

Semantic Network for Vocabulary Teaching¹

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Vocabulary instruction concentrates on teaching strategies with which students will eventually become independent readers and interested in words (Nagy and Herman, 1984 and 1987). It is, however, unclear what learning strategies that students should learn and which aspect of word knowledge that students should explore. This paper proposes that text for vocabulary learning provide context from which students can judge the definitions of the new words, and that they explore semantic fields of new words. An independent reader has many skills two of which are to learn definitions of new words with contextual information (Jenkins and Dixon, 1983; Stahl, 1985 and 1986) and to establish relationships between new words and familiar ones (Irvin, 1990; Maiguashca, 1984; Martin, 1984; Ramsey, 1981; Trimino, 1993; Weatherford, 1990). When learning new words with the two mentioned skills in mind, students not only concentrate on learning word meanings but also focus on strategies for exploring word relationships.

Keywords: English as a second/foreign language vocabulary teaching and learning

Introduction

When our students leave the classroom, either in an ESL or an EFL environment, we hope that they can apply what they have learned to daily life. It is also hoped that our students can solve their language problems on their own; for example, they are able to elaborate their points when others require more information from them, or they can understand others' points with limited clues. Our students eventually need to become independent learners.

In terms of independently learning vocabulary, Nagy and Herman (1984 and 1987) maintain that students learn word meanings from context, and language teachers' task is to teach students how to infer word meanings from context. It is clear that the success in guessing word meanings from context encourages students to practice reading more text. It is unclear, however, what strategies students should learn so that they can become independent

readers and find interest in learning vocabulary. Furthermore, it also needs to be clarified which aspect of word knowledge students should pay more attention to.

This paper proposes that reading text for vocabulary learning provide context from which students can choose most appropriate definitions of unknown words. It further suggests that students explore semantically related words of the newly learned in order to have longer retention. In the following discussion of building semantic network, this paper first shows linguistic evidence from research in lexical structure and that in the mental lexicon; it then discusses what language teachers can do according to research in both lexical semantics and the mental lexicon; and, finally, it gives a sample paragraph to demonstrate the aforementioned points.

Organization of the Lexicon

While semanticists examine the lexical structure (Leech, 1974; Lehrer, 1974), psycholinguists explore the organizations of the mental lexicon (Aitchison, 1987). Researchers in both disciplines agree that words in the minds are organized and their relationships are established on the bases of the features of each words. The following discussions address the analysis of the lexicon, the organization of the mental lexicon, the implementation of the lexicon, and their implications to teaching.

Componential Analysis

According to componential analysis, each word meaning or semantic unit is decomposed into primitive semantic features. It is the semantic features that word meanings are contrasted and compared; moreover, it is based on the semantic features that semantically related words are grouped and semantic fields are formed. Semantic fields not only show that a certain group of words are related in meaning but also show how they are related, in the relationships of hypernymy, hyponymy, coordination, for instance. While the relationships between words are exhibited in componential analysis, semantic fields determine particular relationships which exist among related words.

In the following examples, each of the verbs, *jump*, *run* and *walk*, can be decomposed into two components: *move* as the common verb shared by the three verbs and a phrase as a distinguishing feature, shown below in Table 1.

Table 1 Definitions of *jump*, *run* and *walk*

Verb	Definition
jump	move off the ground
run	move fast on foot
walk	move along on foot

The common verb, *move*, found in the definitions is called the hypernym, upon which the relationships among the three verbs are established. It is the distinctive phrase attached to the hypernym that con-

trasts each meaning from that of other verbs.

Based on the above analysis, the relationships among the verbs are found: *move* is the hypernym of the three verbs while the three verbs are the hyponyms of *move*; and, because the three verbs share the same hypernym, they are coordinate terms to each other. Hence, the three verbs and their hypernym, *move*, form a semantic field of *move*, shown below in Table 2.

More verbs which share *move* as the hypernym in their definitions, such as *drive*, *fly*, *ride*, and *travel*, can be added to the semantic field presented above and make it a larger semantic field.

