The Eyes Have It: New Frontiers in Understanding Cognition in Rett Syndrome

With the growing use of and technological advances in eye-tracking-based Augmentative and Alternative Communication devices, researchers studying cognition among “non-verbal” subjects are confronted with new means of data collection and analysis. The subject of my research, a 6-year-old child with Rett syndrome—my daughter Kalika—is classified as non-verbal and has limited functional hand use. Because of these symptomatic communication challenges, the issue of cognition in Rett syndrome, a rare neurodevelopmental disorder, has historically been a matter of conjecture and debate within the scholarship. Most neuropsychological testing has been inadequate to the task of assessing individuals’ cognitive abilities.

Analyzing longitudinal ethnographic data involving the language and literacy socialization of Kalika, I show that an applied linguistics approach to understanding cognition in Rett syndrome, centered around the use of an eye-tracking Augmentative and Alternative Communication device, contests long standing deficit perspectives and encourages different approaches to understanding cognition in this significant disability context. This research thus offers new pathways to exploring cognition among previously discounted communities.