The application of word meaning expansion for teaching vocabulary

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The following essay is a condensed summary of a completed thesis for achieving a degree of Master's of Art in Teaching English as a Foreign Language.

If we imagine language as a living entity framed and supported by structure/grammar and fleshed with words, this organism requires both to function. It is impossible to learn a language without vocabulary. There exists at least 500,000 words in English, while the average native speaker only knows about 30,000 words receptively and 3000 words productively (Allen, 1983). Teaching every last word to English language learners is out of the question. Still, a more sustainable and feasible approach to helping students develop their vocabulary repertoire is by teaching them techniques of self-learning.

This mindset has led to the formation of several vocabulary techniques based on semantics phenomena such as word formation, synonyms, associated meanings, antonyms, etc. However, among these phenomena exists polysemy, a case that has almost been neglected for developing vocabulary repertoires.

All semantic theories must define the nature of meanings and their relationships, including the ambiguity phenomenon that can arise in a sentence for several reasons. According to Falk (1978), Fromkin and Rodman (1998), and Lyons (1979), ambiguity can occur through homonyms, polysemes, or ambiguous syntactic structures.

Reviewing the history of semantics reveals that with regard to polysemy and the relationship between the meanings of a polysemous word, unfortunately, almost all semantic theories, either traditional or cognitive theories, have failed in presenting an operational explanation.

Nonetheless, there has been an exception; metaphorical-cognitive semantics based on metaphorical structure has been successful in defining polysemy systematically. According to this theory, Lackoff and

Johnson (1980) argue that the way we think is metaphorical, and hence language operates metaphorically most of the time. Humans think and talk metaphorically with metaphors being a norm of communication, not an exception (not only for literary purposes). Accordingly, meaning is based on the relationship between the world and the human metaphorical perception or understanding of the world. Thus, it seems that a great number of mappings of the form to multiple meanings, such as polysemy, are due to metaphorical usage that is no longer consciously metaphorical. This mapping is structured on our understanding of more abstract domains in terms of our understanding of more concrete domains. That is to say, more abstract domains of meaning tend to derive their vocabulary from more concrete domains rather than vice versa (Levinson, 1995; Sweetser,1993; and Lakoff, 1987). Therefore, it is possible to define polysemy systematically in this way; a polysemy is a single form that conveys a group of senses related metaphorically and sequenced from concrete to more abstract meanings.

It is evident that almost always, whether theory-based or not, polysemous words have been taught discretely to learners (Hatch & Brown, 1995). This discrete approach, on the one hand, leads to learning a set of separate words with the same form by students while they do not know the relationship of these words. On the other hand, it may lead to the learning of only some of the possible meanings of a single form and not all the meanings as a related set. As Allen (1983) implies, employing the traditional discrete approach may seem reasonable and acceptable at the elementary and pre-intermediate levels where students need to learn a limited number of words that are more concrete than abstract. However, it does not help the students at higher levels—intermediate to advanced—where the students need to increase their vocabulary knowledge, specifically abstract vocabulary knowledge, through the use of the words that they have already acquired.

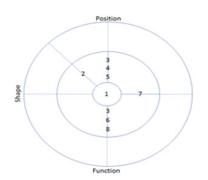
To be more precise, there are three major reasons why such a technique is essential. The first is due to the fact that most English words are polysemous (McCarthy & O'Dell, 1995). The second is due to vocabulary improvement, and as Allen (1983) mentions, one way of such can be making the students learn new meanings for already known words. The third is the lack of a technique for teaching polysemous words to the learners (Hatch & Brown, 1995).

This study with a focus on polysemy as a semantic phenomenon defined by metaphorical-cognitive theory proposes a technique—Word Meaning Expansion Technique—for improving the vocabulary knowledge of students. The Word Meaning Expansion Technique called the "Ripple Effect" by Fengying (1996) is a technique that through diagramming (ripple diagram), it illustrates the metaphorical expansion and relationship of the meanings of a polyseme. As suggested by Fengying (1996), this technique might be appropriate for teaching all polysemous words. However, for this particular study, its efficacy was tested for polysemous nouns.

The polysemous nouns with concrete core meanings (entities that exist in the physical real world like objects, body organs, etc.) were employed. This type of polysemous noun was chosen as most students have no difficulty with these core meanings. As Hatch and Brown (1995) state, the core nouns are the easiest and first words learned at the beginner levels. Therefore, in the treatment period of this study, the students and teacher can focus entirely on the more peripheral and abstract meaning expansions of these nouns in which they may have more difficulty (as they most likely do not know these meanings). Furthermore, such core-like polysemous nouns could confirm how weak the upper language learners are at the peripheral and abstract meaning expansion of even such simple polysemes.

