

Language and Communication Issues in ASD: *Let's Talk about Talking*

Olga Bogdashina



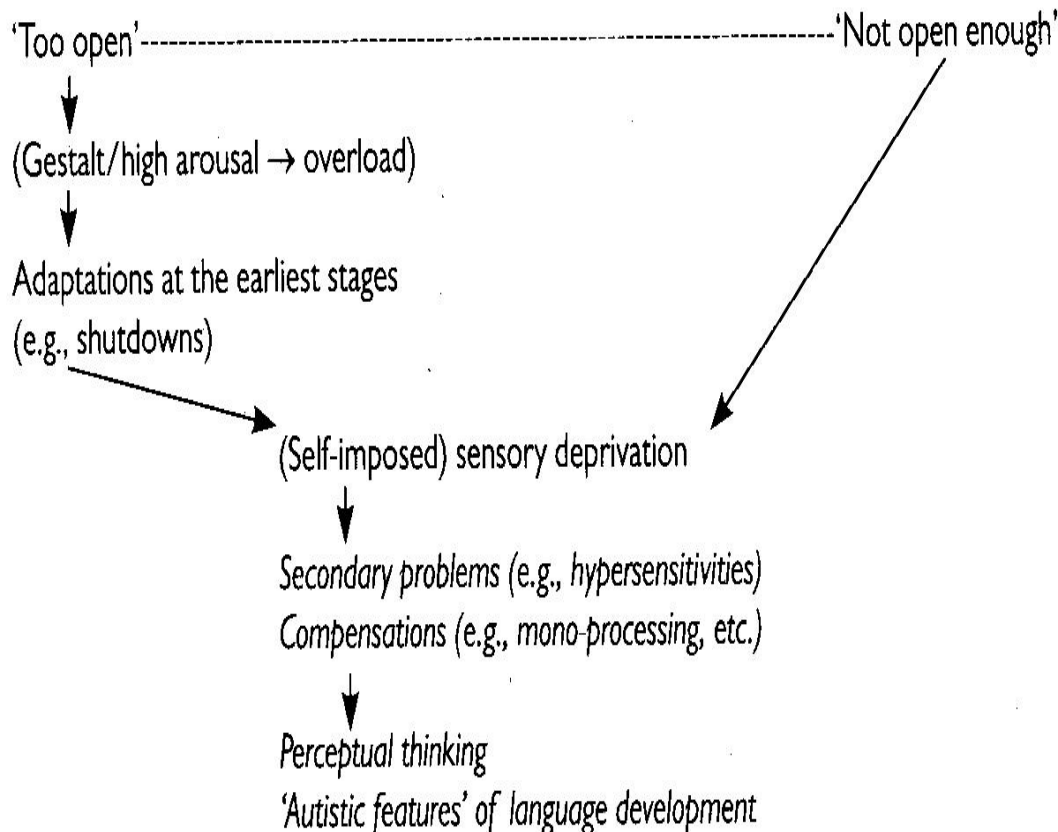
INTERNATIONAL
AUTISM
INSTITUTE

Before I begin, I'd like to clarify that

□ Autism before DSM-5

□ Sensory perception

□ Personal



Communication and Language

- Do individuals with autism communicate?
- What language do they use?
- What should we do to establish meaningful communication with them?

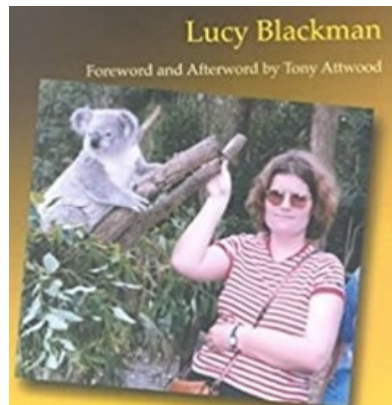


Non-verbal communication

Q: *What was Lucy communicating?*

“I was sitting on the potty on [her minder’s] kitchen floor because I wanted ...[?]”

...something to eat.”



Her baby-sitter started minding her at the time of her toilet training, so she bribed Lucy to sit there with food. So sitting on the potty in the kitchen became Lucy’s communication strategy when she wanted to ask for food.

Verbal communication *(Naoki Higashida)*

The girl with autism approached her classmates and said: “All of us!” They interpreted it as ‘She wants to join in with us’.



Naoki Higashida (2013)

In fact, the autistic girl's 'all of us' came from something the teacher had said earlier on in the day:

“Tomorrow, all of us are going to the park.”

What the girl wanted to find out was *when* they were going. She tried to do this by repeating the only words she could use, 'all of us'.





Social communication

Non-autistic people are often puzzled by the ‘odd’ communication expressed by individuals with autism.

However, autistic children may be equally puzzled by their non-autistic communicative partners

Who is communicatively impaired?

