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SEMANTIC FIELDS AND EFL/ESL TEACHING

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Abstract

The vocabulary of a language is a system of interrelated lexical networks but not a collection of independent items. Vocabulary of a language is organised into fields within which words interrelate and define each other in various ways. Sense relations are not enough to explain the relation between some lexical items. For example, we cannot explain the relation between patient and hospital through synonymy, antonym, hyponymy, polysemy or homonymy, but we can say that they belong to the same semantic field which we can label as 'health'. In this paper, semantic field also known as word field, lexical field, field of meaning, and semantic system is explained by giving supporting examples. Besides, some implications for Teaching English as a Foreign Language/Teaching English as a Second Language (TEFL/TESL) are suggested.

Keywords: Semantic fields, structural semantics, lexical network, lexical field, semantic system

1. Introduction

In the 1930s, the structuralist notion of paradigmatic sense relations was applied to an approach which is called lexical field theory. Based on research in historical semantics, Jost Trier (1931) introduced the term lexical field (or semantic field) that he defined as a set of semantically related words whose meanings delimit each other. Thus, the meaning of a word can only be fully determined in terms of contrasts in which it stands with other words in the field. From a diachronic perspective, this means that any change in the meaning of one word affects the meaning of other words to which it is related. According to Trier, the members of a field cover a whole conceptual or objective domain without any gaps or overlaps, i.e. the boundaries of a lexical field can be clearly delimited. Criticism of this conception of lexical fields brought about differentiations and modifications of lexical field theory and led in the development of componential analysis (Retrieved from English Language and Linguistics Online, 2017)

A semantic field is a set of words (or lexemes) which are related in meaning. Semantic field is also known as a word field, lexical field, field of meaning, and semantic system (Nordquist, 2017). Semantic field more specifically is as a set of lexemes which covers a certain conceptual domain and which bear certain specifiable relations to one another (Lehrer (1985, cited in Nordquist, 2017). In order to clarify the meaning of semantic field and exemplify it, Nordquist (2017) states that "the words in a semantic field share a common semantic property. Most often, fields are defined by subject matter, such as body parts, landforms, diseases, colours, foods, or kinship relations" (p.1).

Hurford, Heasley and Smith (2007) explain semantic field by giving the difference between binary antonyms and semantic field and point out that binary antonyms can considered as incompatible terms which are members of two-term sets (the 'miniature semantic systems'. This notion can be broadened to other groups of words which are not quite opposites as they are incompatible members of a larger (multiple-term) semantic system (or semantic field), such as the days of the week, the seasons of the year, etc. We

should remember that the members of such larger sets are co-hyponyms and the term referring to the field is a superordinate term.

Brinton and Brinton (2010, p. 144) gives more examples of lexical field: (a) Parts of the Face, (b) Stages of Life, (c) Water, (d) Clothing and (e) Jewellery.

a) Parts of the Face

forehead	Brow	temples	
Nose	nostrils	bridge/tip of the nose	
septum	mouth	lips	
Eyes	eyebrows	eyelids	eyelashes
Chin	cheeks	jaw	jowls

b) Stages of Life

new-born	young adult
Infant	adult
nursling, suckling	grown up person
baby, babe	middle aged person
child, kid	senior citizen
toddler, tot	mature person
Preschooler	aged person
Youngster	senior citizen, senior
Adolescent	old {lady, man, person}
Youth	sexagenarian
lad/lass	septuagenarian
Preteen	octogenarian
teenager, teen	nonagenarian
juvenile, minor	centenarian

c) Water

forms: ice, water, steam, vapour, sleet, rain, snow, hail

bodies of water: ditch, slough, swamp, narrows, strait, inlet, bight, bayou, brine, deep, firth, loch, tarn, well, reservoir, firth, pool, sea, ocean, lake, pond, bay, inlet, estuary, fjord, sound, gulf, lagoon, cove, harbour

water in motion: creek, river, waves, billows, stream, rain, brook, rivulet, tributary, spring

frozen water: ice, snow, crystal, sleet, hail, icicle, iceberg, rime, hoarfrost, glacier

