

Aphasia Insights!

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“That is, while the perception an extended phantom continues to provide sensory feedback to the brain areas that previously represented the amputated limb, telescoped phantoms activate brain areas remote from the original limb representation. It is this latter cortical re-organization that is hypothesized to underlie the development of increased levels of phantom pain.” pp. 2.

“Pulling telescoped phantoms out of the stump”: Manipulating the perceived position of phantom limbs using a full-body illusion. **Schmalzl et al., 2011**

Stroke Educator, Inc. is committed to educating the wider public about stroke and the 50 state “*Aim High for Aphasia!*” Aphasia Awareness Campaign.

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Telescoping, phantom-limb, phantom-word and the process of cortical reorganization.

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A “phantom-limb” is the experience of a person who has lost a limb but still has the feeling of a limb that provides the same spatial location where the intact limb used to be. The sensation of the phantom-limb that retracts and (eventually) disappears into the stump is called telescoping and is the perceptual correlate of cortical reorganization.

People with a stump have discussed the phenomena of their phantom-limbs and have explained the sensation of the appearance of their phantom-limbs’ as it “telescopes” and recedes.

I have a story about my own experience with word-finding that is similar in its own way to telescoping. In its own way, I was able to “see” the words that were more like a phantom-limb; there but *not* there.

Word-finding was a big part of my aphasia therapy. I had been told by my SLP that word-finding and repetition was the sum total of my therapy.

I asked my SLP if there was more to it than just the simple word-finding quizzes and activities. I don’t know exactly what I had asked my SLP, but a semblance of what I had said appeared in my diary. I wanted to know more about the overarching context of my recovery.

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In its own way, I was able to “see” the words that were more like a phantom-limb; there but *not* there.”

My mental scene included a metaphor about trying to find a word that was on the other side of a river with a burning bridge between me and the word that I could see.

I traced the path of “word-

finding” words through a physical place in my mind. There were several words (buildings, skyscrapers, skyline, land, unites, etc.) that I knew I knew, but I could not conjure up those words in any modality. I couldn’t write them down nor could I say those words out loud.

I tried and tried. I took some pictures of those items (in signs and plaques) and showed the

pictures to my wife. She would say those words (and I knew those words from her mouth) but as I tried to express those words, they were somewhat “frozen.” I just couldn’t come up with them.

As I worked on “seeing” those words (that I could *see* in my mind but couldn’t *say*), I could “see” those words on the other side of the river. But there was always a burning bridge between me and the word I wanted to say. I could see it but I couldn’t get to it.

I starting “walking” (again, in my mind) to find a place where I could get *over* the river. I looked for other bridges or shallow places where I could walk across.

As I looked for a new way to get across the river, I kept looking back at the burning bridge. And every time I looked back, I got an impression that I was getting “closer” to the word I wanted.

If this experience had been filmed in my mind, this is what it would have looked like. I could tell that I was indeed getting closer.

And the day came, when I “looked back” and discovered that I had arrived at the other side of the river...and found that I could see *and* say that word out loud.

All the other words that I couldn’t find didn’t appear all at once either. Each word had its own river and its own burning bridge. But one by one, the *need* to pursue had evaporated. The effort and urgency were part of the need. Once the urgency had faded, so did the need.

After reading about the telescoping effect of people who had seen (and consciously perceived) that their phantom-limb had appeared (Flor et al., 1995; Schmalzl et al., 2011) and then started to retract, I began to think that I too had observed a similar “telescoping” event for word-finding.

It appears that people with aphasia are able to “consciously perceive” the effect of seeing various words on a day-to-day basis that still can’t be said, while the practice of “looking back” made the words appear less foggy and more distinct.

Being able to (mentally) see (and perceive) a qualitative physical (but still mental) change in the appearance of the words, was tantamount to plasticity in action which is, by definition, the perceptual correlate of cortical reorganization.

Practice is more than just *practice*. It is one thing to go through the motions. It is another to be *aware* that the practice once started, is the *prescription* for improvement if one only knows that the prescription *itself* (to look, to see, to think, to do and to act) *is* the medicine.

People with aphasia are able to “see” the activity of neurological improvement by observing the mental view (of a phantom-word) paired by the physical activity seen over time. People with aphasia get better when (and as) they realize that practice *really* is the cure.

References:

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Signed: *The Johnny Appleseed of Aphasia Awareness.*