

A Plea for a Measure of Abnormality:

Embracing and Celebrating Neurodiversity, One Mind at a Time

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In 1993, Joyce McDougal wrote a book entitled *Plea for a Measure of Abnormality*, where she challenged what’s “normal” and showed her humaneness and kindness to those of us or our patients, clients, neighbors, or relatives who do not fit into society’s understanding of what’s allowed/ acceptable/ “right” – mostly in relation to the psychoanalytic process in narcissistic pursuits, psychic pain, sexual perversions, and psychosomatic illness, just to name a few.

When we expand this quest for measuring “abnormality” 30 years later, we think more in terms of neurobiological diversity, with all the controversies around it. Controversies arise because of the confusion of (professional) tongues and lack of agreement on how to measure (test) one’s “abnormality.”

If you ask a traditional adult neurologist this question, the abnormality would be measured in the symptoms of neuro-pathological conditions like stroke, multiple sclerosis, Parkinson’s, etc., which also include the neuro-mental symptoms of delusions, delirium, hallucinations, and seizures. A pediatric neurologist would probably recount autism and other neuro-pathological and developmental disorders that show up as abnormal behaviors and developmental delays.

For a neuropsychologist, the abnormality would be measured by testing one’s brain functions: e.g., executive brain functions, which include mainly the working memory (retaining information), cognitive flexibility (thinking in more than one way/direction), and inhibitory control (resisting impulsivity and staying focused).

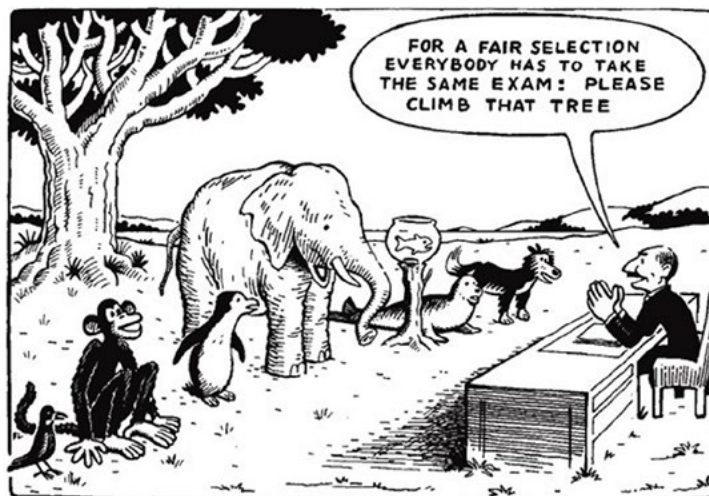
If you ask the same question of a developmental neuroscientist, you will probably hear about “no Theory of Mind” in people with autism spectrum disorders (ASD), which means that people with ASD cannot make inferences about what is in/on the other person’s mind. According to this assumption, people with ASD do not have an idea about other people’s intentions, beliefs, emotions, desires, and thoughts that can be different from their own (Apperly & Butterfill, 2009).

Specialists in speech and language pathology, neurolinguistics, and communication disorders would say that the pathology in neurodiverse people is mainly about severe difficulties in comprehension of spoken language, especially the abstract concepts (adjectives, adverbs, and *wh*-questions), semantic relations and complex syntactic structures (Shane, 2015). They would also say that people with ASD diagnosis are lacking a capacity for empathy (Vollm, 2006) as we know it.



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Some computational neuroscientists and cognitive imaging scientists will say that ASD is a disorder of neural connectivity (Just et al., 2012); others—that there are functional brain asymmetries in three anatomical planes in people with ASD diagnosis v. controls (Desaunay et al., 2023); or that there are abnormalities specifically in corpus callosum (a “bridge” between two hemispheres) connectivity (Loomba et al., 2021); or that facial emotions are accurately encoded in the neural signal (which is new information), and that the problem is possibly in decoding this information (Mayor Torres et al., 2022). The list of problems goes on...



If we ask an educator—she/he will rely on standardized testing to find one’s mind’s “differences” (aka abnormalities), to determine if this student could move to the next class, level, or program. This is reflected in the anecdote which educators in any master’s program learn about: “When asked, ‘What test should you give to a bird, a chimpanzee, a penguin, an elephant, a fish, a seal, and a dog?’—an educator would answer: ‘The tree climbing one, of course.’”