gas: vapour, steam

d. clothing

dress (cocktail-, strapless-, shirtwaist-)		gown (evening-, ball-)	
toga	shift	jumper	smock
jumpsuit	suit	pantsuit	sports coat
vest	pyjamas	nightgown	smoking jacket
bathrobe	tee-shirt	shirt	blouse

undershirt	turtleneck	pants/slacks	trousers
shorts	knickers	cut-offs	skorts
culottes	skirt	peddle-pushers	bloomers
underwear	panties	brassière	girdle
hat	cap	beret	tam
toque	scarf	headband	earmuffs
belt	tie	suspenders	gaiters, spats
socks	tights	pantyhose	stockings
gloves	mittens	muff	muffler
shawl	cape	coat (sports-, rain-, over-, top-, lab-)	
jacket	parka	wind-breaker	anorak
sweater	pullover	cardigan	apron

e. Jewellery

ring	earring	nose-ring	brooch
watch	wristwatch	pocket-watch	stud
pin	pendant	necklace	choker
crown	tiara	bracelet	anklet
cufflinks	stick-pin	tie-clasp	belt buckle

2. Semantic Fields

In order to understand the concept of semantic fields, we should review semantic field theory. Crystal (1992) defines semantic field theory as "... the view that the vocabulary of a language is a system of interrelated lexical networks, and not an inventory of independent items" (p. 346). He also states that semantic field theory is also called lexical field theory. He gives these examples of semantic fields: "...the fields of vehicles, colour, and parts of the body" (p. 347). Pan and Xu (2011) explain semantic field theory with another example: "The basic assumption underlying the theory of semantic field is that words do not exist in isolation: rather, they form different semantic fields, such as a vegetable field which contains all kinds of words that denote vegetables: spinach, cauliflower, cabbage, pepper, eggplant, onion, tomato, cucumber" (p. 1587). As Changhong (2010) states, the semantic field theory matured thanks to the affords of the German scholar, J. Trier in the 1930s, whose version is seen as a new phase in the history of semantics. Wu (cited in Changhong, 2010) summarizes Trier's semantic field theory as follows:

a. The vocabulary in a language system is semantically related and builds up a complete lexical system. This system is unsteady and changing constantly.

b. Since the vocabulary of a language is semantically related, we are not supposed to study the semantic change of individual words in isolation, but to study vocabulary as an integrated system.

c. Since lexemes are interrelated in sense, we can only determine the connotation of a word by analyzing and comparing its semantic relationship with other words. A word is meaningful only in its own semantic field. (Wu cited in Changhong, 2010, p.51).

As Changhong (2010) reports, “Trier’s semantic field is generally considered paradigmatic. It deals with paradigmatic relations between words such as hyponymy, synonymy and antonymy” (p.51).

Crystal (1992) points out the significance of context and points out that “...it is always necessary to consider context before assigning a lexical item to a field-for example, hospital relates to both the semantic field of health (as in ‘I was in hospital last week’) and that of buildings (as in ‘The hospital needs a new roof)” (p. 347).

2.1. Historical Background

Crystal (1987) states that “...the linguistic approach to semantic fields was first profounded by German scholars in the 1930s. In one of the earlier studies (J. Trier, 1934), the approach showed how the structure of a semantic field can change over time. Middle High German terms for knowledge changed greatly between 1200 and 1300. In 1200, German had no separate lexeme for the quality of cleverness. The language contained kunst (courtly skills) and list (non-courtly skills), and there was also Wisheit for any form of knowledge, whether courtly or not, mundane and divine” (p. 104). Crystal (1987) points out the difference which occurred in German a hundred years later and he states that “...a, hundred years later, everything was different. Wisheit had developed the restricted meaning of ‘religious experience’; kunts was beginning to take on the meaning of ‘art/skill’, and wizzen (modern wissen had more the meaning of ‘knowledge’. List had left the field entirely, as it had begun to develop pejorative connotations (of its sense of ‘cunning’ or ‘trick’ in Modern German). The whole of this change can be summarized in the form of two diagrams” (p.104). Crystal (1987) illustrates this change with the following diagrams.