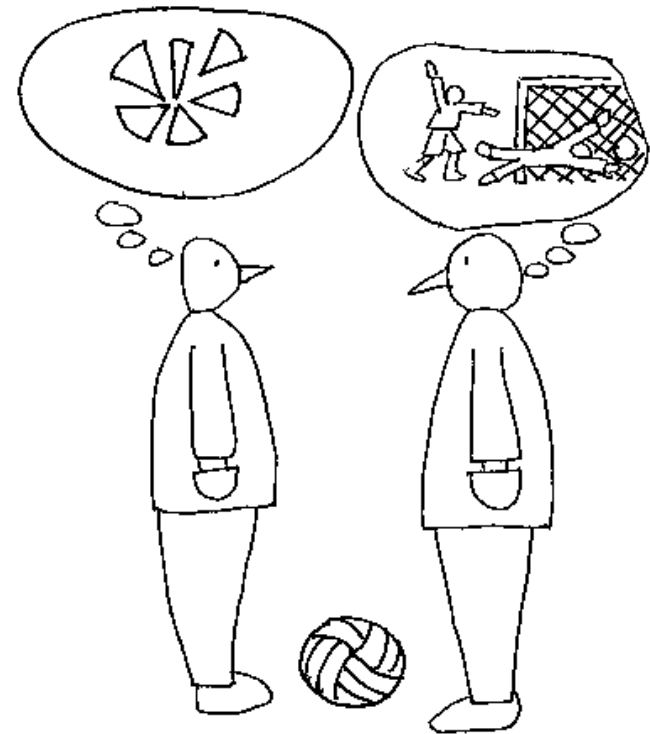
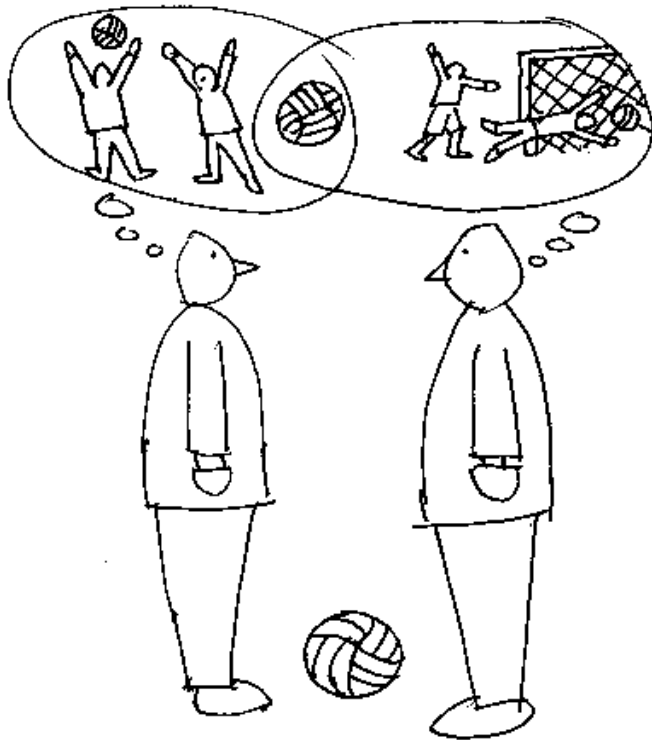


In order to communicate successfully
we need

- **Shared experiences/ shared knowledge**
- Shared tool of communication
(language)

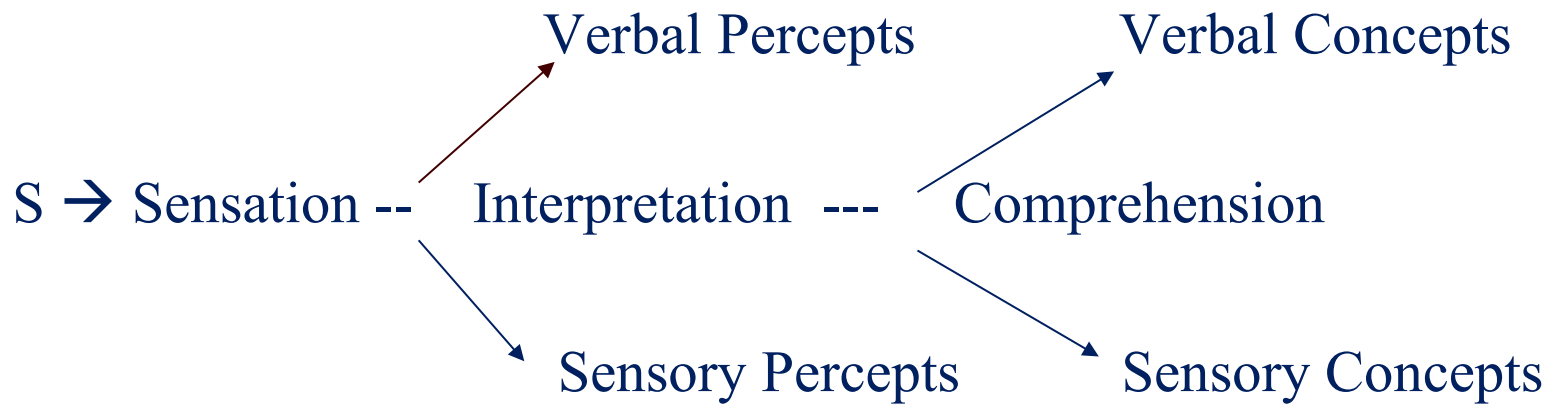
Shared knowledge makes communication possible

Communication is impossible as there is no shared knowledge



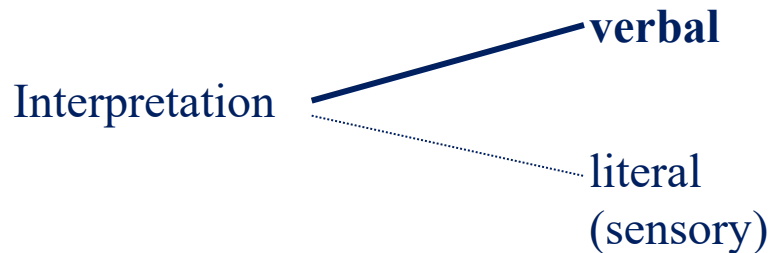
Where does the shared knowledge come from?

