echolalia, and noncommunicative utterances. We have proposed interpretations that go beyond treating those features, however atypical, as simply manifesting an underlying deficit.

Taken as a whole, the perspective that we have presented has implications of three kinds. The first is theoretical, engaging the question of the developmental trajectory and core features of autism. We view our contribution as sharing strong affinities with the work of Hobson and his associates. In particular, our view of language as inherently interpersonal is consistent with Hobson's (2008, 2010) emphasis on social relatedness and intersubjectivity in elucidating the developmental psychopathology of autism. By engaging the interpersonal valence of language in action and interaction, our analysis of autistic speech affirms difficulties in the functioning of self-in-relation-to-other that Hobson (2010) has perceptively described. At the same time, our treatment contributes additional possibilities to Hobson's theory. We maintain that characteristic features of autistic language not only reflect the core deficit of the condition—they often reveal an attempt to mobilize the affordances of language to manage difficulties in relating to and identifying with the other. Furthermore, the experiential affordances of language encourage us to speculate that children with autism may have more resources available to them in processing others' perspectives than traditionally thought (see Higashida, 2013, for evidence from a first person memoir). In particular, it may be the case that certain language forms associated with autism, such as echolalic re-animations of another's utterances, provide a means to access the experience of the other. Thus, such utterances may sometimes constitute an attempt to overcome difficulties in perspective-taking and social relatedness.

The second set of implications addresses methodology, which follow directly from their theoretical counterparts. If we take seriously the inseparability of language from communication and social action, we should privilege verbal data collected in naturalistic settings for drawing inferences about the ways autistic speech can reveal atypical self–other relations and engagements with the social world. This is not to say that interview and experimental data should be disregarded as a rule. It does mean, however, that researchers should take seriously the way such procedures constitute social engagements, however contrived, and that such contexts necessarily shape the child's contribution. And if we take seriously the intersubjective dimension in defining autism symptomatology, we should

not only invoke the interactional and experiential matrix in the formation of certain linguistic proclivities. We should also consider how this matrix operates in the present moment—that is, how it informs each and every occurrence of atypical language.

A third set of implications pertains to intervention. Indeed, the perspective that we as researchers bring to understanding autistic language has direct implications for how we are likely to conceptualize the process and goal of clinical intervention. If we regard stereotypical features of autistic language as manifesting deficits alone, we are likely to support effort to encourage the child to suppress or replace them. Consider what would follow, by contrast, from an appreciation that these linguistic features often represent efforts to marshal the affordances of language to overcome difficulties. From such a vantage, we may conceive of interventions that could support and scaffold these efforts. Also, if we hold to the idea that the nature and developmental trajectory of autism lies in the nexus between self and other—and not in the child alone—we are moved to consider the quality and authenticity of the child–clinician interaction. We may be concerned about the distinct possibility that structured or targeted attempts to intervene may actually deprive the child of authentic interaction and discourage the exercise of the child's full linguistic ability. Ultimately, such opportunities for interaction and expression may be what are most conducive to the child's development.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

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