As a neuropsychoe educator, I would say that the problem happens when there is an overload of information for the brain to take in, which causes a breakdown in processing of this information, and the “symptoms” of such a breakdown are socially unacceptable behaviors. When these behaviors are not understood for what they are, there is a further breakdown in inter-personal communications, which cannot be helped by medications or disciplining.

What if we ask parents of neurodiverse children? Responses will vary from feeling shame for “stimming,” abnormal behaviors, low achievement at school—to expressions of pride for their child’s specialness. In her heartfelt poem, “Welcome to Holland,” Emily Kingsley offered a profound

perspective on the experience of raising a child with a developmental disability. She described awaiting her baby as planning a trip to Italy:

“The Coliseum. Michelangelo’s David. Gondolas in Venice...” And then, there is a change in the flight’s plan, and you are not invited to vote on it. And the flight attendant says, “Welcome to Holland.” And that is where you will stay for the rest of your life! It is not a filthy and full of disease place, it’s a different place, even full of beautiful tulips and windmills, but you are not ready to stay, especially when you see other people go to Italy, and they brag about it and all its flashy beauty... But you have to stay here, in Holland! Kingsley says, “And the pain of that will never, ever, ever, ever go away... because the loss of that dream is a very very significant loss... But... if you spend your life mourning the fact that you didn’t get to Italy, you may never be free to enjoy the very special, the very lovely things ... about Holland.”

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So, these parents learn to see the inherent value in the journey (of parenthood) rather than focusing solely on the destination (of fixing their children); and if they don’t—their life is ridden with never-ending

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grief and sorrow. O'Brien (2007) described this phenomenon of mourning the idea of a "normal" (typical) child in mothers of children diagnosed with autism, calling it "ambiguous loss." Ambiguous loss produces all the symptoms of trauma, and if appreciated as such, we, professionals, can become the expert companions in these parents' journeys, which might lead to post-traumatic growth in parents, as well as joyous life for children and families (Grinman, 2020).

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Neurodiversity Is . . .

The concept of "neurodiversity" that is reshaping the way we perceive and understand the human mind was offered in the late 1990s by journalist Harvey Blume and autism advocate Judy Singer. It recognizes and values the inherent diversity in neurological conditions and challenges the notion that there is a single "normal" or "typical" brain. Blume and Singer believed that individuals who are neurologically different deserve recognition as a distinct political category, alongside other established categories such as class, gender, and race. Their aim was to acknowledge the strengths of neurodiverse individuals, to enhance their rights, and to redefine societal perceptions of neurodiversity.

Blume and Singer brought to light the fact that people with dyslexia often possess above-average visual thinking abilities and entrepreneurial skills. Those with ADHD exhibit creative problem-solving skills and imagination, excelling in holistic problem processing based on imagination rather than working memory. Individuals on the

autism spectrum frequently demonstrate an unusual affinity for mathematics and computer programming. Even those who struggle with mental illness often develop unique coping strategies and display heightened creativity.

Today we know that about 15-20% of people who inhabit our planet belong to this neurodiverse group, and this percentage is growing. There was a nearly fourfold increase in parent-reported ASD between 1997-1999 and 2006-2008, as documented by Blumberg et al. (2013) and Boyle et al. (2011). A more recent CDC report showed that children born in 2016 were more likely (56%) to receive an autism diagnosis by age four compared with children born in 2012 (Shaw et al., 2023).

To better conceptualize neurodiversity, we should consider the following key points, offered by the Durham Region Autism Services in Canada: 1) The human brain functions more like a biological ecosystem rather than a computer. 2) Human brains exist along spectrums of ability, and there is a diverse range of mental landscapes. (Many individuals on the autism spectrum may outwardly appear "normal," as cognitive abilities like literacy, sociability, attention, and learning exist on spectrums.) 3) One's abilities are defined subjectively by modern culture, in which the "dis-abled" (neurodiverse) person resides. For example, dyslexia was not a disability until reading became a cultural norm for an average individual (and one of the main accomplishments in school became "reading comprehension"); and the behavior of the person with an autism diagnosis is labeled abnormal because our culture expects adherence to social boundaries and values the innate desire for socialization.

