

Echolalia on the Spectrum: The Natural Path to Self-Generated Language

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We in the autism community know many things about echolalia. We know that it's part of the profile of kids with autism spectrum disorder (ASD). We also understand that echolalic language functions in many ways, particularly communication. What is not widely understood, however, is how integral echolalia is to the language development process. This article will shed light on the how and the why—and with that knowledge, our community will be better able to help kids with ASD develop from echolalia to self-generating conversational language.

The “Why” of Echolalia: Gestalt Language Processing

Speech-Language Pathologists (SLPs) have historically recognized echolalia as a natural part of the language development progression for half of all children. Known as *gestalt language processors* (Peters 1973, 2002), they include both neurotypical (NT) kids and spectrum kids (Prizant 1983). Compared with kids who are born *analytic processors*, NT gestalt processors develop self-generated language later, but do catch up. Spectrum kids progress from echolalia to self-generated language later still—but go through the same process. This natural path isn't always easy for spectrum kids, and the resulting grammar system isn't always complete, but researchers found that gestalt language processors use echolalic language as the source material for developing their self-generated grammar (Prizant and Rydell 1984). Like their NT counterparts, spectrum kids make the transition naturally although at an older age, more painstakingly, and sometimes less completely.

That echolalia leads to self-generated grammar may sound surprising at first, but consider how little boys use a holistic style of speaking and how they gradually shift to a more specific style over time.

Starting with a sandbox-type stage and action-figure speakers, NT boys (and some girls) deliver long, blurry monologues. Drama abounds, and even though the specifics are vague and hard to understand, listeners can usually get the gist of the action. These strings of sound, the *gestalts* or “wholes” of the gestalt language processor, have poor word boundaries, making them hard to understand, but gestures and intonation add meaning. A story is told, if indistinctly.





The “How” of Echolalia: Delayed Analytic Language Processing

Over time, these gestalt language processors, NT young boys (and girls), develop more precision in their language processing, and from their long strings of sound emerge shorter phrases that people around them acknowledge as real language. If we listen carefully, we discover that these phrases are parts of the former monologues, now shorter and clearer, the results of a process of extraction known as *mitigation*.

Over time, these children break down phrases into single words and enter the *analytic* stage of language development. They then use single words to communicate other thoughts and quickly begin constructing two-word combinations of the isolated words. Sounding like much younger analytic children, these NT kids then combine words into short phrases using basic grammar, and later, more complex grammar.

The early research of Barry Prizant, Patrick Rydell, Amy Wetherby, and others (Rydell and Prizant 1995; Wetherby 1986) showed this process to be the same for gestalt language processors on the spectrum—and just as natural—but often incomplete and very delayed compared with NT gestalt language processors. This means that these spectrum kids do not exhibit a language *disorder* at all, but merely a language *delay*.

Stage	Language Examples	
1: Communicative use of language <i>gestalts</i>	“Let’s get out of here!”	“Want some more?”
2: Mitigation into: (a) chunks and (b) recombining	(a) “Let’s get + out of here!” “Want + some more?”	(b) “Let’s get some more!” “Want out of here?”
3: Isolation of single words and generation of two-word phrases	“Get...more.”	“Want...out?”
4: Generation of more complex sentences	“I got more.”	“I wanna go out.”

The Stages of Natural Language Acquisition

As described in *Natural Language Acquisition on the Autism Spectrum: The Journey from Echolalia to Self-Generated Language* (Communication Development Center Inc, 2012), there are four primary stages of language development among gestalt language processors. They are summarized below, with two ongoing examples to illustrate the progression. In reality, mitigation is happening with many phrases simultaneously.

Echolalia Then and Now

Kids with ASD have a great variety of auditory inputs that both enhance and complicate the process. When the language around them is more about the dialogue of characters like Goofy and Buzz Lightyear than about adult conversation, echolalia is delivered with great drama: “To infinity and beyond,” and “Buy them wherever DVDs are sold!” It is difficult to see the communicative value of movie talk, or see it as a step in the right direction when the phrases we hear sound like movie snippets and computer game directions: “Back off!” or “Game over.” These may seem minimally useful in moving a child toward flexible language development, but some of the classic lines from the past were little better. Kids then—and now—need more than unintentional language to hear and mitigate.



