

2015-06

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Sabbaghan, S. "The Affordances of Variation Theory (New Phenomenography) in Enhancing EAL Students' Learning" (2015). In Preciado Babb, P., Takeuchi, M., & Lock, J. (Eds.). Proceedings of the IDEAS: Designing Responsive Pedagogy Conference, pp. 158-167. Calgary, Canada: Werklund School of Education, University of Calgary.

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# **THE AFFORDANCES OF VARIATION THEORY (NEW PHENOMENOGRAPHY) IN ENHANCING EAL STUDENTS' LEARNING**

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*Variation theory is relatively new perspective on learning and has not been comprehensively explored in the English as an additional language (EAL) context. Research in other educational fields has shown that lesson structures informed by variation theory have been able to enhance student learning. This paper is an attempt to demonstrate how lesson structures guided by variation theory can be applied to teaching vocabulary. An analysis of the lesson presented suggests that using variation theory in an EAL context provides affordances that increases the probably of student learning, and merits further investigation.*

Keywords: Variation theory; English language teaching; Teaching vocabulary

## **INTRODUCTION**

This paper is an attempt to demonstrate how *variation theory* (Marton & Booth, 1997) can indeed be a source of pedagogical principals that inform teaching vocabulary in an English as an additional language (EAL) context. The motivation behind exploring lesson structures informed by variation theory arises from my personal experience employing it in mathematics education, as well as research, which report successful learning in mathematics (Runesson, 2005; Watson &

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Mason, 2006), teaching writing in Chinese as a second language (Marton & Tsui, 2004), and teaching writing and grammar in ESL (Ling Lo, 2012). After a brief and limited description of variation theory, I present two lessons focusing on the verb “get,” one informed by the communicative approach, and the other, by variation theory. I provide an analysis of these lessons and show how the implementation of variation theory can structure learners’ awareness, which increase the probability of learning.

### **WHAT IS VARIATION THEORY?**

Variation theory is a perspective on learning and experience that explains how a learner might come to see, understand, or experience a phenomenon in a particular manner. Variation theory is rooted in phenomenography, which focuses on describing and discovering variation in the ways people experience a particular phenomenon. Variation theory, however, focuses on explaining why the variations in experience exist. The theory has pedagogical implications, which aim to enhance learning.

#### **What is learning?**

Because our brain has a limited capacity for processing information, when we experience a phenomenon, it is impossible to attend to every aspect of that phenomenon simultaneously. Consequently, some aspects of the phenomenon come into our focal awareness while other aspects fade into the background. Therefore, what we experience depends on which aspects of the phenomenon we can discern simultaneously. In other words, if two learners attend to different aspects of the same phenomenon, they will experience that phenomenon in different ways. However, if we help learners structure their awareness so that they are able to discern particular aspects of a phenomenon at the same time, the probability of learning increases.

Three key concepts underlie learning in variation theory: Discernment, variation, and simultaneity. According to variation theory, all three concepts are essential for learning. In order for learners to experience a phenomenon in the intended way, they would need to discern critical features. For example, a critical feature of the concept of a ripe tomato is the “redness” of the tomato. Therefore, teaching this concept involves learners experiencing variation in the dimensions of colour so as to discern redness. If learners are unable to discern redness while trying to understand the concept of a ripe tomato - perhaps because the pictures we show them are in black-and-white - we have not structured the learners’ awareness to experience the phenomenon of a ripe tomato in the intended way. It is important to point out, however, that discernment is not possible without variation. If everything in the world were red, the concept of redness would have no meaning because we would have nothing to compare to. We can understand red because we can compare to “blue”, “green”, and “yellow.” It is not enough, however, to simply tell the students what the critical aspects of a particular phenomenon are. Learning occurs when learners experienced a variation in the dimensions of the critical aspects – first individually, then collectively and simultaneously.

Everything has a multitude of features. Therefore, if we want learners to see an object in exactly the same way, then we must be able to focus their attention on the same features in the same order. These aspects of an object or a phenomenon which are necessary for a particular meaning to appear in learners’ awareness are known as *critical features*. In a learning environment, the teacher, or the resource usually selects critical features of whatever it is to be learned. Critical features cannot be selected without first identifying the *object of learning*. In variation theory, the object of learning is a “specific insight, scale or capability that the students are expected to develop” (Marton & Pang, 2010, p. 2).