Table 2 Semantic Field of *move*

move		
jump	run	walk

The Mental Lexicon

Similar to lexical semanticists, psycholinguists are interested in how words are organized in human minds. Elicitation of words in experiments gives psycholinguists reasons to form theories of the mental lexicon. In the atomic globule theory (Aitchison, 1987), each word in our minds is composed of semantic primitives which are shared in all languages and which are used to explain how words are related. The verb *move*, for example, can be analyzed as a semantic unit which contains at least three smaller atoms or senses, each of which forms its distinctive semantic field, shown below in Figure 1.

The cob-web theory (Aitchison, 1987), also called the network theory, states that each word meaning in our minds is a unit which connects to semantically related ones, and the word web or the semantic network is formed by the associations of each unit. For example, the verb *walk*, to move along on foot, in a person's lexicon can have the

following associations shown in Figure 2.

Figure 1 Atomic Globule Theory-*move* as an example

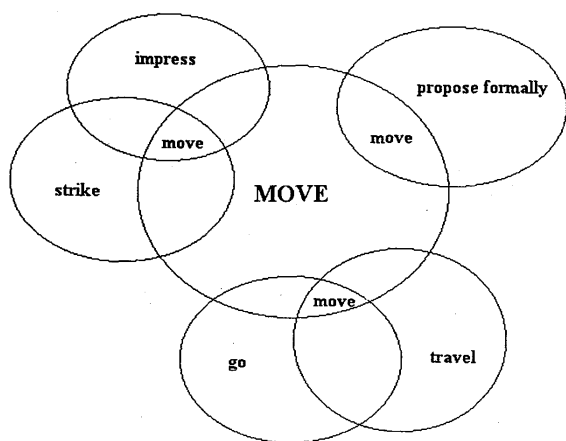
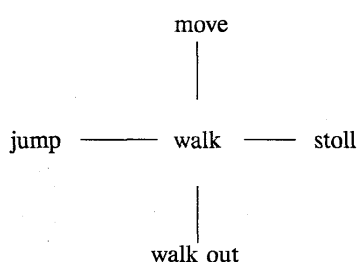


Figure 2 Cob-web Theory-*walk* as an example



Four lexical relationships are found in Figure 2 of cob-web theory. They are hypernymy found between *walk* and *move*, hyponymy between *walk* and *stroll*, coordination between *walk* and *jump*, and phrasal usage of *walk* as in *walk out*. In the above examples of the mental lexicon, words related to *move* or *walk*, for instance, do not have to match what lexicographers compile and what lexical semanticists discuss in a dictionary or a thesaurus. The main reason is that individual variation is likely to exist in each person's lexicon no matter which theory is applied to. Although the atomic globule theory and the cob-web theory hold different ex-

planations of how the mental lexicon is structured, they both agree that the mental lexicon is well-constructed.

From the discussion in lexical semantics and the mental lexicon, it is understood that lexical structure exists among words and can be found in the mental lexicon. Whether a new word can or not become a lexical member in our minds strongly depends upon its connections with words that have already existed in the lexicon. The more connections a new word establishes, the longer retention it will have and the more likely it will become a member of the lexicon. When vocabulary learning is concerned, students are suggested to focus their efforts on connecting the unknown, new words to familiar ones.

WordNet

WordNet (version 1.5, 1997) is the English lexicon compiled into a computer format by a group of linguists, psycholinguists, and computer experts at Princeton University. As claimed by the group's leader Miller and other members in the project (1990), WordNet is built on the basis of psycholinguistic reality of the mental lexicon of a native speaker. The network theory of the mental lexicon (Aitchison, 1987) maintains that the storage and retrieval of words in our minds, strongly depends upon those which are semantically close and related. Furthermore, the related words tend to belong to the same word class or syntactic category, that is, nouns are grouped together with nouns, adjectives with adjectives, and verbs with verbs. Based on lexical memory and synonymic substitutability, WordNet is an attempt to capture the mental lexicon of English native speakers in a full range.

Because of synonymic substitutability, the major difference between WordNet and a conventional dictionary is that WordNet divides the lexicon according to word classes or syntactic categories. Each class has its distinctive relation to form its network in the lexicon. The relations are nominal hierarchy, adjectival opposition, and verbal entailment (Miller, 1990; Gross and Miller, 1990; Fellbaum, 1990). The following sections discuss individual characteristics of each word class.