Consider this: the research on echolalia was done in a different era, and even though echolalia seems more prevalent today, its place in the language development process is the same. The language exposure between then and now is quite different. A few decades ago, kids didn't have ready access to movies and had to rely more on the spoken word in their homes and schools. Mitigations were defined by that language exposure; mitigations today are still defined by language exposure. Our place in our children's language development is just as crucial as it was decades ago — even if it is harder to understand.

Understanding Our Role

It is not surprising that the phenomenon of echolalia causes us to scratch our heads in confusion, close our ears in consternation, or try to ignore it. We try to teach other language, or put the echolalia into useful scripts with the hope it can be “replaced by spontaneous language” (Henn 2012).

But these strategies fail to address the natural development process of spontaneous language, which is a complex weaving of grammar, vocabulary, conversation, and narrative. For the gestalt processor the ingredients for grammar—and even vocabulary and social reciprocity—emerge from the child's own echolalia.

Echolalia is foundational, and the best language experiences for a child are whatever match his communicative intentions. The language we provide each child needs to capture his heart and speak to the essence of that child. Early language gestalts that we model for our

echolalic children provide material for intentional communication, plus the stuff of later grammar and vocabulary, if we do our jobs right!

Foremost, we must provide spectrum kids with appropriate sensorimotor supports and then with the right language models so they can extract kernels from them and eventually build a language system of their own. For 15 years the SLPs in our clinic at the Communication Development Center have individualized the supports and the language contexts to help each child accomplish this. An SLP uses the best practices of social reciprocity, fun, and communicative intentions along with the right language experiences for each child. For the echolalic child, that means readily mitigable gestalt language and an absence of competing inputs and expectations such as scripts, “canned” sentences, overused questions, and cued phrases.

Take-Home Lessons in Language Development

- 1. Know that echolalic language provides spectrum kids with meaningful language contexts.** It is the language “soup” from which useful phrases will be extracted (mitigated) when the time is right. The process works if the child hears many similar utterances in the environment around him and discovers the commonalities. He can then break down large chunks of language into smaller, useful phrases. But it is up to us to inventory the child’s language contexts (e.g., movies, books, everyday language at home) and supplement them with planned language experiences the child can echo and use meaningfully.
- 2. When the child’s expressive language includes a small assortment of phrases, he can mix them up.** This allows the child to create semioriginal sentences. For instance, “Come on, guys—let’s get out of here!” and “Coming soon—to a theater near you!” becomes “Come on, guys—to a theater near you!” This is how mix and match works in real life! And once your family hears an invitation like this one, or something equally cute, they will no longer think of echolalia as a language disorder, but will realize they are witnessing the process of gestalt language development!
- 3. Echolalia signals a *delay*, not a disorder.** The reason spectrum kids are so misunderstood, and the reason echolalia seems like a symptom of a language disorder, is not just that it sounds like Goofy or Buzz Lightyear, but that mitigation is so delayed. For NT kids, the process passes under the adult radar because the kids are so young and physically immature that their long gestalts sound like a blur of melody that is impossible to understand. Our echolalic kids with ASD are older, however, and since their speech is better, we recognize the words, and, to our dismay, they are often movie lines.

Not to despair: now that we understand why our kids sound like they do, we can applaud the process and think about how to supply more language gestalts to supplement their language exposure.

Take Heart

It’s time to take heart from the most well-known, self-described mitigator of echolalia and member of our autism community, Temple Grandin. Interviewed on a radio program in 2005, she offered encouragement for every parent who despairs over echolalia. The interviewer said, “Tell me about the process you went through to become as remarkably verbal as you are. You write early on that people said that you were a tape recorder. You

had certain phrases that you said over and over again. And listen to you now!"

Grandin responded by talking about her own cognitive style. "Well, what happens is...as I get more and more phrases on the hard drive, I can recombine them in different ways, and then it's less tape-recorder like...it's gradual learning...you gradually just keep getting better and better and better."

And getting better and better is the spontaneous language we all want our children to develop. With a better understanding of how the natural process works, we can help them to achieve it!

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Resources

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Bio

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