For this study, the diagrams for these polysemous nouns were created based on the metaphorical expansion of the meanings from the core to peripheral and abstract domains. Each diagram illustrates not only the meaning expansion of the word but also the metaphorical link of concrete to more abstract senses. The central circle represents the physical entity in the material world. Mimicking a ripple, this further extends to other physical entities which resemble the core meaning or observable entities which denote an event, process, or state (more peripheral and abstract meanings). Thus, all of the meanings radiate and correlate from the center to the outermost layer along several lines by focusing on different features of the original entity.

As an example, in the diagram for *foot*, the central circle of the diagram shows the core meaning of foot—the lower end of the leg. In the next layer, the foot refers to other entities that share common features such as position, function, or shape with a foot. For example, in this layer, based on the function, the foot also refers to the state of walking, pace, and step. The function of the foot is not only holding the weight of the body as the lowest part of the leg but also walking which is considered a peripheral function (as a state). However, there is another peripheral meaning in the second layer closer to the line of the third layer (more abstract and different from others): *foot* as an infantry soldier. Based on the second function and also the position of the foot, a foot (soldier) is a person who served within the army that were too low in rank for membership in the cavalry. They also walked or learned to walk all the time. In other words, the foot can also refer to a person (refer to diagram 1).



foot 1. part forming the lower end of the leg. Beginning at the ankle, on which the body stands and moves: he rose to his feet, stood up. A dog's feet are called paws. 2. the part of a stocking, sock, etc. covering the foot.

the toot.

3. any partsimilar in position or function: foot of a sewing machine. 4. lower end of a bed or grave.

5. lowest part; bottom: at the foot of the page ladder wall mountain. 6. step, pace, tread light swift fleet of feet. stepping or walking lightly, swiftly, etc. 7. measure of length=12 inches: George is very tall, he is six feet two. (six feet two inches)

The research question of whether the Word Meaning Expansion Technique has any impact on learning polysemous nouns by Iranian EFL learners (at intermediate to advanced levels) was raised.

To conduct the research, two intact groups of Iranian EFL students as control and experimental groups were selected. The experimental group was instructed by the word meaning expansion technique and the students in the control group were instructed by the common traditional approach. A standardized test was applied to test the two groups before and after the treatment. A simple factorial design was established. To analyze the data, a two way analysis of variance (Two way ANOVA) was employed in order to determine the probable significant differences between groups, tests (instructions), and groups by tests together. Sceffe's tests were conducted to specify the exact location of the meaningful differences.

The results of the study proved that the word meaning expansion technique could be more effective for learning, for at least the core-like polysemous nouns. The result demonstrates that by searching and finding the metaphorical relationship between the meanings of a polysemous noun and using them in examples, students create a systematic net of related senses in their minds which helps them learn and remember the meanings more easily.

This study can have pedagogical implications for English learners, English teachers, and lexicographers. Since a great deal of the English vocabulary consists of polysemous words, this visual systematic technique receives utmost importance. Through diagramming the senses of polysemous nouns from core to more abstract ones and establishing a metaphorical relation between the senses, this method cannot only help intermediate to advanced students learn the polysemous nouns systematically but improve their vocabulary knowledge faster. Moreover, as the actual associations are culture-specific, by linking the meanings of a word through diagramming, the students are led to get familiar with the culture of the target language and the way that native speakers perceive the world.

Considering the limited time of classes which constraints the teacher from teaching all relative words, using this technique gives a powerful strategy to the students for learning and recalling the polysemous nouns by themselves. This way, their scope of vocabulary will increase, while they become more teacher-independent.

Lexicographers can also benefit from the Meaning Expansion Technique. In diagrams, the spokes in empty areas can indicate the possible different meaning expansion routes. Therefore, lexicographers may become aware of the future expansion and changes in the meanings of the words.

Although this study was focused on the word meaning expansion technique for teaching polysemous nouns, further research can be carried out on the application of this technique in teaching polysemous verbs, adjectives, prepositions, or modal verbs. It is also possible to investigate the effect of this technique on

other foreign language learners and even on ESL students. And finally, regarding the fact that metaphorical thinking and language use are universal, but the actual associations are culture-specific, contrastive research using a word meaning expansion technique can be conducted. The research can compare and contrast the metaphorical relationship that speakers of different languages set according to their different cultures. In this way, the probable problematic areas that two EFL learners of two different linguistic backgrounds learning the same foreign or second language (e.g., English) may have in learning polysemous words can be predicted.

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Masoumeh Gooya holds an MA in Applied Linguistics—Teaching English Language. She has taught EFL and ESL to students of varying ages and levels for over 15 years in Iran, Canada, and the USA. Her primary focus has been teaching English for General and Specific Academic Purposes and English Proficiency Tests (e.g., IELTS and TOEFL) preparation. Currently working, she is also an Interest Student at Queen's University with the goal of continuing her passion and education in Applied Linguistics in a PhD program.