Celebrating Neurodiversity Experts and Expert Companions

One of the experts on neurodiversity was Dr. Stanley Greenspan (2000; 2005; 2007), a pediatric psychiatrist, who understood

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that we are all born with so-called individual (processing) differences and that these differences should not be just “fixed” or medicated. Dr. Greenspan believed that “nurturing interactions” based on (body) regulation are the must-have ingredients for one’s social development, as well as learning and intellectual growth. Greenspan (2010) was not concerned with providing diagnostic tags. Instead, his work was about noticing children’s differences in processing sensory information, helping them to regulate and to modulate their emotional responses, to achieve shared attention, engagement, two-way communication, social problem-solving, and continuous flow, and only then—meaningful symbolic communication, logical thinking, and academic skills. (See *Greenspan’s Learning Tree*).

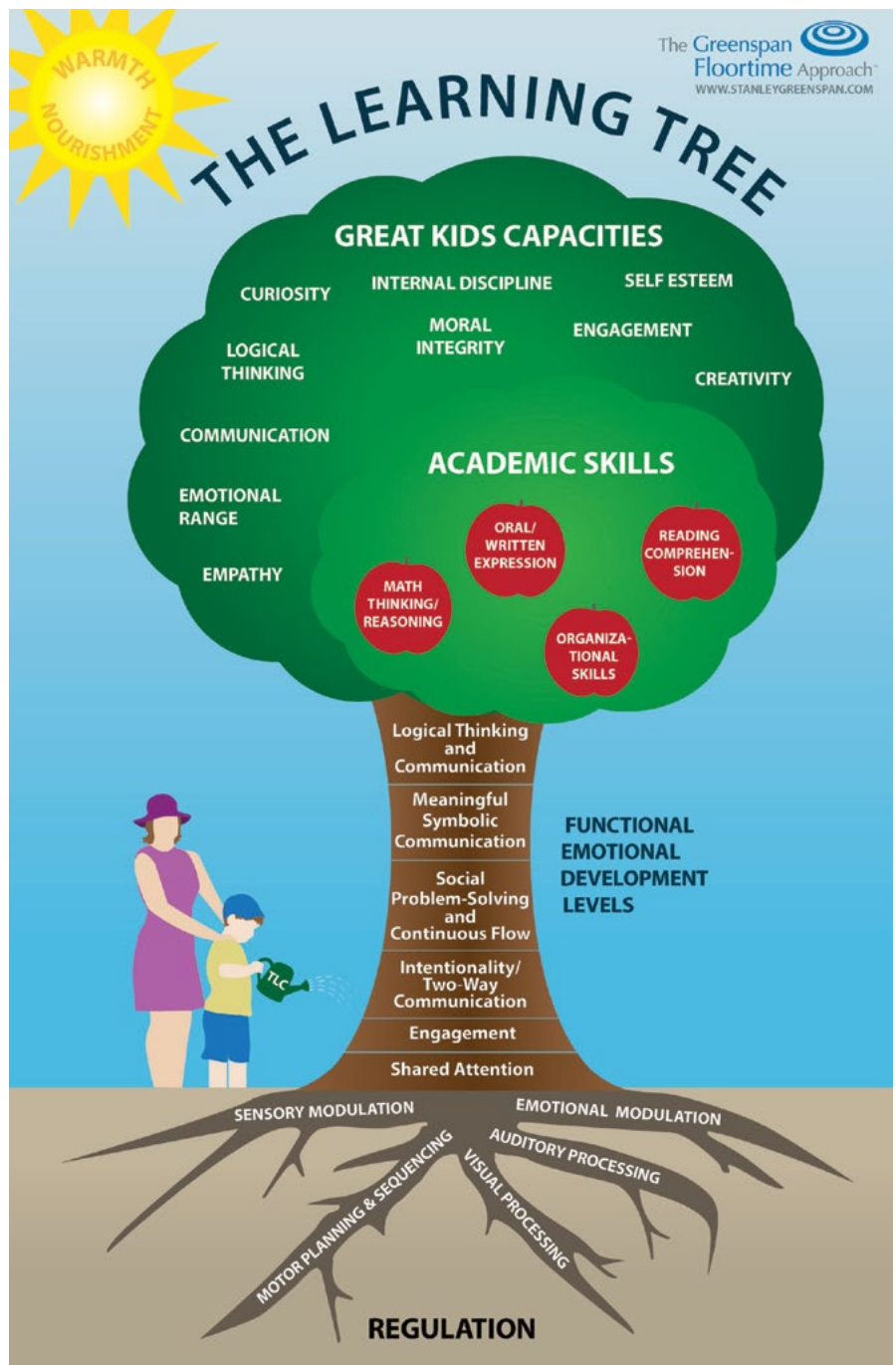
In other words, he was doing the “bottom-up” work with children, so that later in life they could easily exercise the top-down modulation and achieve their highest human potential.

