Introducing Neurosimilarity: A Paradigm Shift in Understanding Human Brains

The human brain is an extraordinary organ, infinitely complex and inherently unique. While terms like "neurodiversity" have gained traction in recent years to describe the variability in human neurological functioning, these terms can inadvertently reinforce a dichotomy between a perceived "typical" brain and those considered "divergent." The words we use to describe people matter deeply—they influence perception, shape attitudes, and can either unite or divide. In contrast, the concept of **neurosimilarity** seeks to emphasize a universal truth: no two human brains are identical, and this inherent diversity is a defining characteristic of humanity.

The Science of Uniqueness

This understanding of uniqueness challenges us to rethink existing frameworks, such as neurodiversity, and explore more inclusive concepts.

Advances in neuroscience confirm that every human brain is shaped by a complex interplay of genetics, environment, and experience. Even identical twins, who share the same genetic blueprint, develop distinct neural patterns due to differences in their lived experiences and environmental influences. This uniqueness parallels other natural phenomena, such as the individuality of zebra stripes—no two sets are alike, yet they collectively define what it means to be a zebra. Just as the diversity of stripes is an inherent part of being a zebra, the diversity of neural patterns is intrinsic to being human.

From Neurodiversity to Neurosimilarity

While the term "neurodiversity," first coined by sociologist Judy Singer in the late 1990s and popularized by journalist Harvey Blume, has been invaluable in fostering greater understanding and acceptance of neurological differences, it was further amplified by Steve Silberman's influential book *NeuroTribes: The Legacy of Autism and the Future of Neurodiversity* (2015), which brought the concept to a broader audience. and acceptance of neurological differences, it often implies categorization—creating distinctions between "typical" and "atypical" brains. Neurosimilarity shifts the focus, emphasizing that every human brain exists on a continuum of individuality. This perspective not only avoids unintentional hierarchies but also fosters a sense of shared humanity, celebrating both our commonalities and our unique neural profiles.

The Evolving Language of Neurosimilarity

As Neurosimilarity gains traction, certain terms commonly used to describe neurological differences and support systems may gradually become obsolete or evolve. For instance:

- **Accommodation**: Traditionally, this term refers to adjustments made for individuals considered outside the "norm." Under Neurosimilarity, systems would be inherently designed to serve everyone, rendering accommodations unnecessary. Terms like "built-in flexibility" or "adaptive systems" could replace it.
- **Special Needs**: This phrase suggests a separate category of needs, whereas Neurosimilarity emphasizes that all individuals have unique needs. "Individual needs" or "learning profiles" better reflect this inclusivity.
- **Normal/Abnormal**: These terms create binary distinctions. Neurosimilarity reframes such concepts as "common" and "less common" to describe prevalence without judgment.
- **Disorder**: Labels like "disorder" pathologize natural variations in neural functioning. More neutral descriptors such as "profiles" or "patterns of attention/interaction" could replace them.
- **Neurotypical/Neurodivergent**: These terms reinforce a dichotomy. Neurosimilarity encourages a spectrum view, focusing on "individual neural profiles" instead.

Practical Applications of Neurosimilarity

This evolution in language aligns with Neurosimilarity's vision of celebrating the universal uniqueness of all brains while fostering a culture of inclusivity and empathy.

1. Education: Neurosimilarity encourages a universal design for learning, such as flexible seating arrangements, sensory-friendly classrooms, and multimodal teaching strategies. Instead of categorizing students as having "special needs," educators can adopt individualized approaches that honor each child's unique learning profile.

2. Mental Health: By recognizing every brain as inherently unique, Neurosimilarity can reduce the stigma often associated with mental health conditions. Rather than viewing conditions as

"abnormal," they can be understood as natural variations in neural functioning, paving the way for more personalized and empathetic care.

3. Accessibility: Public spaces and systems designed with Neurosimilarity in mind would prioritize inclusivity as a foundational principle. For example, environments could be created to balance sensory experiences, accommodating individuals with sound sensitivities while enhancing accessibility for all.

4. Workplace Inclusion: Neurosimilarity promotes a strengths-based approach to inclusion, encouraging organizations to value and leverage the unique problem-solving styles and perspectives that each individual brings.

5. Scientific Research: Neurosimilarity aligns with current advancements in neuroscience, which increasingly highlight the vast variability in how brains function and adapt. It calls for research that focuses not on categorizing brains but on understanding the rich spectrum of human neural diversity.

A New Perspective on Shared Humanity

Neurosimilarity is more than a scientific or philosophical concept; it is a call to action. Much like zebra stripes—unique yet integral to a collective identity—our neural patterns define us through their inherent variation. This diversity is a beautiful and essential aspect of what it means to be human.

Conclusion

Neurosimilarity reimagines how we view human brains, focusing on the continuum of individuality that defines everyone. By fostering a deeper understanding of this universal truth, it offers pathways toward inclusivity, empathy, and meaningful connection in all aspects of life.

The concept of Neurosimilarity invites us to reimagine how we think about human brains, moving beyond categories and dichotomies to embrace the continuum of individuality that defines us all. By fostering a deeper understanding of this shared truth, Neurosimilarity offers a path toward greater inclusivity, empathy, and connection in every aspect of society.

This essay emerged from a collaborative process, blending Carol Gray's original ideas with assistance from ChatGPT in refining language and structuring this concept.