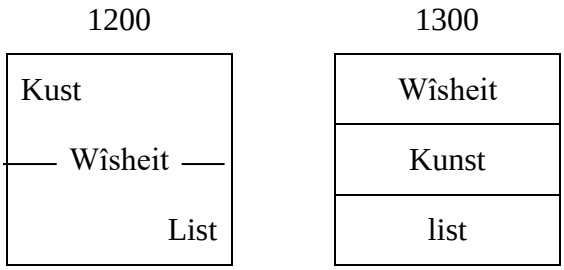

Figure 1. J. Trier’s observation of the change in the semantic field of the ‘intellectual aspect of the German Language in two different periods (in Crystal, 1987 p. 104).

Trier (cited in Palmer, 1981, p. 68) compared a single language at two different periods. Palmer states that it is also possible to compare two languages to see the way in which they divide up a particular field. Therefore, Palmer (1981) gives the comparison between the colour system of English and literary Welsh proposed by the Danish linguist Hjelmslev (1953). The following figure shows the comparison between the colour system of English and literary Welsh along a single dimension.

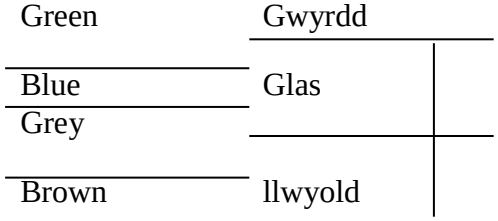

Figure 2. The comparison between the colour systems in English and literary Welsh.

Crystal (1987) states that "...there have been many philosophical and linguistic attempts to classify the concepts or words in a language notably, those associated with the 17th century quest for a universal language. In recent times, the most influential and popular work has been the 'Thesaurus of Peter Mark Roget (1779-1869), first published in 1852. Roget divided the vocabulary into six main areas: abstract relations, space, matter, intellect, violation, and affections. Each area was given detailed and exhaustive sub-classifications producing 1,000 semantic categories in all" (p.104).

Crystal (1987, p. 104) gives the following illustration for Roget's categorization of affections.

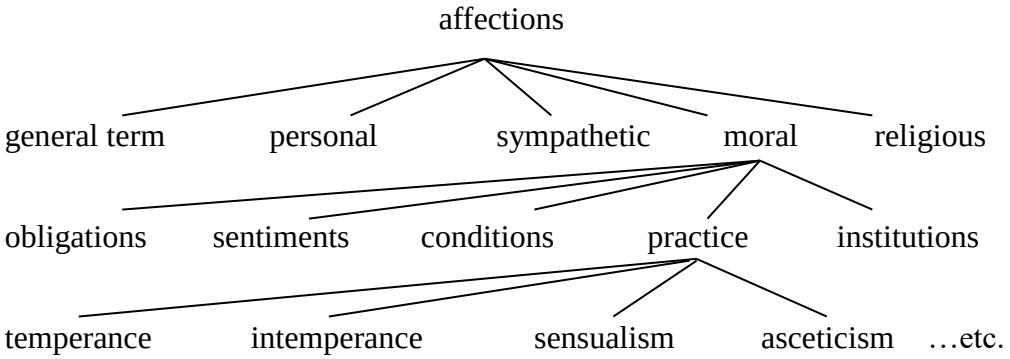

Figure 3. Roget's classification of 'affections

2.2. Semantic Fields in Child's Language

Semantic fields in a child's language develop as the child grows and perceives the distinctions among concepts and objects. Clark and Clark (1977) state that "Children usually stop over-extending their words at about the age of 2-6. It is at this point that they start to ask innumerable 'What ('s) that?' questions and to expand their vocabulary at a much faster rate. It is as though they have just realized that there may be words for all sorts of things for which they, as yet, have no names. As they require new words, they narrow down over-extensions and build up semantic fields of words for various conceptual domains" (p.497). The following figure (from Clark and Clark, 1977, p. 498) illustrates the stages in the development of a child's semantic fields.