Nouns

A nominal hierarchy is formed by a superordinate term on the top and hyponyms on lower levels. Lexicographers, understanding that nouns form such hierarchies, use a superordinate term as a base and some other features to distinguish its hyponyms. Each hyponym inherits all the features in the superordinate term and distinguishes its coordinate terms with its unique features. That hyponyms inherit features of the superordinate terms is called lexical inheritance system, and those features that differentiate among coordinate terms are distinguishing features. Presented earlier in Componential Analysis (2.1), examples of nominal hierarchy have been discussed and shown in Table 2: Semantic Field of *move*, and will not be repeated in this section.

Adjectives

The adjectival networks in WordNet are formed by antonyms (Gross and Miller, 1990). The antonymic relations are further subdivided into two categories: direct antonyms and indirect antonyms. Direct antonyms are adjectives that are considered a pair of antonyms by native speakers; and indirect antonyms are adjectives that are semantically opposite but are not accepted by native speakers as antonyms. For example, *wet* and *dry* are direct antonyms. But, *moist* and *dry* are indirect antonyms because *moist* is related to *wet* instead of being a

direct antonym of *dry*. The bipolar opposition between the pair of direct antonyms *wet* and *dry*, and their indirect antonyms, are shown below in Figure 3.

The presentation of the synonymic and antonymic relations of *wet* and *dry* in WordNet are shown below in Table 3.

Table 3 Some synonyms of *wet* and *dry*

wet (vs. dry)	dry (vs. wet)
⇒damp	⇒arid
⇒humid	⇒anhydrous
⇒moist	⇒dried-up
⇒soggy	⇒parched
⇒watery	⇒sere

Direct antonyms in WordNet are indicated by "vs." in parentheses, such as the first line in Table 2. Indirect antonyms are derived from hypernyms of an adjective (*dry*) to its antonym (*wet*). In order to show, for instance, that *moist* is an indirect antonym of *dry*, WordNet uses the hyponymic structure found in adjective *wet*. Each hyponym of *wet* is an indirect antonym of *dry* and vice versa.

Verbs

English verbs form a semantic network of their own, and their main semantic relationship is lexical entailment (Fellbaum, 1990). The entailment system is first divided by whether the entailed and the entailing verbs have temporal inclusion. Under the category of temporal inclusion, verbs are further classified by whether the entailed verb is a manner of the entailing verb, troponymy (Fellbaum, 1990). The group of non-temporal inclusion is further divided into presupposition and causative verbs. The four verb relations are shown below in Figure 4 with examples immediately below each category.

In the examples of Figure 2, *limp* and *snore* entail someone is *walking* and *sleeping*, respectively. They are categorized under temporal inclusion. While *limp* is a manner and a troponym of *walk*, *snore* is temporally included in *sleep* by the test of: when someone is *snoring*, someone is *sleeping*. Word pairs classified under non-temporal inclusion are

Figure 3 Bipolar adjective structure between *wet* and *dry* (Reprinted from Gross and Miller, 1990, p. 268)

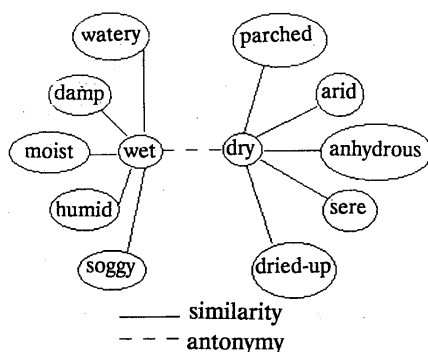
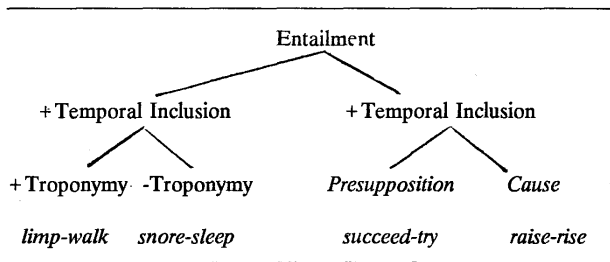


Figure 4 Four entailment relations in WordNet (Reprinted from Fellbaum, 1990, p. 292)



because they are irrelevant to time reference. *Succeed* implies that someone has *tried*, and *raise* causes something to *rise*. These lexical entailments are shown by the synonyms and superordinate hypernyms or superordinate terms in WordNet. The presentation of *limp* as a verb, for example, is shown below.

