



Theory of Mind

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Andy, a boy with autism, has attended a typical classroom since first grade. Although Andy's language was two years delayed, his language has progressed to the point where he is able to speak with fluidity. Andy has a few friends that he plays with during and after school. Their favorite game is making a space ship from an old cardboard box and pretending to be astronauts. Andy attends our town's swim program on Saturday mornings. According to the criteria defined by the Diagnostic and Statistical Manual (DSM), Andy should be cured. So why does Andy still appear so odd? Social skills is listed as a DSM criteria for Autism Spectrum Disorders however Social skills encompasses so much more than learning to say hello and goodbye. The key element of social skills is perspective taking, also called theory of mind.

The theory of mind simply means the ability to understand another person's emotional perspective. If I am having a conversation with my friend John and John starts to fidget in his seat, attempts to change the subject, or starts to pack up his bag and gazes at the door, I will interpret this "body language" as disinterest and hence will change the subject or let John go. A person on the Autism spectrum will generally not pick up these cues and will continue to talk regardless of the listener's desire or interest. People on the Autism spectrum generally do not pick up on these non-verbal cues; in essence they are "non-verbally deaf". As a result, they are unable to get inside another person's head, to take another person's perspective, and make decisions based upon this information.

The above example is just one area that the theory of mind category encompasses. Other areas of deficiency include: a) Inferring what one should do when specific directions are not presented. For example, Jamie's teacher announces that it is time to go to the bathroom. Jamie stops what she's doing and lines up at the door. Jamie's teacher proceeds to give her a time out for not cleaning up before she lined up, even though Jamie protests that the teacher never said, "Clean up, then go to the bathroom". b) Understanding when one is being deceived. For example, Eric, the school bully, meets a child in the lunchroom. Holding a brown paper bag with a heavy object in it, Eric says to the child, "I have one hundred chocolate bars in my bag and I'll trade all of them to you for your one cup cake." Your child agrees only to find rocks in his bag. c) Perspective taking. The child who makes blunt comments that might be hurtful may not understand how his actions affect someone else. For example, James, a child with autism, opens his birthday present, a hand knit sweater made by his grandmother. James says, "This is ugly and itchy", not taking into account his grandmother's feelings. d) Literal Thinking. For example, when mom says, "It is raining cats and dogs outside" and the child is now afraid to go outside for fear a cat or dog will hit him!

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The theory of mind also involves pretending, thinking, knowing, believing, imaging, dreaming, guessing, deceiving, forming a "generic" and categorization. In addition, the theory of mind "...also involves tying all of these together into a coherent understanding [gestalt] of how mental states and actions are related...it has the dual function of representing the set of epistemic mental states and turning all this mentalistic knowledge into a useful theory [to help people make sense of their daily lives.]" (Baron-Cohen p. 51)

What is so remarkable about the theory of mind is just how automatically people without autism both give and interpret social cues during interactions. These cues are generally unconscious, as several studies on subtle eye movement have shown. For example, in 1967 Kendon studied eye movement in conversations of typical people and found that the speaker will make initial eye contact and then periodically look away. When s/he is finished with her/his sentence, s/he will "...look back at a listener just before finishing his or her message, presumably to check the listeners attention and reaction to the message." (Baron-Cohen p. 118).

"...[N]ot only do we pay attention to the actual words a speaker uses; we also focus on what we think was the gist of what he or she wanted to say or wanted us to understand". Sperber and Wilson (1986) call this a search for relevance. "The listener assumes that the meaning of an utterance will be relevant to the speaker's current intentions. Thus, when the cop shouts, "Drop it!" a robber is not left in a state of acute doubt over the ambiguity of the term "it". (Baron-Cohen p. 27). As you can see from this example, using words with multiple or ambiguous meanings (such as she, he, they, later, over there, the other day, etc...) can be extremely confusing to people with autism.

It is the theory of mind along with speech, social interaction, and symbolic play that appears to be highly disordered in people with autism. As anyone who knows someone with impairments on the Autism spectrum can attest, they believe they are the center of the universe. It would be fair to assume that if you didn't understand that other people had thoughts, feelings, etc., you, too, would believe you were the center of the universe.