Finding the Words...

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When They are Pictures!

Helping Your Visual Child Become Verbal! Part 1

Welcome to a brand new topic in our continuing series on language acquisition. It is a true "eye opener," and promises to open some doors, if your child is a visual thinker!

This column is the first in a series of three, and it is designed to introduce the idea of language development when your child's "first language" is pictures. It is an exciting topic, and it will become "easier to see" after you try out some exercises we have included here.

After you have finished reading this column, we invite you to look back at an earlier series, Natural Language Acquisition on the Autism Spectrum, which you will find useful as a companion tool. All four parts of the earlier series can be downloaded from the author's website, www.communicationdevelopmentcenter.com. The principles of holistic, gestalt thinking are important here, and you will discover how thinking in "wholes" and thinking in pictures figure together as we help our kids with language development.

So now, let's turn to the kids we all know who "think in pictures." Where do words fit into their development? How? And when?

Our best teacher, as she often is, is Temple Grandin. In her landmark book, *Thinking in Pictures*, Temple described her cognitive style to us. "I think in pictures," she wrote. "Words are like a second language to me. I translate both spoken and written words into full-color movies, complete with sound, which run like a VCR tape in my head. When somebody speaks to me, his words are instantly translated into pictures."

Temple's ability to visualize has given her extraordinary skills in her work with livestock. She has been able to create systems for moving cattle in humane ways, because she can first visualize how they would work *from the cow's perspective*! As she says, "I create new images all the time by taking many little parts of images I have in the video library in my imagination and piecing them together. I have video memories of every item I've ever worked with - steel gates, fences, latches, concrete walls, and so

forth. To create new designs, I retrieve bits and pieces from my memory and combine them into a new whole. My design ability keeps improving as I add more visual images to my library." (1995)

While most of us see Temple's abilities as exceptional, she feels her giftedness is not unique. She writes, "One of the most profound mysteries of autism has been the remarkable ability of most autistic people to excel at visual spatial skills while performing so poorly at verbal skills…Interviews with autistic adults…indicate that most of them also think in visual images." (1995)

Jeffrey Freed also considers autism to be the extreme of right-brained, visual thinking. With co-author, Laurie Parsons, Freed wrote in *Right-Brained Children in a Left-Brained World*, "Autism is…the most pronounced form of hypersensitivity and right-brainedness… The further right an individual falls on the continuum…the more apt (the person is) to store information primarily in pictures." (1997)

It is important to acknowledge here, however, that not all individuals with *spectrum* diagnoses are visual thinkers. People with Asperger's labels have a spectrum diagnosis, of course, but are really on the other end of the continuum (both the autism continuum *and* the left-brained/right-brained continuum). As we know, Asperger's kids develop language at the expected age, and are auditory-verbal thinkers. And as we also know, Asperger's kids are often so left-brained and language-oriented that they tend to talk "all the time," avoiding visual-spatial tasks, and exhibiting what we now call "nonverbal learning disabilities."

But, it is the kids who are visual thinkers whom we are addressing in this column. These are the kids whose cognitive style is visual-spatial, often appearing deaf or unable to process auditory information in their younger years, and characteristically late in developing language.

And what kind of a thinker are you, dear reader?

Temple has a test of visual thinking that we would like you to try when you finish reading this paragraph.

The test is to close your eyes and picture a steeple...yes, a steeple…like a church steeple. Don't open your eyes until you have done this to the best of your ability. That's the test… Now, please close you eyes and try it.

OK? Done? Now, read on… Temple then asks who of us saw a single, indistinct steeple…kind of a fuzzy, icon of a steeple…not a particular one, but a "generic" visual representation of a steeple… Was this you? It was certainly this author!

When presenting the "steeple test" to audiences, Temple then asks who saw something more precise…a particular steeple from one's past, one's memory. Was it the first steeple you ever saw as a child? And, did any of you see more than one steeple…maybe some different, specific steeples? If so, did their memory come to you in a series? And, if you had taken the time, would you have seen even more? Temple's ability to visualize is more like that.