From Sensations to Concepts via Different Routes:

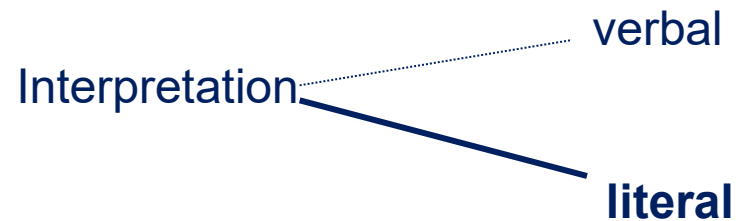


Though we possess both capacities of interpretation and comprehension all our lives, one of them becomes dominant in very early childhood.

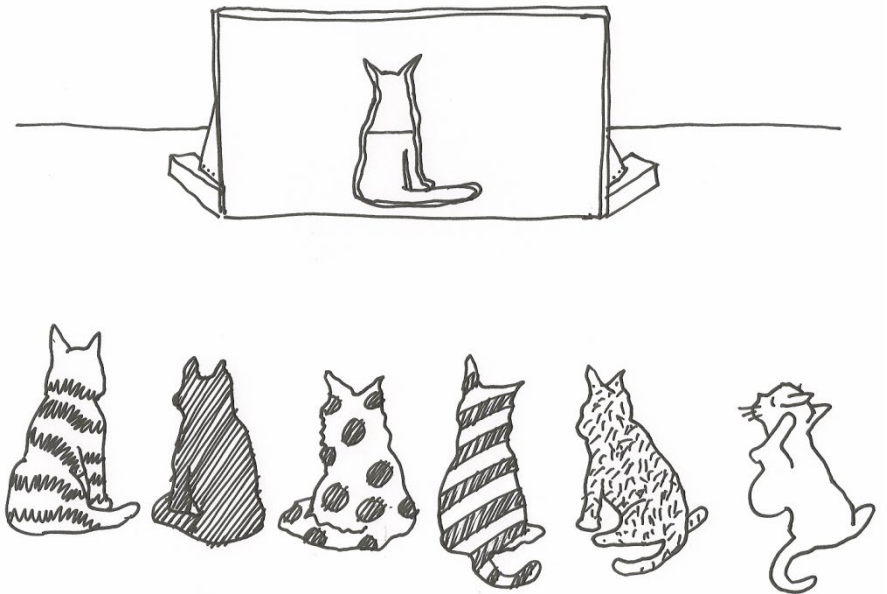
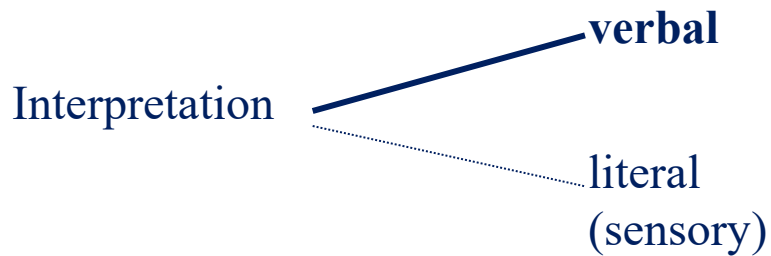
In NT development the dominant side of interpretation is a verbal one:



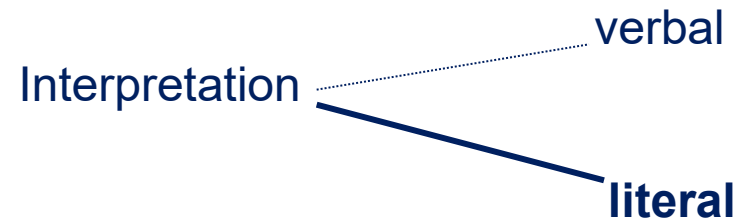
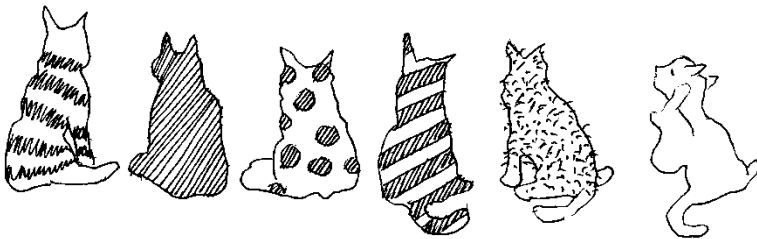
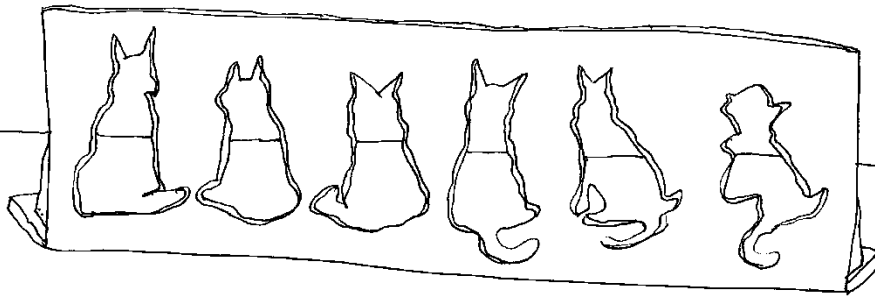
In autism sensory interpretation may be dominant:



In NT development the dominant side of interpretation is a verbal one:



In autism sensory interpretation may be dominant:



'Read the colours'

YELLOW

BLACK

PURPLE

ORANGE

BLUE

GREEN

GREEN

RED

YELLOW

BLACK

PURPLE

BROWN

‘Read the colours’

ЖЁЛТЫЙ

ЧЁРНЫЙ

ФИОЛЕТОВЫЙ

ОРАНЖЕВЫЙ

СИНИЙ

ЗЕЛЁНЫЙ

ЗЕЛЁНЫЙ

КРАСНЫЙ

ЖЁЛТЫЙ

ЧЁРНЫЙ

РОЗОВЫЙ

КОРИЧНЕВЫЙ

For those who are at the stage of literal perception verbal words have no meaning. They are meaningless sound-patterns and may serve as ‘auditory toys’ to play with.