Dr. Eric Kandel, one of the leading neuroscientists and Nobel Prize laureate, as well as the author who popularizes neuroscience, confronted very difficult questions in his lifetime quest to understand the brain-mind dyad: 1) How can the almost 100 billion neurons of our brain communicate to produce the individual Self and consciousness?; and 2) What happens when these connections are miswiring, misfiring, or merely interrupted by physical or psychic trauma? Kandel’s (2007; 2018) work shows how—by studying the dis-ordered brain—we can understand the “ordered” one: studies of ASD illuminate foundations of social instincts; neurological studies of addiction help us understand the relationship of pleasure and willpower; and research on Parkinson’s disease explains the connection of movement, mood, and cognition as a well-orchestrated and well-performed piece of classical music. In his books, Kandel discusses how the diversity in neural processes produces

individual variations (differences) in cognitive functioning, which contribute to the richness of human experiences.

When talking about unusual minds and their contribution to humanity and to the neurodiverse community, we cannot forget Dr. Oliver Sacks, a brilliant neurologist and author. When asked how he would

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like to be remembered in 100 years (during his 1989 interview on “The MacNeil/Lehrer NewsHour”) he said: “I would like it to be thought that I had listened carefully to what patients and others have told me, that I’ve tried to imagine what it was like for them, and that I tried to convey this. And to use a biblical term, the feeling, ‘he bore witness.’” Experiencing neurodiversity himself (he was dealing with the “face blindness” condition), Sacks bore witness to the joys and struggles of various neuro-

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diverse populations. In his 1996 book *An Anthropologist on Mars: Seven Paradoxical Tales*, Dr. Sacks offered a fantastic collection of real neuro-pathological case studies, letting us in on some beautiful but complicated human stories and insights that emerge from them.

The title of the book was borrowed from Dr. Temple Grandin, a zoology professor at Colorado State University and an “autistic person” herself. This is how she described her feeling in the world—as a cow or a Martian. The other stories were about remarkable lives of other “different-minded” people: a surgeon with Tourette’s syndrome who exercised a laser-focused precision during operations; an artist who acquired extraordinary skills after traumatic brain injury; and a man with memory area damage, for whom it was always 1968... Sacks (1996) concluded that “defects, disorders, [and] diseases... can play a paradoxical role, by bringing out latent powers, developments, evolutions, forms of life that might never be seen, or even be imaginable, in their absence” (p. xvi).

In her 2010 TED Talk, “The World Needs All Kinds of Minds,” Grandin called for acceptance and appreciation of people “on the spectrum,” asking, “When does a nerd turn into Asperger, which is just mild autism? I mean, Einstein and Mozart and Tesla would all be probably diagnosed as Autistic spectrum today.”

Over the last 25 years, Grandin has become a fierce advocate for the ASD community. In her public talks, she humanizes/normalizes neurodiversity, as she shares how her mind works: it “thinks in pictures”—like “Google for pictures,” it can “test-run a piece of equipment... just like a virtual reality computer system,” it attends to details (which a neurotypical mind misses), collecting them bottom-up (which helps in problem-solving), and it thrives on hands-on activities (like working in the auto-shop, or drafting, or creating art), not on abstract ones; it also tends to be a “specialist” mind—good at one thing and not at others. Grandin calls her type of mind a “photo-realistic visual thinker,” and she describes other neuro-atypical minds as “pattern thinkers” (who become engineers and computer programmers), “music and math” minds, and verbal minds (they “know every fact about everything”). She explains that it is about different wiring: some people are wired to have “cognitive” minds, and some—“social” minds; and that there is a trade-off between these two wiring circuits—that’s all!