Table 4 Synonyms/Hypernyms of Verb *limp*

limp, hobble
⇒ walk, go on foot, leg it, hoof, hoof it
⇒ travel, go, move, change location, locomote, betake oneself-(displace oneself)

Under the category of synonyms and hypernyms, the verb *limp* has one synonym, *hobble*. Its immediate hypernyms are preceded by *walk*, of which immediate hypernyms are preceded by *travel*.

Words in different word classes or syntactic categories form their own structures. The main semantic relationships found in word classes are hierarchical structures in nouns, bipolar opposition in adjectives, and lexical entailment in verbs. WordNet presents them by using synonymic and hyponymic relationships.

Implications

Vocabulary instruction needs to show how related words are organized so that students understand how to distinguish the words which belong to the same semantic field. A thesaurus is necessary for students to acquire a new word with its related ones, and students can establish their semantic network. When presenting the meanings of each vocabulary item, a teacher can use the componential analyses to distinguish word meanings so that students not only know that some words are related but also understand their differences, and the differences between related words can be presented in their definitions.

When vocabulary instruction is concerned, semantic fields allow teachers to arrange the learning order of the target vocabulary according to their structure obtained from the analyses. For example, a hypernym of high frequency such as *walk* can be learned before *stride* and *tiptoe* because *walk* is used to explain *stride* as in "to walk in a fast pace" and *tiptoe* as in "to walk on one's toes." Furthermore, a semantic field shows students how a target word is related to others. By using the componential analyses, students should know how a target word is differentiated from others in a semantic field; thus, they have better chances to know how to use the target word in a proper situation.

Though the mental lexicon is not as neatly systematic as the models described in the analyses of lexical semantics, its organizations support the view that words in the minds are organized, may it be an atomic fashion or in a web-like model. Each word is related in our minds in some way. That a word is learned means that a word enters the mental lexicon and that it has established its connections among related words. The more connections that a word makes to other words, the longer retention it has in the mental lexicon. Vocabulary teaching and learning, then, should follow the findings in the mental lexicon, making associations among the target vocabulary.

Definition, Context and Semantic Fields

Having discussed how semanticists and psy-

chologists investigate the lexical structure, we now

turn to a practical view of implementing linguistic analyses and psycholinguistic findings in teaching vocabulary. Earlier or traditional vocabulary teaching strongly focused on students' recognition of words in the target language and on finding an equivalent of students' native languages. Prompt response to a target words in ones' own language is considered important. After lexical semantics had drawn attention of linguists around mid-seventies (Leech 1974 and Lehrer, 1974), emphases on vocabulary in foreign language learning started to emerge and vocabulary teaching was specifically discussed (Anthony, 1975; Brown, 1974; Channell, 1981; Harvey, 1983; Jenkins and Dixon, 1983; Judd, 1978; Meara, 1980; Nilsen, 1976; Ott, Blake and Butler, 1976). The following discussions address teaching vocabulary in terms of definition, context, and semantic fields.

Definition

The major concern in vocabulary learning is to establish connections between a new word and those previously learned ones. The connections between a new word and the previously learned ones are made by word meanings. Learning word meanings is the first task as well as the commonest method for our students. Though there are objections to learning words in isolation (Nagy and Herman, 1987), learning new words from definitions has been dominant in vocabulary teaching. The main task for students is to contrast the meanings of a target word with other words.

In second or foreign language learning, an equivalent in learners' native languages of a target word is often provided either by teachers or by textbooks. Equivalents are especially necessary for beginners of a second or foreign language. Because beginning learners have little knowledge about the target language, the establishment of their vocabulary knowledge needs to depend on what has been learned, which is the lexical knowledge of their first language. The explanations of a target word for beginners require a great deal of instructional details, in particular, when cultural differences are involved. In this case, the use of equivalents should be guided and needs detailed explanations to prevent students from misunderstanding and misusing the target words.

