

## Global Community – A Plain Language Summary by Ryan Tannenbaum

### Building on what you know – How understandings of grammar, syntax, and morphology can transfer between languages

A plain language summary of *Awareness of derivation and compounding in Chinese-English biliteracy acquisition*

#### **What you need to know:**

Written Chinese uses a great deal of compounding to create new words. English and Chinese compounds share many similarities, and learners appear to use their understanding of Chinese compounds when reading English words.

Researchers suggest that ELLs will apply strategies from their native language when they are reading English. However, this is dependent on how applicable the strategy is to the new language. As a result, Chinese ELLs bring their knowledge of compounding to English, but not derivation.

#### **What is the research about?**

The researchers build on previous studies looking at how language learners will take certain skills from their native language and apply them to a new language (transfer).

Researchers looked at whether Chinese ELLs would transfer their understanding of how Chinese words can be combined (compounding) to how English words can be combined.

They considered two types of changes that are found in both English and Chinese, compounding and derivation.

Compounding – taking two separate words, and joining them together to make a new word – for example class + room -> classroom.

Derivation – Changing a word to change its grammatical function – such as tense or type – for example, enjoy -> enjoyed/enjoyment.

In Chinese, compounding is very common, and used frequently. However, derivational changes are not that frequent. While English uses compounding, the most common change that words undergo are derivational.

#### **What did the researchers do?**

The researchers worked with 245 grade six students from a Chinese public school. The students had been receiving four English lessons a week since grade three. They had received English instruction, but their English skill was still low.

The researchers looked at four different parts of the students' Chinese and English understandings – as well as their nonverbal intelligence.

*Derivational awareness* – Students were given word pairs, and were asked to identify which words were related. For example – *teach* and *teacher* vs. *man* and *many*.

*Compound awareness* – Students were asked a riddle and given possible answers. The students’ answers would then show their understanding of how words can be joined. For example – *Which is a better name for grass where a lot of bees like to hide: bee grass or grass bee?*

Students were also given groups of words, and asked to choose the one that didn’t belong (was not a compound). For example – *classroom, bedroom, mushroom.*

*Vocabulary knowledge* – Students were read a word and shown four pictures, they then had to choose the picture that best represented the word.

*Reading Comprehension* – Students were asked to read short English and Chinese stories, then answer some multiple-choice questions.

The researchers used this information to paint a picture of how different understandings contributed to the way subjects read a text. For example, students with high vocabulary might not need to understand *how* words change, because they already know the words.

### **What did the researchers find?**

Researchers came to three major findings:

- 1) Students who understood compounding in Chinese had higher levels of Chinese reading comprehension
- 2) The skills that native speakers use to read, must be developed in non-native speakers when learning the language. In English, understanding how compounds and derivations work helps students have better reading comprehension.
- 3) Students’ compound awareness in Chinese, helped them understand English compounds as well

The researchers suggest that skills can transfer from one language to another when there is some overlap between the two languages. In the case of compounds, both English and Chinese compounds are “right-led,” which means the word on the right tells us what it is, and the word on the left describes it. When the languages are different, like Spanish (which uses “left-led” compounds) and English, this transfer does not occur.

### **How can you use this research?**

Chinese ELLs are coming with deep understandings of how Chinese language works. By understanding how the two languages are similar, co-teachers can work to synchronize grammar lessons and highlight the similarities between the two languages. This will help to make the transfer more obvious.

Secondly, by understanding how two languages differ – such as English’s emphasis on derivations, we can identify understandings that will need additional focus to develop properly.

Chinese students may be comfortable with compounds, but these are not as common in English as they are in Chinese. Therefore, it is important to explicitly teach students about derivations, and provide a lot of practice so that they can improve their skills.

### **About the authors:**

Dongbo Zhang ([dongbo.zhang@nie.edu.sg](mailto:dongbo.zhang@nie.edu.sg)) is from the National Institute of Education at Nanyang Technological University in Singapore.

Keiko Koda is from the Modern Languages department at Carnegie Mellon University.

**Keywords:**

Morphology, compounding, derivations, English-Chinese transfer, reading comprehension

**Reference:**

Zhang, D., & Koda, K. (2014). Awareness of derivation and compounding in Chinese–English biliteracy acquisition. *International Journal of Bilingual Education and Bilingualism*, 17(1), 55-73