-
- “I did not...have the faintest idea, that the words should mean anything. They were just patterns of sounds to me. Wonderful sounds” (*Tito*)
 - “When I was a kid, words were sound, like the TV, like crumpled paper, like water, like gravel. Words were a sensory material. They didn’t have a use. They were just there” (*Williams*)

“To understand the mind of a child or adult who is completely nonverbal,.. you must leave the world of thinking in words. This can be quite challenging for many people... For the majority of people, words are their “native language.” It is difficult for them to step outside this very basic way of relating and imagine something else.

“Try to imagine a land of sensory-based thoughts... What would thinking in touch be like? How might I function if I could only relate to my world through my sense of smell?..” (*Grandin*)

Literal perception → Literal interpretation → ‘Sensory Words’

Donna Williams developed two words for the sensory experience of ‘cat’:

“One was ‘**foosh**’ which defined it by the sound made by your hand over the fur when stroking the creature. The other was ‘**brrrook**’... which defined it by the noise which came out of the creature when it was stroked” (*Williams*)




Literalness

- ‘Perceptual words’ (‘sensory concepts’)
- Everything is ‘the’ something
- If a child remembers a ‘dog’ as a small white Pekinese in a blue collar, any other canine (even a Pekinese in a red collar) cannot be identified as a dog, it is so different!

One word – one object





Later transition of dominance from sensory to symbolic plane of comprehension (Very few individuals remain ‘fluent’ in both ‘languages’):

“In my case, I remember this transition from the system of sensing into the system of interpretation began to happen not in the first days or weeks of life as usual but at around 3 years old.

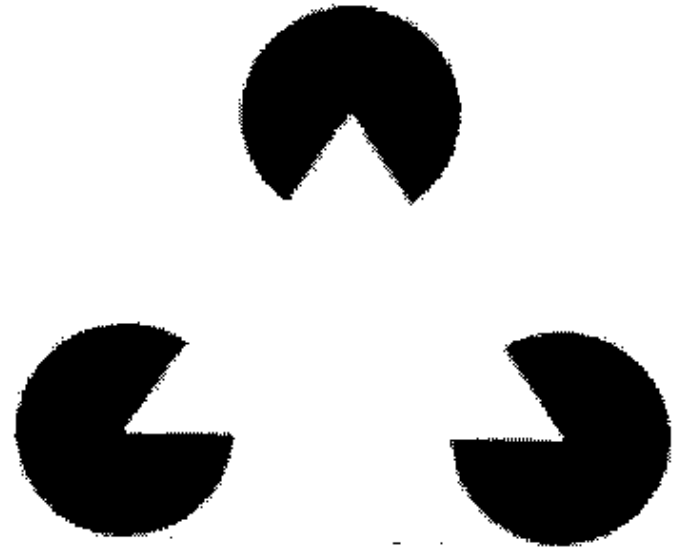
It was not until around the age of 10 that the system of interpretation... eventually came to be relied upon... Even then, it was taken on, not as a first and primary ‘language’ but as a secondary one and much later as one of two equal but different ‘primary’ systems” *(Williams)*

On the cognitive level: *Snyder et al., 2004*

Autism is the state of delayed acquisition of concepts.

The main arguments are:

- We are not conscious of the details of percepts. Instead, we often see what we expect to see or what is closer to our mental representations.





- “For the person with autism to understand the concept of *street*, they have to see more than one street. Autistic thinking is specific to general. To learn a concept of *dog* or *street*, I had to see many specific dogs or streets before the general concept could be formed.” (Grandin)



- **“Practice, exposure and experience with objects and around objects matter a great deal.”** (Mukhopadhyay)





In order to communicate successfully we have to speak the same language

Language is a system of symbols (words) and methods (rules) of combination of these symbols used by a section or group of people

Main functions:

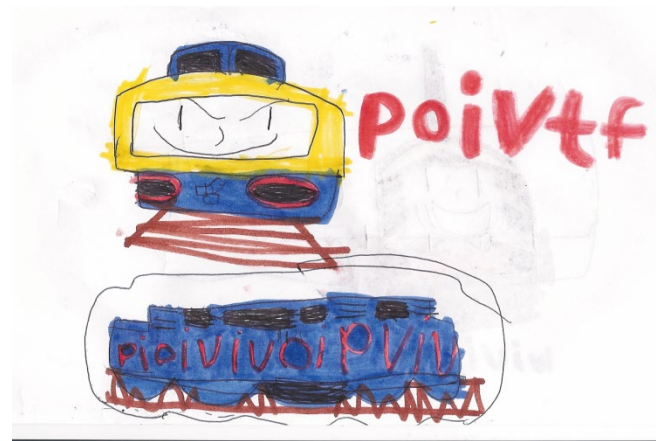
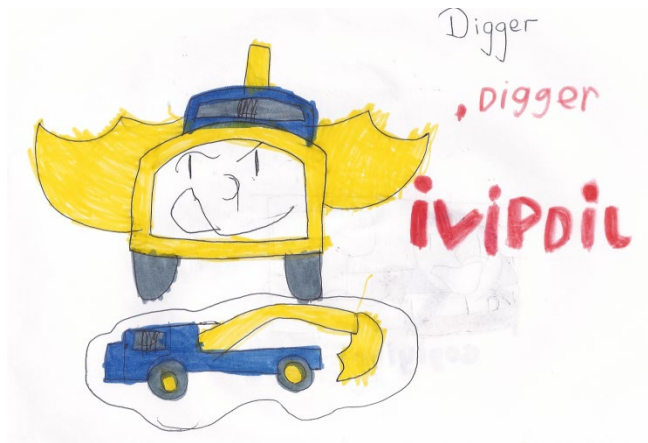
- Communicative
- Cognitive