Exercises that require students to look for definitions of a target word help them build its semantic network. Students who need practices in word definitions are often asked to find synonyms, antonyms, or phrases to explain a target word which occurs in reading text or a word which is selected from a word list. The task of explaining a target word could start with asking students to use their own words, which is crucial to learning meanings or definitions of a word. Using their own words, students can test their own understanding of a new word; thus, the connections between the new word and those that they have learned are made. Giving explanations to a new word should be followed by giving correct answers either from teachers or from resources. This type of definition exercise, however, might be difficult and burdensome for non-native beginning learners because of their limited vocabulary knowledge. It is most used in intermediate to advanced learners' classes. Once students are introduced to and enjoy the strategy of learning definitions of a new word, their word power increases (Anthony, 1975; Nilsen, 1976; Ott, Blake and Butler, 1976).

Definition and Context

Searching for a definition of a new word creates opportunities for the interaction between words. Context, on the other hand, has abundant information related to target words, and the information is woven among word meanings. In other words, when there is enough information embedded in context, students are able to figure out what the unknown words mean (Nagy and Herman, 1987; Nagy, Herman and Anderson, 1985). From the understanding of definitions of a new word, students then decide and select an appropriate one which matches the context where the new word exists. The advantage of learning vocabulary from context is that words which interact with other words across syntactic categories enlarge students' semantic network and increase students' vocabulary size.

Inferring word meanings from context results from students' recognition of embedded, given clues (Nattinger, 1988). Contextual clues, in terms of vocabulary learning, can be a title, an abstract, an outline, a table of contents or topic sentences which provide information about what students will

read. Furthermore, guessing meanings from context can be guided by grammatical structure in which word meanings are given and woven. In addition to lexical information, contextual clues can be drawn from discourse, the importance of which is that our students should understand written text is not a collection of loose or irrelevant sentences. There are topics and meanings underlying each sentence. Paying close attention to interaction between words in text helps understand those words that are new or unfamiliar to our students.

Though context provides an environment for training strategic readers, learning word meanings from context has its obvious shortcomings. The major drawback in learning new words from context is that students might misunderstand word meanings from the context, especially when there is insufficient information in text. Another problem is that learning new words from context is probably best for advanced learners but not beginners. Non-strategic or poorly-skilled students, most likely to be found in the beginning stage, tend to miss clues provided in the context. In this case, asking beginning students to guess meanings from context is inefficient in learning word meanings. Before students have gained some grammatical and lexical knowledge which are necessary for inferring word meanings, learning new words from context is not recommended.

Definitions and Semantic Fields

Definitions of a target word give direct expla-

A Sample Paragraph

In this section, a sample paragraph will be used to discuss how definition, context and semantic fields play crucial roles in students' exploration of word relationships. Though the text prepared by the author is written for the purpose of discussion, readers can apply the method to teach other text of their own choices.

The target words for discussion in the above paragraph are *flounder*, *march* and *stroll* which are related to the actions of moving and walking. Definitions from *Oxford Advanced Learner's Dictionary* (OALD, 1990) of the target words are listed below.

nations within which semantically related words to the target word could occur as synonyms, antonyms, hyponyms, or hypernyms, for example. The semantically related words prepare students for exploring the relationships between a new word and other words of similar meaning (Channell, 1981; Hague, 1987; Harvey, 1983; Stieglitz, 1983). Knowing and realizing the distinguishing differences between words leads to correct usage of words, which demonstrates a part of learners' verbal skills. Students, learning definitions alone, might not concentrate on words' relationships which are the major elements to form semantic network. Semantically related words are suggested to learn together with new words.

The application of componential analysis and semantic fields are particularly helpful to students to form a semantic network closer to that of native speakers'. By contrasting meanings between semantically related words, students not only learn the meaning of a target word but also learn how it relates to other words in their semantic field. Because words within a semantic field are studied, students can establish connections between the target word and others. With the help of semantic fields, students are likely to have longer retention of the target word. Associations between words help sharpen students' verbal skills (Channell, 1981; Hague, 1987; Harvey, 1983; Stieglitz, 1983).