Grandin admits that there are some deficiencies in her mind’s operations that she had to deal with, but she feels that people with ASD can adjust to anything they put their minds to. She says that she, like most people on the spectrum, has “sensory issues” (more precisely, sensory processing issues), like touch, light, and sound sensitivity. Still, she learned to give herself more time to process these stimuli. And, she had to train herself to “understand” (feel) time; so, when asked once for some advice about dealing with one student’s poor time perception, she (pragmatically) said, “Just buy her a big clock!”

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What's Next?

Dr. Temple Grandin's 2010 TED Talk is a call for appreciation and celebration of neurodiversity. As she lets us in on intricate details of a neuroatypical mind (and a mindset), she also voices a concern: there are not too many young people from this (growing) community appearing in Silicon Valley these days; teachers "do not know what to do with these kids," and the hands-on activities that stimulate these minds to grow are taken out of the K-12 classroom.

As Grandin says, "We need different kinds of minds to work together." To do just that, we need to develop and promote different approaches to stimulating and nurturing neuroatypical minds (not "fixing" them, but letting their abilities unfold—through their mind's "working" rather than following commands) and helping them to integrate into the melting-pot world (rather than providing them with "safe" spaces that do not require either skill building or resilience).

We need to provide them with a healthy, positive, environment that directly modifies the brain (by stimulating the development of complex networks of neuronal connections), furthering its ability to adapt, which leads to one's thriving and success (Durham Region Autism Services, n.d.).

What does it mean practically? As Grandin says, "We've got to show these kids interesting stuff." Also, we need to take these kids out of the "autism sensitivity" bubble and "teach them basic things"—like how to be on time, how to have "table manners," and how to be useful (e.g., to do some work. Grandin recalls being a dressmaker when she was 13, and taking any internship job available when she was in college). As per Grandin, we need to know the pitfalls of neurodiverse minds (like being stuck on one idea) and use those to stimulate some great abilities.

For example, a fixation on cars can be used to motivate a child to do some mathematical calculations related to cars, and a fixation on Legos can be used to build different structures.

Grandin's pragmatic enthusiasm about neuroatypicals is a breath of fresh air: she talks about these people becoming an integral part of the human tribe, and not a protected species, when she describes what kind of jobs neuroatypical minds can do. Visual thinkers can become graphic designers, computer experts, photographers, and industrial designers. The pattern thinkers will be our mathematicians, software engineers, and programmers. The "word minds" will make great journalists and stage actors (as many of them must learn

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social skills as "being in a play"). Grandin also speaks about making changes in the educational system and attracting people from other fields to teach in K-12 classrooms—to "light the spark" (aka to motivate these kids to learn) and to expose them to new things to work on. We also need teachers and mentors to understand that neuroatypical brains need specific tasks rather than general ones and "it is never too late to expand the mind of a person on the autism spectrum" (Grandin, 2010).

As I am celebrating neurodiversity every day of my life, I will finish this article with Temple Grandin's (2006) quote: "If by some magic, autism had been eradicated from the face of the Earth, then men would still be socializing in front of a wood fire at the entrance to a cave." 🗨️

HEADQUARTERS UPDATE

The first half of 2023 has flown by. We have been working with the Society's Chapters and the ACE Foundation on education programs a few weekends every month. The 54th Annual Education Conference, held in April, was very well received.

We continue to work with the PR Committee and the PR firm on a new website for the Society. The website should have a fresh new look soon!

The 2022 Scholarship awards ceremony was held on Zoom at the end of January. A video of the students was followed by a Zoom after-party. Once again, it was a wonderful event.

The NYSSCSW Board held its first hybrid meeting in March at the Fifth Avenue Presbyterian Church. The Board will use this system again in September and November. The June meeting will be in person.

In March, I represented the Society at the MSW Virtual Job Fair, meeting with graduating social work students virtually and explaining the Society and its benefits to them. There were over 900 students in attendance, all eager to start working and networking.

Looking ahead, the Annual Membership Meeting will be held on Sunday, October 22, 2023, at Red Hat on the River in Irvington. We hope to see you there.

We hope you all enjoy your summer!

Kristin

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For some short essays related to neuropsychobiological lenses on various things (aggression, thanks-giving, beholder share) visit innarozentsvit.com. For more information on neurodiversity, visit one of my web sites "Celebrating Neurodiversity 365™" CelebratingNeurodiversity365.com.

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