Autistic languages



- Visual
- Spatial
- Auditory
- Tactile
- Kinaesthetic
- Olfactory

'Visual language'



‘Visual thinking – visual inner language’

“When I talk to other people I translate my pictures into stock phrases or sentences I have ‘on tape’ in my head” (*Temple Grandin*)

□ Not all autistic people think in pictures!

“I learned sound pattern and the feel of words in my mouth and sound pattern in my ears... but without gestural signing to link experiences to the blah-blah... the interpretation was lost. Unlike Temple, I do NOT think in pictures. I imagine primarily in feel, movement, kinaesthetic and via acoustics made by the object when struck. I ‘visualise’ like a blind person.” (*Donna Williams*)

‘Auditory language’






‘Tactile language’

‘Kinaesthetic language’



Translation

“The linking of words with sensory experience means that if I hear the word ‘shoe’, I link this with the sound it makes being thwacked on the floor... If I hear ‘picture’, I re-experience running my fingers around its frame, the cold of its glass and the sound it makes being tapped... If I hear the word ‘biscuit’, I re-experience the crunch and the feeling of it as I ate it...” *(Williams)*


- 
- They learn better with concrete information
(visual, auditory, tactile, etc.)
 - Choose the methods of instruction to match the person's 'inner language'. Not all autistic individuals are visual thinkers!
 - Teach them a range of strategies for memorising and retrieving information, such as making stronger connections between 'sensory words' and 'verbal labels'

Translation problems

In order to communicate their thoughts


- They have to ‘select’ particular images and place them in order
- Then they have to ‘translate’ these images
- To be able to hold the images together in the memory while verbalising them

The same is true the other way round, i.e. when they have to respond to verbal instructions



Perceptual thinkers have trouble with words that cannot be constructed into a mental picture:

“The words ‘know’ and ‘feel’ were like ‘it’ and ‘of’ and ‘by’ – you couldn’t see them or touch them, so the meaning wasn’t significant. People cannot show you a ‘know’ and you cannot see what ‘feel’ looks like. I learned to use the words ‘know’ and ‘feel’ like a blind person uses the word ‘see’ and a deaf person uses the word ‘hear. Sometimes I could grasp these unseeable, untouchable concepts, but without inner pictures they would drift away again like wispy clouds”
(Williams)



Social experiences present even greater challenge as they cannot be represented with ‘sensory-based mental images’.

How can you ‘translate’ social experiences into ‘sensory concepts’?

Beautiful metaphors and concrete thinkers: - a paradox?

“Growing up, I learned to convert abstract ideas into pictures as a way to understand them. I visualized concepts such as peace and honesty with symbolic images.

I thought of peace as a dove, an Indian peace pipe...

Honesty was represented by an image of placing one's hand on the Bible in court.”
(Grandin)



Specific peculiarities of ‘autistic verbal language’

- ‘Autistic muteness’
- Echolalia
- Pronoun reversal
- Extreme literalness
- Metaphorical language
- Neologisms
- Affirmation by repetition
- Repetitive questioning
- Demanding the same verbal scenario
- Autistic discourse style
- Poor control of prosody



‘Autistic muteness’

NAOKI HIGASHIDA

“Can you imagine how your life would be if you couldn’t talk?”

“I don’t know why we can’t talk properly. But it’s not that we won’t talk – it’s that we can’t talk and we’re suffering because of it. All on our own, there’s nothing we can do about this problem”

TITO
MUKHOPADHYAY

“How can I talk if my lips don’t move?”

Autistic muteness

- Some don't understand speech (sensory – especially, auditory – processing problems)
- Motor problems
- “I was about 3 when I realised that I was given instructions, but the individual words were blurring into the fluctuations around me, and sometimes being overtaken by following or preceding sounds.”
(Lucy Blackman)
- I could understand what people said to me, but I could not get my words out. It was like a big stutter, and starting words was difficult...
(Temple Grandin)

Temporary muteness ← overload, Stress and anxiety




“I had ‘forgotten’ the natural sequence of connections needed to make consistently comprehensible language. Articulation was happening without vocal connection. My lungs and diaphragm were responding to intention to speak but either my jaw, lips, and tongue weren’t on speaking terms or my voice box walked out on the job” (*Williams*)

However, under extreme, often negative, circumstances:

- some nonverbal autistic children could say a complete, and original, context-appropriate sentence about once every eight to ten years;
- some have only spoken once or twice in a lifetime.





When the child starts to talk, his speech is characterized with specific ‘autistic’ features as if the child was speaking a foreign language. They seem to acquire language intellectually as an adult would have to learn, say, Japanese.