Table 5 Sample paragraph: John's Childhood

John's Childhood

Just like a normal child, John never liked school. When he was small, he and his parents lived in a little village. He didn't like school days because he must walk a long way from where they lived. Especially, in rainy days or snowy days, he had to flounder through deep mud or snow. That even made him hate school. He loved holidays like other children. For some holidays, he could stay at his uncle's and watch bands and other people marching on the street. During weekends, he seldom worried about his homework but enjoyed strolling in the fields. School seemed far in John's childhood.

Table 6 Definitions of *flounder*, *march* and *stroll*

flounder:1 move or struggle helplessly or clumsily; move with difficulty, as through mud or deep snow; 2 hesitate or make mistakes when talking or when coming to a decision (p. 471)
march: 1 (a) walk as soldiers do, with regular steps of equal length; (b) walk purposefully and determinedly; (c) cause (sb) to march (p. 761)
stroll: walk in a slow leisurely way (p. 1276)

Definitions from OALD provide students with a great deal of information to understand what the target words mean. Polysemous words, however, could cause some problems in learning. It is necessary for students to select a proper definition of a word simply because meanings of polysemous words, such as *flounder* in the paragraph, often cover several semantic fields. One of the phenomena often found in students with lower skills is their frequent travel between the text and the dictionary in order to find an understandable explanation of the target word. The reason for students' to-and-fro checking is their ignorance of the semantic field to which the target word belongs. Such inefficient learning can be solved by asking students to judge the semantic field before they use dictionaries. Comprehensively studying the definitions of the target word should follow so that students have thorough understanding of the target word. After checking the definitions, students should be able to choose the appropriate definition or explanation which fits the meaning of the target word in the paragraph. Flounder in the paragraph is the only polysemous word among the target words, whereas three definitions of *march* belong to the same semantic field. There will be no difficulty for students to detect the semantic field to which *flounder* belongs if they compare the phrase *flounder through deep mud or snow* in the paragraph with the first definition of *flounder* in OALD. While definitions help students understand what words mean, judging semantic fields to which words belong helps students efficiently select a proper definition for new words in context.

After students check word definitions, one of the exercises could be to ask students to write their own definitions. Writing definitions of newly

learned words checks students' understanding of the words. It requires students' production skills. Because of their limited vocabulary and few experiences in writing, students in lower levels will find it hard to produce their own statements of words. Such an exercise can be reserved for more advanced students.

Besides definitions, examples often coexist with definitions to show how words are used. OALD follows this convention and lists examples in sentence or phrase form immediately after each definition. Examples of each target word in the paragraph are listed below.

Table 7 Examples of *flounder*, *march* and *stroll*

flounder: 1 Ann couldn't swim and was left floundering (about/around) in the deep end of the swimming-pool. 2 I wasn't expecting the interviewer to ask about my private life and was left floundering for a while. flounder (on) through a badly prepared speech (p. 471)
march: 1 (a) Quick march! Demonstrators marched through the streets. They marched in and took over the town. march by, past, in, out, off, away, etc. The army has marched thirty miles today. (b) She marched in and demanded an apology. (c) march the troops up and down They marched the prisoner away. She was marched into a cell. (p. 761)
stroll: strolling (around) in the park He strolls in and out as he pleases. (p.1276)

Examples give students more opportunities to learn the usage of the new words. Making sentences of their own is often done after reading example sentences. It not only requires students' understanding of meanings but also that of grammatical and pragmatic usage. One of the problems in writing sentences is commonly found in those who use bilingual dictionaries in which equivalents of the students' native languages mislead their understanding. Due to the fact that bilingual dictionaries often list short, concise equivalents, students might obtain misleading connotations which cause incorrect usage of words. Examples of words, in this case, serve as further explanations of the usage. Together with definitions, examples in which target words are embedded provide contextual information for better understanding. Students, after some

time in learning the target language, are suggested to study definitions, explanations and examples so that they have better control over the new words.

When studying definitions and examples gives students chances to learn a word thoroughly, contrasting word meanings gives students opportunities to explore word relationships. In addition to the target words taken from the sample paragraph, two other verbs in their definitions are used to explain the target words: move and walk. Further investigation shows a hierarchy existing among those five moving verbs. Move is used to explain walk which can explain flounder, march and stroll shown below in a simpler explanation from OALD.

