Smoked Silver: How Schematic Patterns Affect Vocabulary

by Amanda McCracken

When I asked students in my introductory listen/speak class what the color of my coat was, I expected to hear "grey." Instead, one of them replied "smoke silver." *Really?* I thought to myself. These students barely knew their primary colors, but one of them knows "smoke silver"! I thought for a moment, and it came to me, "Aha—you like cars, right?" I asked him. A smile spread across his face. This student knew a great number of poetically blended colors based on his knowledge of and passion for cars. And so I escorted my five 18-year-old boys outside to apply colors to cars, a much needed reprieve after an hour in the classroom.

My expectations were blown away, but, more important, I was reminded how critical it is to teach students in familiar schematic patterns. We only recognize what those familiar schemas are when we pay attention to their answers and ask the right questions. I could quote and make reference to philosopher Kant, or psychologists Piaget or Bartlett, or educational psychologist R. C. Anderson (see this page on schema theory). However, we as teachers know and live these theories. We have to remind ourselves that the context in which we are introducing new vocabulary has to be made relevant for our students.

In fact, the need-to-remember component in the Involvement Load Hypothesis (Laufer & Hulstijn, 2001) is strongest when it is intrinsically motivated. In addition, by introducing and connecting vocabulary to a student's already familiar schema, we help build brain pathways that are more likely retraveled (more accessible based on expertise and experience).

Activities to Elicit Familiar Schema

Word Squares

Having students create "word squares" is a good way to increase students' personal connection to words (Cobb & Blachowicz, 2014). In one of the four squares, students write the word in the context in which they found it. In the second square, students write the definition. In the third square, students draw a picture (or some nonlinguistic representation) that to them represents that word. And finally, in the fourth square, students uses the word in a sentence that is personally important to them.

Self-Directed Learning

Teachers can increase student interest in learning vocabulary if students are given the authority to choose a few of the new words. In my experience, students actually choose harder words than those on a graded reader list—and they learn them. Students can also be asked to rank the vocabulary list in order of words most important to them. Asking students to discuss in groups why they chose their top words helps reinforce the meaning and relevance of the words (Jing & Jianbin, 2009).

Collocations Brainstorming

I also like to give students a new vocabulary word and have them, in groups, brainstorm collocations on a giant piece of paper (so it looks like a giant web). Let's imagine the word is *diligent*. In knowing the definition, this makes one student think of the word *discipline*, which makes another student in the same group draw a connection to the famous Barcelona soccer player, Lionel Messi, which in turn makes another student in the group draw a connection to the word *success*. The more personal connections they can make to the words, the more memorable the words become. Then we compare each group's web and cross out duplicate ideas. Whichever group has the most remaining unique collocations is the winner. I find that this sort of collocation brainstorming helps students in their writing, too, by increasing their awareness of the impact of word choice.

Connecting Senses

Can they think of a collocation associated with a personally familiar smell? When the sense of smell is triggered (perhaps even by word association) in the olfactory bulb, the nearby amygdala (where emotional memory is encoded) is triggered (Zald & Pardo, 1997). If smells trigger past emotions, then can't we posit that we remember images tied to emotion? And if we can do this, then we will remember the words associated with those images, too.



Figure 1. Paint swatch

Paint Swatch Sentences

One game I created (inspired by the "smoke silver" comment) uses paint swatches. Students choose a swatch and then are asked to use two or three of the color names in a sentence (but not as a color). This asks them to think beyond the literal meaning of the word(s) and to be creative. Associating a color with a new word makes it more memorable. Students then vote on whose sentence is the cleverest. For example, one student wrote (using the three colors from the swatch in Figure 1): "The Big Surf that flooded Beachside Drive reflected a Tahitian Sky."

TESOL Connections: August 2017

Word Retrieval and Episodic Memory

The significance of the "smoke silver" comment was reinforced that same week, when I visited a memory care center for residents with Alzheimer's and dementia to do massage. What do patients with memory loss and ESL students have in common? Word retrieval and the impact of experience on memory, specifically episodic memory.

I rarely talk to "Betty," one of the full-time residents who is not my massage client, though she has seen me in passing perhaps four times a month for the past couple of years. However, this particular day I greeted her and asked her how she was doing. "I'm fine, thanks," she replied, "Did you change your hair color?" I *had* just recently added red and blonde highlights. I was shocked; even close friends hadn't noticed. Cheryl, whose dementia stems from depression and not Alzheimer's, can't tell you when she last had a shower or where she lives, but she recognized

a change in my hair color. Apparently hair or color was part of a past schematic pattern that primed her to notice even a subtle difference in my hair color.

Knowing the past experiences (e.g., marriage, family, professions, war) of a person with dementia or Alzheimer's can be a schematic pattern through which they can be reached. Similarly, tapping into our students' interests is key to helping them remember and *retain* new vocabulary.

References

Cobb, C., & Blachowicz, C. (2014). No more "look up the list" vocabulary instruction. Portsmouth, NH: Heinemann.

Jing, L., & Jianbin, H. (2009). An empirical study of the involvement load hypothesis in incidental vocabulary acquisition in EFL listening. *Polyglossia*, 16, 1–11.

Laufer, B., & Hulstijn, J. H. (2001). Incidental vocabulary acquisition in a second language: The construct of task-induced involvement. *Applied Linguistics*, 22, 1–26.

Zald, D. H., & Pardo, J. V. (1997). Emotion, olfaction, and the human amygdala: Amygdala activation during aversive olfactory stimulation. *Proceedings of the National Academy of Sciences of the United States of America*, 94(8), 4119–4124.

Amanda McCracken is an instructor at the International English Center (IEC) at the University of Colorado. She is also the editor and founder of the ESLevations Journal at the IEC. McCracken's work has appeared in publications such as The New York Times, Runner's World, Huffington Post, Elle, and Al Jazeera. She is also a certified massage therapist.