

HOW MY WIFE GOT BRAIN-HACKED (AGAIN)

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I've bought this electric toothbrush for my wife's seventieth birthday, because simple tasks like brushing her teeth have become tedious for her. My Tammy was diagnosed with Parkinson's disease ten years ago. First, she noticed a tremor in her left leg. Later, her hands started shaking, too. When the doctors finally confirmed what we had suspected for a long time, she had trouble walking.

Tammy's disease progressed, and our daughter Suzy moved back in with us. Suzy was recently divorced. She helped Tammy with daily chores. I did my best too, but I've never been of much use in the household. So, when Tammy's previous birthdays came around, I chipped in for whichever gift Suzy fancied. Our daughter has always been sceptical of the internet of things, so a smart toothbrush was not an option. This year I finally got the chance, as Suzy left for Thailand. She celebrated her mom's birthday by video-calling us in front of a sunny temple.

It's a pity that our son George couldn't visit us either, so Tammy didn't get to hug our three grandchildren. They live in New York, you see, where George's wife Michaela works as a professor, so we see them at most twice a year. Tammy always feels stoked when they arrive, but lately, she looks tired by the time they leave.

About two years ago, Tammy's neurologist told us about the possibility of an implant for deep brain stimulation. Although the operation could be risky and there was a possibility of serious side-effects, the prospects for improvement were highly positive for her type of complaints. It took us two months to make our minds up, but we decided to continue the procedure. Leading up to the operation, Tammy was very anxious. Last Spring, she finally received the implant. She remained conscious the whole time, and I stayed with her. Revalidation was tough, but many of her symptoms improved over the Summer, and then Suzy went to Thailand.

It was shortly afterward that my Tammy got brain-hacked for the first time. It happened while George and his family visited us. Our grandson, Kyle, aspires to become a professional gamer. We love hearing about his life at school and his friends, but he spends most visits playing games on his tablet.

The last time was different: Kyle was surprisingly interested in how his granny was doing after the operation. He admired the two bumps on her head and stroked the short white hair that had already started growing back. But he was even keener to see the patient controller that came with Tammy's implant and the setup for recharging, which she must use every few days to keep the implanted battery full and her symptoms at bay.

We had a cosy family evening. George and Michaela helped Tammy with making chicken casserole and fried potatoes. That used to be George's favourite when he was little, so it was nice to see his children enjoy it, too. We all watched a talent show on TV afterwards.

The following morning, my Tammy could no longer walk in a straight line! She looked drunk and bumped into the walls and the furniture, especially those towards her left. I thought she had suffered a stroke, so we hurried her to the hospital. George had to drive us because I was too shaken. Fortunately, the doctor soon noticed that some settings of her implant were off. When we returned home, Kyle declared victory and said he would tell all his classmates how he had brain-hacked his granny. Tammy scolded him but she still couldn't hide her fondness for the rascal.

That was two years ago, and I'm sure Kyle knows better now, but I still remember our helplessness and Tammy's look of despair. Her implant has worked fine ever since, but the illness progressed. At our age, we don't need birthdays to remind us of the passing of time.

When Tammy opened my birthday gift, she looked pleased.

"You shouldn't have," she said, but she wanted to try it immediately.

"We may have to charge it first," I said.

When I put the toothbrush in the charger, it asked to connect to our Wi-Fi, so I installed it for her. After she had brushed her teeth, it rewarded her with a star. I helped her into her nightgown and kissed her goodnight.

Tammy was still asleep when I left for groceries in the morning. She didn't open the door immediately when I returned. That wasn't uncommon, as she had trouble getting up after being seated for a while. Or perhaps she didn't hear me over the droning dance music that seemed to be coming from our upstairs neighbours, even though it was quite early for a party. Just as I rang again, longer this time, our next-door neighbour passed me in the hall.

"It's been this loud for an hour now," he complained.

“That’s today’s youth for you,” I answered.

He raised an eyebrow and went inside.

Tammy looked bewildered and exhausted when she finally opened the door.

“Come on, Johnny, dance with me,” she exclaimed.

The hair on her neck was soaked with sweat, and the music boomed much louder now, straight from our living room. She took me by my wrist with a surprisingly firm grip and led me to her dance floor. She danced like no one was watching, like before we’d ever heard of Parkinson’s disease.

I escaped from her grip and immediately checked the patient controller of Tammy’s implant. The usual smiley indicated that everything was okay, but I clicked the button to show me the log. “Update received,” it said under today’s entry, but unlike the earlier updates in the list, the source’s IP address was the same as the receiver’s: it came from within our home. I walked to the bathroom as fast as I could. “Upload complete,” said the screen of the toothbrush.

Tammy’s rave-of-one was still unfolding in our living room as I desperately searched for the manual. I couldn’t find it, but I thought: “As long as Suzy doesn’t call us now, we will be fine.” That evening, the new toothbrush rewarded us with five stars.

ABOUT THE AUTHOR

Sylvia Wenmackers is a professor in philosophy of science at KU Leuven, Belgium. Most of her research is related to the foundations of chance. Besides academic papers, she writes a monthly column for a popular science magazine. She has published two nonfiction trade books, and her speculative fiction has appeared in *Nature Futures* and *Danse Macabre*.