Table 8 Explanations of target words

walk: to move along on foot
flounder: to walk with great difficulty
march: to walk with regular steps of equal length
stroll: to walk in a leisurely way

Lexical relationships found among the verbs are as follows. *Move* is the hypernym of *walk* which is the hypernym of the other three verbs. Hyponymy also holds in the opposite direction. Among *flounder*, *march* and *stroll*, coordination is established by sharing the common verb *walk* in their explanations. Distinguishing features among the coordinate verbs are stated in phrases, *with great difficulty*, *with a regular steps of equal length*, and *in a leisurely way*, respectively. It is the distinguishing phrase in each explanation that contrasts each word meaning with their coordinates. A grid presentation in Table 8 below shows the semantic field of move in the discussion.

Table 9 Semantic Field of Move

move		
walk		
flounder	march	stroll

When students need more lexical members in the semantic field of *move*, *run* and *jump* are proper hyponyms of *move*. Their definitions of *run* and *jump* from OALD listed below add themselves to the family by using *move* as their hypernym in the definitions.

Table 10 More examples in the semantic field of *move*

run: to move with a speed faster than a walk, never having both or all the feet on the ground at the same time (p. 1107)
jump: to move quickly off the ground, etc., especially up into the air, by using the force of the legs and feet (p. 678)

By the same token, hyponyms of *walk* below can be added to make it a more complete list. Examples and simple explanations in parentheses are taken from the *Longman Dictionary of Contemporary English* (English-Chinese, 1997, p. 1729).

Table 11 Hyponyms of *walk*

clump, lumber, plod, trudge (to walk heavily)
amble, saunter, wander (to walk slowly and aimlessly)
pace, stride (to walk quickly and purposefully)
prance, strut, swagger (to walk proudly and confidently)
stamp, stomp, stomp (to walk heavily and angrily)
creep, pad, sneak, tiptoe (to walk quietly)
shamble, shuffle, waddle (to walk awkwardly)
lurch, reel, stagger, stumble, totter (to walk unsteadily)
hobble, limp (to walk unevenly)

Exercises of finding coordinates of target words help students contrast word meanings, which makes them focus on the differences between words. Understanding the dissimilarities of word meanings in a semantic field, in turn, enlarges students' vocabulary size and encourages their interest in learning vocabulary.

Conclusion

Deep process of new, unknown words is necessary. Definitions of words and context in which words are embedded stay inseparable; that is, the selection of the proper definition depends upon contextual information. The efficient way of learning new words with context lies in detecting semantic fields prior to searching for candidate meanings. Furthermore, in order to have longer retention, newly studied words need strong and tight connections with the previously learned ones. Related words in a semantic field suit this purpose of vocabulary learning. Exploring various relationships in a semantic field, such as hypernymy, hyponymy, and coordination, consolidates a new word's position in students' semantic network; it also increases students' word power.

Endlessly memorizing equivalents of words in students' native languages could discourage their interest in learning vocabulary. Non-strategic method could make an ill success of vocabulary learning. It is always language teachers' task to guide students to find the most suitable ways to learn new words: the ways which students feel most comfortable with and those which they can use when they are on their own. Too, it is always language teachers' hope that, equipped with the strategies learned in class, students become independent readers, then, independent learners.

Endnotes

- 1 : Related papers by the author can be found in Lin, C. (1996, 1997 a and b).

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字（詞）彙教學的語意網路

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字（詞）彙的教學目的，乃是希望學生能學會如何學習字（詞）的技巧，而成爲獨立的學習者，並且能夠進一步對字（詞）彙產生興趣。但是，在Nagy及Herman（1984及1987）的研究中，並沒有清楚地指出學生應該學會什麼樣的技巧、也沒有提到學生必須對哪方面的字（詞）彙知識加深學習。本篇報告所提出的論點就是，在學生學習的文章中，有相當豐富的字（詞）彙知識，學生應利用學習字義時，建立由字義組成的語意網路。就字（詞）彙的知識而言，一位有經驗的讀者能夠根據前後文推斷出生字的字義，而且能夠儘快將生字與熟悉的字（詞）做語意上的連結，好讓生字由生疏成爲熟悉。因此，字（詞）彙的教學除了要學生學會字義之外，也當加強如何建立語意網路的經驗。

關鍵字：英語教學 字（詞）彙教學