For someone like me, an auditory thinker, Temple's description of concept-formation for a visual thinker is priceless. She

> **"I think in pictures.**
> **Words are like a second language to me."**
> Temple Grandin, Thinking in Pictures

describes the cumulative process she uses. "Basic principles and concepts in my memory are formed from specific examples that are stored as pictures in my imagination. For example, when somebody says the word boat, the first memories that are triggered are of specific boats I went on as a child, such as the ferryboat that took the family to our summer house. It was not a general boat that took the family to our summer house. There is no general *boat* concept in my memory. My concept of what a boat is comes from images of specific boats I have seen. All my thinking starts with specific examples that are used to form basic principles." (1997)

Finally, Temple notes that this gift presents challenges, too, as visualizations accumulate throughout one's life. Temple cites "dealing with the barrage of details from the environment" as one of the "biggest challenges" of autism. As Temple says, "The details never go away…If I think of the word "bowl," I instantly see many different bowls in my imagination, such as a ceramic bowl on my desk, a soup bowl at a restaurant I ate at last Sunday, my aunt's salad bowl with her cat sleeping in it, and the Super Bowl football game." (2005)

And how about the children in the author's clinical experience? The more ASD children we have gotten to know, the more prevalent gifted visual thinking appears to be! Most of our kids over the last ten years have been excellent visual thinkers, many of them extremely gifted. Here is a typical story, as told by Kathy, a parent of one of our children.

Kathy told us that her son "always had the ability to revisualize...always to play back everything in his head, and to store, and to memorize everything...I feel that when he is pulling videos out of his head that he's actually placing himself in the video, that these people are actually around him, that it's colored, like he could reach out and touch and move through the movies as he's seeing them."

While this does sound like a description of giftedness, please remember that it is also the other side of a "learning disability," or a "language learning disability." The flip side is what we heard Kathy say when she called us about speech and language therapy: her child's lack of useful language, his unintelligible speech that didn't seem to communicate anything, and her son's apparent "deafness" in real life.

All of us probably fall somewhere on Freed's line graph of learners…from the extremely left-brained of us to the extremely right-brained of us…with most of us somewhere in between. As a left-brained SLP, I can find myself on that line, and can speculate about my spatially-oriented OT and PT friends. Stereotyping aside, however, we find ourselves in good company no matter with whom we share the "steeple test". We find co-workers who can close their eye and describe what we are wearing to a T. We find others who close their eyes and see nothing but color…or blackness.

We find some pretty well-balanced thinkers out there, too, like an SLP colleague of ours who describes himself, first, as a visual thinker, and second, as a verbal one. This man once told me that, when he was a child, he processed language very slowly, because, like Temple, he had to painstakingly translate whatever people said into pictures. He then did his "real" thinking in pictures, and had to re-translate back into words, so he could take his turn in conversation. Now that he is an adult, his processing time is quite rapid with casual conversation, but he recently said he is still uncomfortable with more detail-laden exchanges. And, as a child, this man's processing rate was so time-consumptive, that, by the time he had done the translation, thinking, and re-translation, the teacher had given up and called on someone else!

Educators have learned a lot over the years about the various styles of thinking among us. But, until Temple described her own thinking so vividly, we hadn't put that extreme of visual thinking on our list of the possible!

I think we are just beginning to understand where language fits in for the visual thinker. In *Animals in Translation*, Temple describes the role of language for a visual thinker like herself. She thinks of language as a filter, and she writes that language suppresses visual memories, without permanently erasing them. As Temple points out, thinking occurs without language, and some thinking is actually hampered by language. This is a good lesson for those of us who sometimes think that language is everything and *the* most important goal for our kids!

In our clinic, language flourishes…and we are happy about that. Our job is to support our ASD kids' speech and language growth. But, Temple's comments help us balance our bias about language, and help us remember to support our kids' natural gifts, so they will not be de-valued, or lost, in the process!

OK, so we have established that we will help our kids develop language…but, a good question is, "When?" Another excellent question is, "Which words?" And, finally, of course, is the complicated question, "How?" While we will explore these questions at length in parts 2 and 3 of this series, let's start here by looking at the structure we use in our clinic.

The following supports are presented in a logical order, each setting the stage for the next. If you will give them a good try, I think you will find that they can prepare you and your child for real language development!

Supports for Language Development in Visual Thinkers

(1) Honor your child's visual thinking style. After all, we are the adults, and it is incumbent on us to do the best job we can to "get into" the minds of our children! Unless your

Try to see the world anew, from your children's eyes!

child is on the Asperger's side of the continuum, there is a huge likelihood that your child, regardless of how young, is visualizing in his mind…perhaps very well. It will make us all feel less anxious about our kids' lack of eye contact when we realize that they are probably seeing enough in their "mind's eye" to take up most of their young brain power! With time, of course, they will learn to take in the "rest of the world," too…but, this will take some maturity!