“[Verbal] language has a different usage for an autistic person than it has for a non-autistic person” *(O’Neill)*

Echolalia

- Immediate echolalia
 - Delayed echolalia
-
- Non-communicative
 - Communicative
- Non-communicative echolalia (the ‘sensory’ use of words):
“...the sounds of certain words can roll about deliciously and provide auditory stimulation...Repeating sound patterns is comforting. It also simply feels nice. Other people do things that simply feel good. Why shouldn’t an autistic do that as well?” *(O’Neill)*

Communicative functions of echolalia:

□ ‘I don’t understand’:

“As an echolalic child, I did not understand the use of words... When I later repeated phrases, it was simply because I sensed that some sort of response with sounds was required. Mirroring... was my way of saying: ‘Look, I can relate. I can make that noise too’”
(Williams)

□ To aid processing


□ Means to ‘buy time’

□ A request

‘Sophisticated echolalia’

- To disguise their difficulties in understanding social and communicative conventions a ‘sophisticated echolalia’ is often used. In this case, it is a survival strategy in in a social world they don’t quite comprehend.

“[When all else failed] I used to rely on a ‘fitting in’ trick that is nothing more than a sophisticated form of echolalia...I imitated the sounds and movements of others...as patchwork façade condemned to live life as a ‘the world caricature” (*Willey*)

- 
- Pronoun reversal

 - Extreme literalness
 - Metaphorical language
 - Neologisms
 - Affirmation by repetition
 - Repetitive questioning
 - Demanding the same verbal scenario
 - Autistic discourse style
 - Poor control of prosody



□ Do they always say what they want to say?

“Please don’t assume that every single word we say is what we intended...Even with straightforward ‘Yes’ or ‘No’ questions, we make mistakes...

I can never say what I really want to. Instead, verbal junk that hasn’t got anything to do with anything comes pouring out of my mouth” (*Naoki Higashida*)

Sensory-perceptual assessment for Communication Profile

- To adjust the environment to the needs of the individual in order to protect the person from painful stimuli and reduce the confusion caused by possible distortions
- To identify the optimum rate of incoming information the person can cope with
- To identify the interaction style to be used with the person
- To identify the preferred communication channel used by the person

Sensory-perceptual assessment for Communication Profile

- To adjust the environment to the needs of the individual in order to protect the person from painful stimuli and/or reduce the confusion caused by possible distortions

“It is impossible for children to learn if they are bombarded with confusing, irritating stimuli they are unable to screen out” (Temple Grandin)

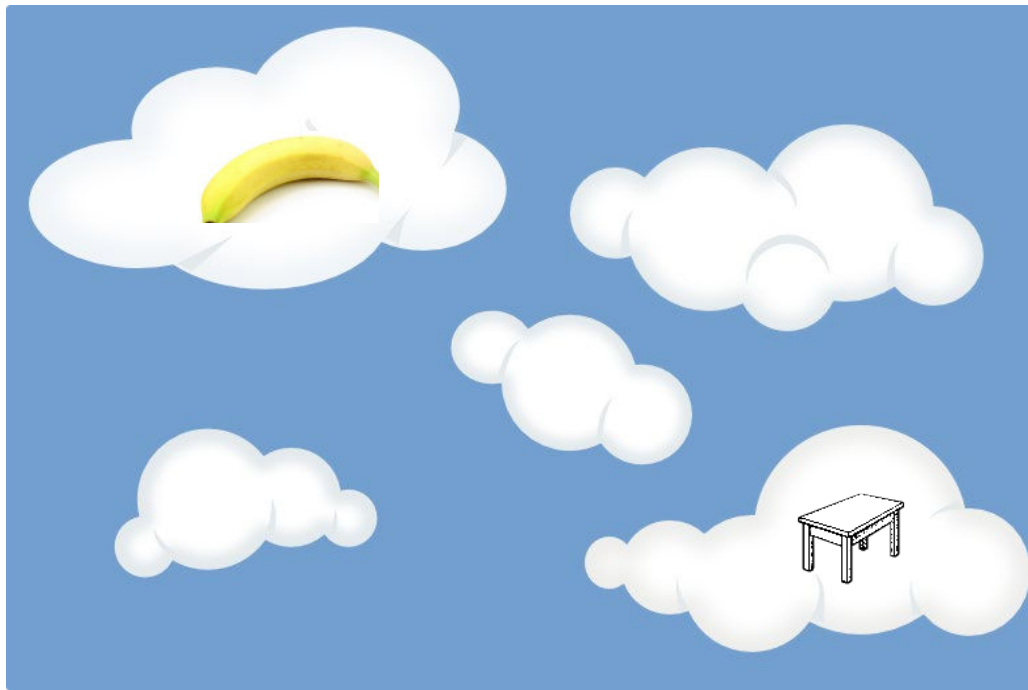
- 
-
- To identify the optimum rate of incoming information the person can cope with

A minimal speech approach

is beneficial for the children who have no or little understanding of verbal language.

- This strategy is used in combination with other non-verbal communication systems (objects, photos, etc.) depending on the child's 'inner language'.
- The consistent use of only one or two concrete words that are strictly relevant to the situation

Connecting words exactly with the situation at the time the child attends to it



- 
-
- To identify the interaction style to be used with the person:

Direct vs. indirect communication



The transition from indirectly-confrontational to direct communication should be gradual:

□ Start from minimal speech

to

□ Speaking aloud to oneself (or to the wall) occasionally mentioning the child's name

to

□ Speaking in the direction of the child

and only then to

□ Talking face to face



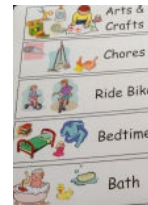
To identify the preferred sensory channel used by the person and to select the communication system

- It is important to find out ‘what language the child speaks’.
- If we use one system for all children in the classroom, for some it might work, for others it might not.

