

# THE DECLARATIVE METHOD: INFORMED BY RESEARCH

#### To speak a language, you have to know the words.

The long-held assumption about learning a second language is that grammar is more important than vocabulary. Second language instruction has traditionally focused on teaching grammatical knowledge: sentence construction, verb conjugations, singular and plural forms, noun-adjective agreements, verb tenses, etc. Linguistic research, however, has demonstrated that vocabulary is more fundamental than grammar (Barcroft, 2004; Lewis, 2002; Nation, 2001; Wilkins, 1972). Meaning is primarily conveyed through vocabulary. British linguist David Wilkins (1972) puts it this way: "While without grammar little can be conveyed, without vocabulary nothing can be conveyed" (p. 111).

Sometimes, just knowing a single word in a language can make all the difference. In his book *Vocabulary Myths*, Keith Folse (2004) tells a story about not knowing the right word. Having just moved to a rural town in Japan to teach English, Folse wanted to buy some flour. He'd learned the Japanese sentence pattern "*Sumimasen*, \_\_\_\_\_\_\_-wa doko desu ka?" or "Excuse me, where is the \_\_\_\_\_?" and confidently set out on his mission to the local supermarket. Yet, even with this basic grammar, he was lacking the most essential component: he did not know the Japanese word for flour. After wandering the store unable to locate any identifiable bags of flour, he spied one of his students outside. He ran outside and called out, "How do you say *flour* in Japanese?" Unfortunately, his student replied "*Hana*" – the word for flower, instead of *komugi*—the word for *flour*. After being presented with chrysanthemums in the produce section, Folse left the store without purchasing flour. He reflects: "What I needed in that situation was one word: *komugi*. In this experience, I learned that vocabulary is actually more important than grammar" (pp. 19-22).

### **Declarative and Procedural Learning**

Transparent Language emphasizes a "declarative first" approach to language learning. Our approach, the Declarative Method, is based on research about how the brain functions, and how best to take advantage of that when learning a new language.

Neuroscientists have found that the human brain has two memory systems: declarative and procedural. These two systems reside in different parts of the brain. The declarative system learns facts: words, phrases, history dates, capital cities, telephone numbers, etc. The procedural system learns skills (Ullman, 2005; 2006). The classic example of a procedurally learned skill is riding a bicycle. Acquiring declarative knowledge generally requires conscious effort and repeated exposure. Procedural skills, on the other hand, tend to be learned through *doing* or *practicing*.

For language learning, the brain relies on both memory systems. Vocabulary – in the form of individual words, longer phrases, and even short sentences – is learned and stored in the brain through the declarative memory system, as can be grammar rules as *facts*. The procedural memory system, on the other hand, internalizes the *skills* of applying grammar rules without thinking about them (Ullman, 2005; 2006). As far as the procedural memory system is concerned, grammar is a set of skills that we ordinarily learn implicitly – at least for our first language.

Nobody needs to instruct young children in the grammar rules of their native language before they can start speaking fluently. Children are quite adept at implicitly deducing grammar rules from repeated exposure to spoken language, even while making frequent grammatical errors when speaking, such as saying "goed" instead of "went" as the past tense form of "go" in English, because they've internalized the general grammatical rule without realizing that exceptions to the rule exist.

Forming inferences from exposure to repeated patterns, trying out these patterns when learning to speak, and constantly re-adjusting our inferences to account for exceptions and outright mistakes is how the procedural memory system learns grammar (Lee, 2004). This is a trial and error process, much like learning to ride a bicycle. The crucial difference from bicycle riding, however, is the need for *facts* – a reservoir of declarative items full of repeating patterns – in order to form inferences. Only with a sufficiently large declarative reservoir can we begin to detect patterns. The larger our declarative reservoir, the more patterns and exceptions to the patterns we can recall.

Research on second language acquisition has demonstrated that second language learners can also deduce grammar rules without necessarily being explicitly instructed in the grammar of that language (DeKeyser, 2007; Lee, 2004; VanPatten, 2003). The key for acquiring declarative and procedural knowledge of a language for both first and second language learners is sufficient exposure to the language.

## The larger your declarative reservoir, the better.

Sufficient, repeated, and meaningful exposure to a language creates a "declarative reservoir." We call words, phrases, short sentences, and other small chunks of language "declarative items," just so that we don't have to keep repeating "words, phrases, short sentences, and other small chunks of language." Declarative items are short enough to hold in your memory. The sum of all the declarative items you know in a language is your declarative reservoir.

One crucial constraint for language learning is the size of your declarative reservoir. A large declarative reservoir is an advantage when you are trying to communicate. Just like trying to purchase flour in Japan, if you don't know a certain word in a language, you will be unable to produce it when needed or understand it when you hear it. The more declarative items you have at your ready disposal, the more easily you will function in that language.

Beyond grammatical construction, a large declarative reservoir also enables fluency. Research has found that, in addition to individual words, the mental lexicon also consists of frequently re-occurring "chunks" of language – stock phrases, idioms, and common expressions – and that we all store a large number of these chunks in our declarative memory (Lee, 2004; Nation, 2001; Sinclair, 1991). These chunks are important building blocks in the development of language fluency, allowing us to reduce the processing time needed to produce fluent speech or writing. Rather than constantly referring to grammatical rules to express every idea anew, people tend to draw on pre-constructed chunks, stringing them together into longer sequences according to what chunks tend to go with what chunks (McCarthy, 1998; Nation, 2001; Pawley & Syder, 1983; Sinclair, 2004).

The tendency to rely on chunks explains the puzzle of why only a small portion of grammatically correct expressions sound native-like (Pawley & Syder, 1983; Nation, 2001). Both "Please pass the salt" and "I request that you hand me the salt shaker" are grammatically correct, but only the first expression sounds native-like because "please pass the \_\_\_" is a high-frequency chunk. One study of second language learners, before and after language immersion, found that memorization of these longer, frequently occurring sequences of words explained their increased fluency (Towell et al., 1996).

Based on all this research, the best strategy for any language learner would be to quickly memorize a large number of frequently-used words, stock phrases, and common expressions, and that's exactly what Transparent Language's declarative method enables you to do. The Transparent Language Online platform is specially designed to help learners quickly build a declarative reservoir in the target language — with perfect recall.

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