MEANING IN THE CHILD'S LANGUAGE

ADDING WORDS TO THE CONCEPTUAL DOMAIN OF ANIMALS

ORDER OF ACQUISITION	WORD	DOMAIN OF APPLICATION
1	bow-wow	a particular dog
2	bow-wow	dogs, cows, horses, sheep
3	(a) bow-wow	dogs, cats, horses, sheep
	(b) moo	cows
4	(a) bow-wow	dogs, cats, sheep
	(b) moo	cows
	(c) gee-gee	horses
5	(a) bow-wow/doggie	dogs, cats
	(b) moo cow	cows
	(c) gee-gee/horsie	horses
	(d) bas	sheep
6	(a) doggie	dogs
	(b) cow	cows
	(c) horsie	horses
	(d) baa	sheep
	(e) kitty	cats

Figure 4. The schematic outline of the stages in the development of a child's semantic fields.

Clark and Clark (1977) explain how a child improves his/her semantic fields. They say "... a child begins with a single word, here 'bow-wow, which he may restrict briefly to one particular dog. Other children might start off with a word for cats, or sheep, or some other animal. A little later, bow-wow may be over-extended to other animals, but as more words are acquired, the child works out where each one fits in and narrows down the domain formerly covered by the over-extension of bow-wow" (p. 498).

2. 3. Semantic Fields and Dictionary Design

There have been some attempts to design dictionaries according to semantic fields. For example, Pliny the Elder's Historia Naturalist in AD 23-79 was organized according to semantic fields. The English Duden: A pictorial dictionary (I960) was organized in 15 semantic fields, the first of which, Atom, universe and Earth is divided into such subfields as Atom, Atmosphere, Astronomy, Meteorology, and each section consisting of a numbered list linked to a picture with numbered elements. The Longman Lexicon of Contemporary English (1981) was organized in 14 semantic fields. The first semantic field in this dictionary, 'Life and Living Things' is divided into Living Creatures, Animals/mammals, Birds, and Kinds and Parts of Plants.

2. 4. Semantic Fields and Translation

Every language cuts up the world in different ways. For example, Arabic has numerous words for different types of camels, v/here English has a variety of words for different types of dogs, and Eskimo language has numerous words for different types of snow. These differences cause difficulties in translation from one language into another. Aitchison (1987) states that "...it is impossible to translate the sentence 'The cat sat on the mat' accurately into French without further information about the state of affairs described. We would have to decide arbitrarily whether the cat was sitting on a doormat (paillasson), a small rug (tapis), or a bedside mat (descente de lit). None of these French words corresponds exactly to our word 'mat1 or 'rug' or 'carpet': tapis is often used to translate English 'carpet' as well as 'rug'. These examples show us that for linguists, it is important to deal with the lexical structure of a language rather than with isolated words" (p. 87).

Similar case occurs when translating the English sentence "My uncle is here" into Turkish since the semantic field of kinship in Turkish differs from the semantic field of kinship in English. One who is going to translate this sentence into Turkish needs further information about the case whether 'uncle' means father's brother or mother's brother. Certainly the context will help the translator, but what if the context is insufficient to give such information! Graddol, Cheshire and Swann (1987) point out the same kind of difficulty in translation and give the following example "The English word cousin, for example, has to be translated into French by either cousin or cousine, depending on whether the cousin is male or female" (p. 100). They also state that "...the distinction that is made by the vocabulary of a language very often reflects a society's beliefs and values" (p. 100).

Dyvik (2005) underline the differences of semantic fields between and among languages and translation difficulties due to these semantic field differences and states that A distinction between ontologies and semantic fields is that work on ontologies typically intends to capture constant, language-independent conceptual structures, while work on semantic fields typically intends to bring out the variability and language specificity of the sets of terms and their interrelations: different languages may carve up the same field in

different ways. Without going into the philosophical question of what the 'sameness' of semantic fields across different languages consists in, we may at least observe that the corresponding sets of terms in two languages are connected by a cognation of translation. The distinctions between the ways in which different languages carve up the 'same' field is then reflected in the fact that this translational cognation is not one-to-one. Dyvik (2005) gives the following classical example.