## USING VARIATION THEORY IN TEACHING VOCABULARY

In this section, I will present two different types of lesson structures (Lesson A and Lesson B) focusing verb phrases with get as head. We will assume that this lesson is meant for intermediate EAL learners who have had prior exposure to the different usages of “get.” The structure of Lesson A is informed by the communicative approach, while Lesson B is inspired by variation theory. There are three objects of learning. The first object of learning is realization that the verb get has multiple meanings. The second object of learning is the understanding that combining get with a particle (preposition or adverb) constructs a phrasal verb. The third object of learning is that phrasal verbs (with get as head) with the same components have different meanings.

### Lesson A

The teacher begins the lesson by presenting a table (see Table 1) with two columns. The first column contains four sentences in which the head of the verb phrase is get. The synonyms/definitions of the verb phrases are written in the second column, but they do not correspond in sequence with the sentences in first column.

Examples	Synonyms
We usually <b>get</b> home around 5 in the afternoon.	Have a good relationship
She can <b>get round</b> the problem if she listens to me	Arrive
I don't <b>get on</b> well with my sister.	Become
Education <b>gets</b> more and more expensive every year.	Solve

Table 1: Examples for different uses of get.

The teacher then instructs her students to match synonyms/definitions of the second column to the sentences in the first column. Next, she randomly asked four students to read the answers so that

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everyone else can check theirs. She then explains that get can have different meanings such as arrive or become.

In the next section, the teacher provides her students with a set of questions (see Table 2) and asks them to mingle by walking around the class interviewing as many people as they can. After about 10 minutes, the teacher asks the students to get into pairs and write statements about the persons they interviewed using get. Finally, the teacher asked students to read some of their sentences. Everyone in the class gets a chance to contribute.

No.	Questions
1	Do you have a good relationship with your parents?
2	Who usually helps you solve your problems?
3	Do you usually arrive at work on time?
4	Are you worried about aging?

Table 2. Questions given to students in Lesson A.

The teacher then writes “get on,” and “get round” on the whiteboard and explains that get can combine with particles (prepositions or adverbs) to make phrasal verbs. Next, she writes “get through,” and “get over” on the whiteboard. She then explains that each phrasal verb can have three different meanings. She asks students to get into pairs and look up the different meanings using their dictionaries and then write their own sentences as examples for each of the phrases. When the task is complete, students share their answers.

## Lesson B

This lesson is divided into interrelated episodes, each focusing an object of learning described above. In Episode 1, the teachers remind the students that the verb, get, has multiple meanings. She

introduces two pairs of sentences one by one (see Table 3). Each pair is identical except for their verb phrase (VP). She reads the sentences slightly raising her voice when she reads the verbs. She then points to the verbs in bold and explains that get can mean, “arrive” or “become.”

Sequence	Sentence A	Sentence B
1	My dad <b>gets</b> home from work in the evening on Wednesdays.	My dad <b>arrives</b> home from work in the evening on Wednesdays
2	My dad <b>gets</b> tired from work in the evening on Wednesdays.	My dad <b>becomes</b> tired from work in the evening on Wednesday.

Table 3: Examples for two definitions of get.

In Episode 2, the teacher presents three sentences (see Table 4) the first two together then the third, again identical expect for verb phrases. The second sentence she presents is combination of get and a preposition. The teacher asks the students if they see any deference in verb structure between the first and second sentence. The students recognize the get + “on” structure in the second sentence. The teacher then reminds the student that verb + preposition is called a phrasal verb, and that ones with get as head are quite common. Next, she presents the third sentence, which has a verb-adverb combination. The teacher asks how the third sentence is different form the second sentence. The students recognize the verb + adverb structure. The teacher then prompts that this structure is a phrasal verb and phrasal verbs with get as head are also common.

Sequence	Sentence A
1	My dad can <b>get</b> annoyed with some people at work.
2	My dad can <b>get on</b> with some people at work.
3	My dad can <b>get round</b> some people, at work.

Table 4: Possible verb structures with the get.

In Episode 3, the teacher presents two sequences of sentences (see Table 5). Sentence A in Sequences 1 and 2 uses the same phrasal verbs (get on), but does not have identical verb phrases. Sentences B in Sequences 1 and 2, are identical except that they have two different verb phrases that reflect the different definitions of get on. The teacher asks the students to read the sentences, then points out that the same prepositions paired with get can have have different meanings. She then explains definitions of “get on”.