Visual Systems:

Visual systems are very helpful for autistic visual thinkers both to understand and to express themselves.

- E.g., PECS
- Visual timetables
- Photos, pictures, drawings, picture diagram-cards, written words



Decision which visual system to use depends on the child's level of understanding of a symbolic/verbal language

Visual systems do not work with people who are not visual thinkers:

“At around the age of 9, I began to recognize pictures far more, although not line drawings because that’s all they looked like – lines. I didn’t interpret them and when I finally did it usually wasn’t what they were trying to represent. The PECS symbol for play that involves 2 figures with hands throwing a ball between them was, to me, a spider... The picture for dinner looks like a face with a black eye” (*Williams*)

Tactile language

For some children touch is the most reliable sense.

They often find it easier to recognize objects through 'feel':

- Children can be taught to read by giving them plastic or wooden letters to feel.
- They can learn about many activities by feeling objects in these activities
- To make their life more predictable, you may give them some objects to feel in advance to prepare them for future events; e.g., a spoon or a plate before a meal, a towel before bath time, etc.

Communication via objects

may cover several ‘languages’ as it is not only visual but also tactile (when touched), kinaesthetic (when moved), auditory (when tapped), olfactory (when smelt)

- If you teach the child the names of some objects, give him these objects to feel (or smell, or tap to produce a sound). They can learn the meaning of objects through texture, colour, sound, smell






It is important to remember:

- ❑ Objects can be communicatively loaded, and the child might get the wrong message from the ‘written language of objects’;
- ❑ Objects may have different meaning for autistic children;
- ❑ The use of objects should reflect the level of literalness the child has;
- ❑ There are synonyms in the language of objects in autism which can be different to those in our understanding

If the child ‘speaks kinaesthetic’:

-
- Label the mime with the word, so that the child can connect the experience of the movement with its verbal label – if you teach a child the word ‘jump’, make him jump, etc.;
 - If you give the child the directions or instructions, help him to translate them into the body language, e.g., you say ‘go to the left’, then turn him to the left; or you say ‘pick up your things and put them on the chair’, then let him imitate you;

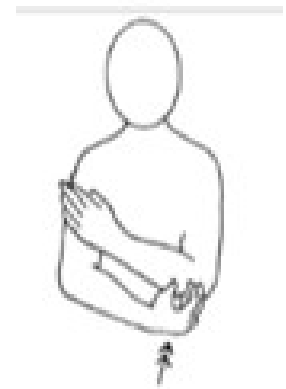
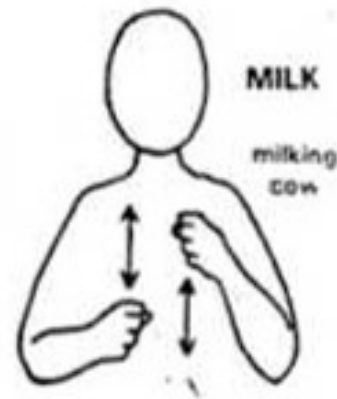
- 
-
- Talk to the child about what you are doing. Encourage her to imitate (to ‘translate into kinaesthetic’). If the child has problems with imitation, help her to form the movement. (Some autistic children were taught to draw and to write by someone holding their hands and guiding them to draw shapes, figures, letters.)


Kinaesthetic language

Sign language

VS.

Mime-signing



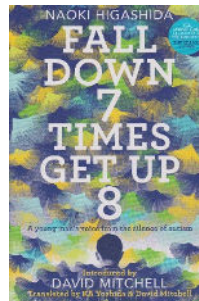
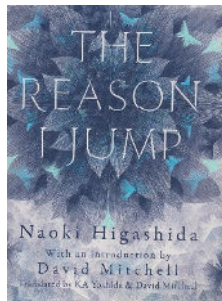
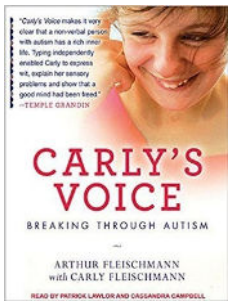


Whatever visual system is used, it is important to combine it with a written word, to develop the child's understanding of written language.

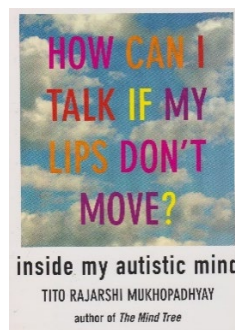
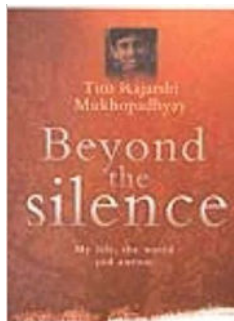
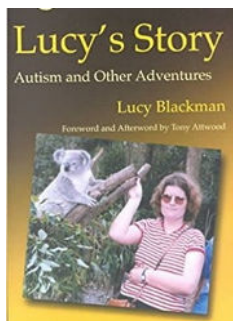
Written communication

Letters and symbols are much easier for us to grasp than spoken words, and we can be with them whenever we want” (Naoki Higashida)

“Communication via typing was not easy (it was NOT a miracle!)” (*Carly*)



- “Not being able to talk means not being able to share what you’re feeling and thinking...Sure, it took a long time before I could finally start communicating via written text on my own, but on that first day when my mum supported my writing hand in hers, I acquire a new way of interacting with others.” (*Naoki Higashida*)



- “Learning to write was the most important skill that I acquired.” (*Naoki Higashida*)



Things to remember:

- Emotional aspect of the word
- Triggered responses
- ‘Challenging behaviours’ may be caused by ‘past’ antecedents



Teaching communication

- *Social skills approach*
- *Social stories*
- Eye contact,
- Gestures,
- Emotions,
- Facial expressions,
- Body language,
- Use of interpersonal space

Rules

Introducing rules of behaviours in different situations:

Autistic individuals find following the rules very useful as the rules help them 'act' in situations they might not fully understand

“Since people with autism and Asperger’s are emotionally immature, they must have basic morality pounded into their heads when they are small children... Some Asperger’s children and adults have done some bad deeds because the basic rules were not taught to them” *(Temple Grandin)*

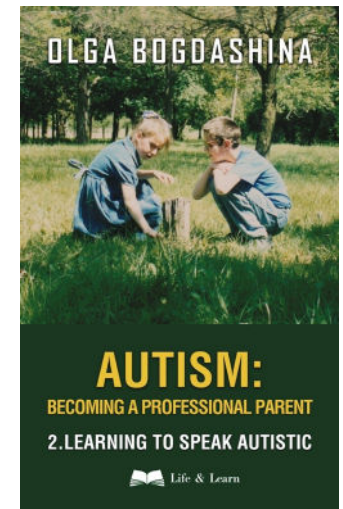
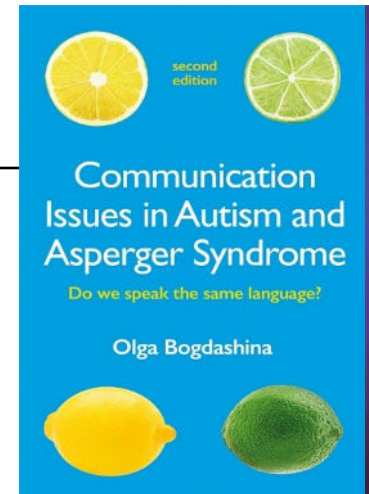
Rules (Temple Grandin)

“I live a rule-based life and I have a rule system I still use today.

- ***Really Bad Things*** – e.g.: murder, arson, stealing, destroying property, injuring or hitting people...
- ***Courtesy Rules*** – not cutting in on a line at the movie theatre or airport, table manners, saying thank you, and keeping oneself clean. These things are important because they make other people around you more comfortable... It annoys me when other people cut in front of me in a line, so I don't do this to other people.
- ***Illegal But Not Bad*** – slight speeding on the highway and illegal parking...
- ***Sins of the System (SOS)*** – smoking pot and being thrown in jail for 10 years and sexual misbehavior

“The role of professionals should be to help people use their natural processes to learn and grow. This might mean helping people develop strategies for dealing with sensory oversensitivities...

Probably it always means learning and teaching translation skills to enable people with different communication systems to communicate with each other” (*Jim Sinclair*)



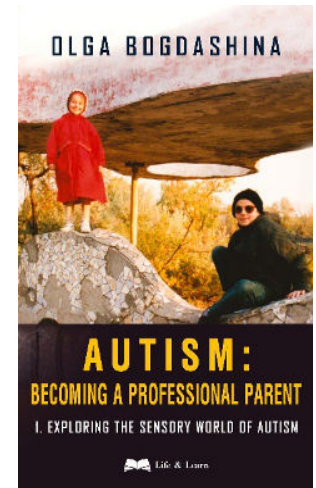
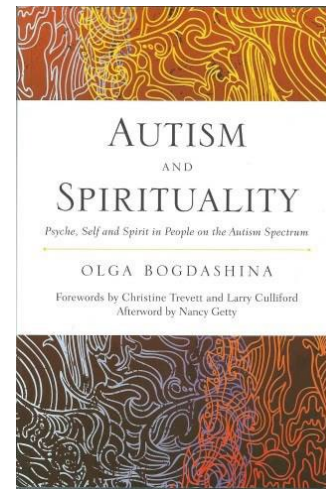
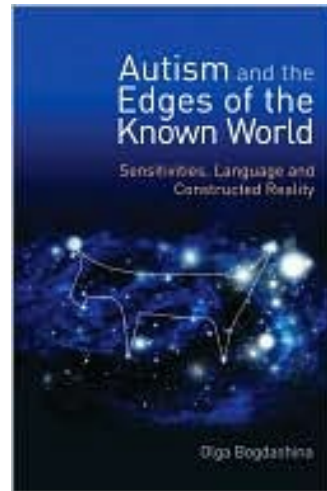
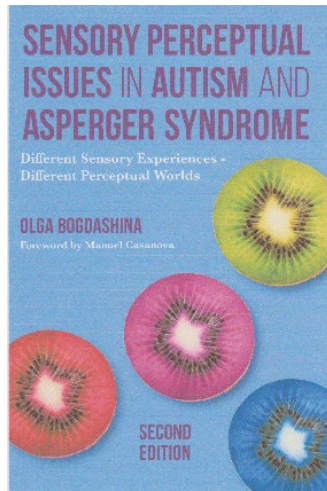


<https://www.olgabogdashina.com/blog>

- Direct vs indirect communication

- Non-Verbal Languages in Autism
- Early vocalisations and babbling in autistic babies
- Lack of expressive verbal language – ‘autistic muteness’
- Late talkers
- Non-communicative echolalia in autism
- Communicative echolalia in autism
- Fluent Speakers – So What’s the Problem?
- ‘Involuntary echolalia’
- Sophisticated echolalia
- Signs or Mimes
- **Guidance for communicating...**

www.olgabogdashina.com



YouTube: <https://www.youtube.com/@olgabogdashinataalks>