(2) Try to get into your child's mind well enough to share that visual world. We can't be perfect at it, of course, but we all know the tenant about autism: that until we can share in "their world," we cannot ask them to "share in ours." We realize now that "their world" is probably filled with amazing visual complexity and color, and, even if ours is not, we share many of the same memories as our children, albeit in a different form. Try to remember these shared memories like a visual thinker: the videos, the books, the holiday decorations, the car rides you shared with your child. With some trying, you can! You may not be as good at doing this as your child, or perhaps not able to "see" it at all, but you can still remember in your own way what the opening of the Disney video is like, what the view of the stars on the bedroom ceiling is like, and what the scene from the car seat is…

Try to see the world anew, from your children's eyes! Notice what your child appears to notice. Take special note when a visual experience causes your child to laugh, cry, startle, or just sit up and notice. *Remember that we really do need to learn from our children (to see what they are seeing) before we can begin to ask them to learn (the words) from us.*

(3) Think about what your child is experiencing as he sees things, and as he visualizes. It may be more than just the visual scene. How does the experience smell? How does it feel…to your child? And how does it sound? If your child is young, he may block the sound out entirely, or scream if you turn the sound on, or talk at the same time. This may be why your child appears deaf. Young ASD kids can often only deal with one modality, or input "channel," at a time. If your child is older, however, there may be a "sound track" to what he sees.

But even if your child isn't ready for sound yet, let's prepare you for the time when your child can deal with it. Please try another exercise: As you are reading this paragraph, can you still see the room surrounding this page? Do you hear the radio? People talking? What is the "sound track" of the film strip of your life at this moment? If you start to pay attention to your own experiences, you will be better prepared when observing (and planning) your child's experiences.

(4) Think about your child's memory of an experience. You can help prepare yourself for thinking about your child's memories by thinking about your own. What does an "episode" of your own life look, feel, and sound like when you "replay" it in your mind? Is it a feeling? A conversation? If it's visual, does it have a sound track?

If your child is a right-brained, visual thinker, he may also be a "gestalt" thinker, so life doesn't come in tidy little moments of "freeze frame." Rather, it comes in long episodes of complexity, or encyclopedic series of events, depending on how long your child has been storing memories. And these episodes and encyclopedia entries aren't easy to encapsulate in single words or even short phrases! We invite you to look back at the Natural Language Acquisition series for a more complete explanation of gestalt thinking.

The visual, gestalt-thinking child does not fit the image of toddlers learning their first word. That child hears us say a word, and just because we said it, learns it because it seems like we think it's important! "Ball," we extort, and our left-brained toddler chortles, "Ball!" to everyone's glee. But for your little right-brained child, it works the opposite way! Your child already has the experience…and it's way more complex than "ball." You need to discover what that experience was and what it looked like and felt like to your child.

(5) Plan some experiences that will be pleasurable to recall later. Since visualizing is just part of your child's experience, you can plan experiences that encompass other sensations and feelings, too, making sure they are positive. Would your child like to look at the new book while he's cuddled up with you? Or while he's swinging? Or under a pile of blankets? What would make your child laugh or smile? How can you plan for a visual experience your child will really enjoy with multiple senses, and want to recall with you later? Commonly-experienced, happy recollections have great potential for "joint referencing" as you and your child build a repertoire and shared history you will eventually be able to talk about together.

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Try out your ideas, sharing them with your child. Remember to think like your child every step of the way. You will need to do this before you decide what the "sound track" ought to be. Write down your results. Keep a log, to prepare you for the next step.

(6) Plan some more experiences, this time adding an "audio track" your child will like. Make sure the sound is something your child finds pleasurable, and, if your child has auditory sensitivities, make sure it is something soothing. Music, giggling, sound effects, and non-vocal sounds like tapping are better than words at this experimental stage. Remember that auditory information comes in all kinds of packages, and that words are not the only sounds that add meaning to experiences.

Yes, words are in your child's future…I promise. But, for now, we have to put our visual child's needs first…and that is to begin where he is…to honor his style, and to share in it!

In our next column, we will help you decide when the time is right for words. But, for now, you have lots of thinking to do…lots of *visual thinking*, and lots of fun to be having too, with your visual child!

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Marge Blanc, M.A., CCC-SLP founded the Communication Development Center, in Madison, Wisconsin 10 years ago. Specializing in physically-supported speech and language services for children with ASD diagnoses, the Center has successfully helped scores of children as they moved through the stages of language acquisition. Contact Marge and her associates: Communication Development Center, 700 Rayovac Drive, Suite 200, Madison, WI 53711, **lyonblanc@aol.com**, (608) 278-9161.