Sequence	Sentence A	Sentence B
1	We often don't <b>get on</b> at work because of his need to interrupt people.	We often don't <b>have a good relationship</b> at work because of his need to interrupt people.
2	We often can't <b>get on</b> working because of his need to interrupt people.	We often can't <b>continue</b> working because of his need to interrupt people.

Table 5. Examples of get on with different definitions.

In Episode 4, the teacher then presents two other sequences. Sentence A in Sequences 1 and 2 have adverbial phrasal verbs. Sentence B in Sequence 1 and 2 have different verbal phrases to reflect the different meanings of the phrasal verbs. Following the same procedure as before, she explains that not only phrasal verbs containing get and an adverb can have different meanings, but phrasal verbs with the same head and particle (e.g. get round) can also have multiple meanings. Table 6 displays the pair of sentences she uses for this sequence.

Sequence	Sentence A	Sentence B
1	She can <b>get round</b> him with the right attitude.	She can <b>persuade</b> him with the right attitude.
2	She can <b>get round</b> the problem with	She can <b>solve</b> the problem with the right



the right attitude.

attitude.

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Table 6. Examples of get round with different definitions.

In Episode 5, the teacher provides the students a set of questions (See Table 7), and asked them to complete two small tasks. First they are to get into pairs and identify the meanings of the verbs or phrasal verbs in the questions. Second, they are to mingle with other students with the aim of interviewing as many students as they can with the questions provided.

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No.	Questions
1	Do you get on well with you parents/children?
2	What time do you usually get home from work/school?
3	How do you get round the traffic problem?

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Table 7: Question given the students in Lesson B.

In Episode 6, the teacher asks students to report on their interview by making statements about their interviewees using the verb get. For the next task, the teacher informs her students that “get through” and “get on” each have at least two other meanings. The students are to find other meanings for the phrasal verbs (by using their dictionaries) and create question similar to the ones in the previous task.

Finally in Episode 7, the teacher asks two student volunteers to write their questions for the different meanings of the phrasal verbs (get through and get on) on the board. Next, she asks them to read the questions and explain the different meanings of the phrasal verbs. Finally, she asks for volunteers to reconstruct the questions on the board by using an expression that carries the meaning of the phrasal verb.

## ANALYSIS OF THE LESSONS

Using patterns of variation is a useful tool that improves the possibility of achieving the object of learning. According to variation theory, whether the object of learning is achieved hinge on whether the students experience the pattern of variation, which allow for discernment of the critical features. Both lessons described above were structured considering the three objects of learning. Moreover, communicative (i.e. interviews) and skilled-based activities (i.e. using the dictionary to find multiple definitions) were part of both lesson structures. However, in Lesson A, the teacher directly told the students what the critical features were. In Lesson B, the students were given the opportunity to discerned the critical features, by being presented with two identical sentences (Episodes 1-4) expect for the verb phrase. These patterns of variation (see Table 8, note that NP is an acronym for noun phrase and PP is an acronym of prepositional phrase) structure the students' attention on what is varied, which, according to variation theory, increases the probability of discernment of the critical features. Episodes 5 to 7 allow students to experience simultaneity of the critical features.

	Invariant	Varied	Critical feature to be discerned
Episode 1	NP, PP,	VP	The verb get has multiple meanings.
Episode 2	NP, PP	VP	Get + preposition is a phrasal verb
	NP, PP	VP	Get + adverb is a phrasal verb
Episode 3	NP, PP,	VP	Get + same preposition has multiple meanings
Episode 4	NP, PP,	VP	Get + same adverb has multiple meanings

Table 8: Patterns of variation in Lesson B.

## CONCLUSION

Applying variation theory is a good example of responsive pedagogy, as it affords flexibility in patterns of variation to address students' misunderstandings. That said, although variation theory

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offers exciting prospects in the field English language teaching, it is not presented here as a panacea for all teaching contexts. Variation theory is a new perspective and the lesson described above has not been implemented in a real context. Therefore, it is difficult to discuss its possible advantages and shortcomings. However, structuring a lesson so as to encourage teachers and students to identify the critical features of an object of learning through comparison with existing frameworks of knowledge and understanding is, in my opinion, worthy of further exploration.

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