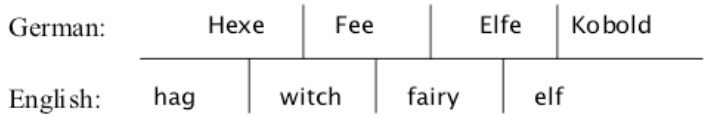

Figure 5. Different partitionings of the 'same' semantic field.

5. Semantic Fields and Vocabulary Teaching

Human brain does not store words in random without any relations or connections among them or store them in alphabetical order like a dictionary, either. Tanner and Green (1998) suggest that vocabulary should be taught in lexical sets and they state that "We don't store words in our brains in alphabetical order like a dictionary does. Research into memory has shown that we apparently store words in our brain in groups of related words (or lexical sets). Words that are related are joined together in our brains; if a new word can be hooked to words which are already stored, it might be easier to remember it. It would seem logical therefore that we should teach words in lexical sets to our learners, so that it is easier for them to retain and store the words in their memory" (p. 29)

Tanner and Green (1998, p.29) state that "Words can be related in several different ways" and they give the following examples:

By topic: *Furniture, clothes, family relationships, animals*

By similarity of meaning or synonymy: *gorilla, chimpanzee, orang-utan, ape*

In pairs – opposites: *hot/cold, old/new, hard/soft*

In Pairs – synonyms: *slip/slide, rough/harsh, booklet/brochure*

In a series or a scale: *Boiling, hot, warm, cool, cold, freezing*

By superordinates: *Fruit*

and hyponyms: *orange, apple, pineapple, banana, strawberry*

By activity or process: *steps in making a cake or building a bookcase*

Word families: *paint, painter, painting*

Or know, knowledge, knowing, and knowledgeable (From Tanner & Green, 1998, p.29).

The groups superordinates, ordinates and topic in the above list are closely related to semantic fields. Therefore we can see the contribution of semantic field theory to language teaching. EFL/ESL teachers should always remember that, as mentioned above, human brain stores words in relation with other. If words are taught in relation with each other as semantic fields or sense relations, EFL/ESL teachers facilitate students' learning of English vocabulary.

6. Conclusion

The vocabulary of a language does not consist of independent and unrelated items. Vocabulary items are interrelated and some vocabulary items are so closely related that they can form a field of sense. However, the same semantic fields in two different

languages may differ in terms of the items which are covered by the semantic fields, and this may result in difficulties in teaching translation and also in teaching vocabulary.

For example, kinship terms in Turkish differ from the kinship terms in English; in English there is only one kinship term for father's brother and mother's brother that is, uncle, but there are two different kinship terms in Turkish for the same kinship; 'amca' for father's brother and 'dayı' for mother's brother. There are also some other kinship terms in Turkish which do not exist in English such as 'enişte' (for uncle's husband and sister's husband), 'görümce' (for wife's sister-in-law), 'elti' (for a woman's husband's brother's wife), 'bacanak' (for wife's sister's husband). This usually occurs because of the cultural aspects of languages and this may occur in any semantic field. Hence, the language teacher must make his/her students aware of these cultural differences and must also teach how to use the context in order to find out these differences. Visual aids such as pictures, diagrams, and tables can be very useful for the students to understand semantic field differences between native culture and target language culture. In order to prevent students from misperception of the problematic vocabulary items, the language teacher must be careful when teaching them.

Moreover, the issue of semantic field should be dealt with in methodology classes at the English Language Teaching (ELT) departments and when teacher trainees teach how to teach vocabulary and translation. If language learners are not aware of the problems and difficulties due to semantic field differences among culture, they may make language errors when using words in their sentences due to the semantic field differences between their own culture and the target language culture.

Besides EFL/ESL course book writers should be aware of the semantic field theory and consider this issue when preparing methods of vocabulary teaching in their course books. Issue of semantic field is crucial for teaching vocabulary and translation.

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