

"You are always saying that your mind wants to do one thing, but your body does another. We can see by your brain map that the reason for this is because your brain lacks the connections to enable it to perform in the way that you would like it to do. But BCIs can help you to match your intentions to your actions. They enable you to do things that you couldn't otherwise do."

"Like Daniel," I type.

"Exactly. Daniel no longer has a right hand, but he does have a BCI-enabled prosthesis. So even though theoretically he shouldn't be able to draw or even eat, he can do both these things merely by thinking about doing them. The sensor helmet he wears is able to read his thought intentions from the neural impulses in his brain and translate them into physical actions."

"The neurons in his brain are controlling his actions, just as they do in our brains, except in his case they were doing it through an intermediary device."

"Exactly. Over time, the more Daniel eats with his prosthetic hand, the actions of feeding himself will become automatic, just as they are with us. Because each time he does it, the neurons in his brain are taking that feedback and learning from it. They are forming new connections."

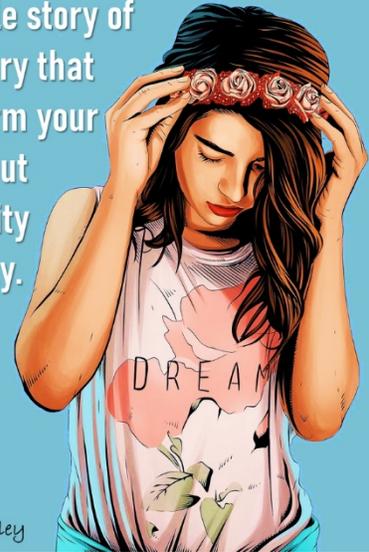
My fingers fly to the keyboard. "So, let's say I want to be able to throw a ball clear across a field. Are you saying that if I put on a BCI cap tweaked to my own brain map and thought about executing the movements involved in pitching like a pro baseball player, I could grow neural connections in my brain that would actually improve my gross motor arm movements?"

"Pretty much. That is the remarkable thing about BCI. You don't actually need to have the ability, you just need to have the intent, and it can help you build the ability."

I sit back. "WOW. It almost sounds too good to be true."

WHO IS ANNA?

A remarkable story of self-discovery that will transform your thinking about neurodiversity and disability.



By Gail Buckley
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