

Beyond better recall, prediction, and analogy, anyone with increased neural interconnectivity would also think a little faster. This is for two reasons: First, the greater number of connections would result in a greater number of incidental shortcuts, allowing a network to grow faster. Second, with more neurons attached to more neurons, the increase in parallel processing performed by the brain would slightly speed up cognitive functions. This would result in some people literally thinking faster, if not better, than others. It is no illusion and helps to explain why they often seem speeded up, more curious, and intense about life in general. The British philosopher Bertrand Russell once said that the only truly brilliant man he knew was his friend and colleague Alfred North Whitehead. Whitehead's daughter Jessie was living in Cambridge in the 80's when we met. She was fond of her dad. "Father never knew what it was to be "grown up", she told me, "He was always asking questions, right up to the end. I guess you'd say he died a very wise child."

This line of thought is remarkably close to Einstein's own assessment of his mind. "Most adults don't spend their time thinking about questions of time and space", he once said, "That is what children do. My problem is that I have never grown up, so I asked those questions and looked for simple answers. I still do." Notorious for his habit of treating everyone from professors to grocery clerks with the same off-handed familiarity, one biographer wrote, "his absentmindedness, his playful wit, his willingness to expound on politics, religion, and philosophy in addition to science and violin playing all sparked an intense curiosity in the public". To rewrite the rules of physics, Einstein had to enjoy bending old rules and coming up with new ones. "I'm enough of an artist to draw freely on my imagination," he once remarked, "which I think is more important than knowledge." Knowledge is limited. Imagination encircles the world."

As long as those with above average synaptic density can maintain a balance between perception and personal interpretation, their daily lives are full of curiosity, searching for underlying rule structures and their practical applications. While most find their daily reassurance in steady careers and social structures, the complex mind finds comfort in tight philosophical schemes and elegant strategies. These individuals succeed or fail in the world between their ears that most of us never hear about. Most of the time they enjoy it. The medieval scholar Erasmus wrote in the fifteenth century that if pure learning weren't a pleasure in and of itself, he would not have spent a life at it. Referring to his beloved books as his "friends", he celebrated his quiet and solitary existence by stating, "What could be more agreeable!"

Adventures in the Tall Graphs

A useful way to visualize the progression from one end of the mental spectrum to the other is to use the familiar bell curve, the

