

Semantic Field of Utterances in "Healthy Living Guide"

Ghusoon Abdul Kadhim Faraj
English Department
College of Imam Al-Kadhum
Iraq
Email: ghusoon.kadhim@alkadhum-col.edu.iq

ABSTRACT

Many books, articles, guidelines, and other resources have been written to help us avoid the Covid-19 virus, which has affected our lives in many ways during the last few years.

The corpus of this research is taken from "A Healthy Live and Nutrition Guide" by Harvard University. This guide presents tips about following a healthy style and how to do the best to eat healthy meals, exercise, and sleep well during coronavirus.

It is essential to use the semantic field while analyzing word meanings and examining the semantic relationships among words within sentences in order to fully grasp the guide. Those relations vary according to the relationship that a word may have with another word or word.

Only nouns are selected to be investigated and are grouped into different fields, such as eating, moving, sleeping, and other related fields, such as quantity and time. All nouns were classified into lexical-semantic fields to the lexical Field Theory as proposed by the German Linguist Jost Trier (1936). The semantic relations used to decide which semantic field a word belongs to are hyponymy (Type of) and meronymy (Part of). The researcher uses both qualitative and quantitative methods in dealing with the corpus.

The study results reveal that the semantic field of "Eating" is by far the most common one, and it formed almost two-fifths of the data (almost 39%). The field of "Moving" is way less than that of "Eating", and "Sleeping" is almost half the "Moving" field.

Keywords: Semantic Field, Utterances, Healthy Living Guide.

1. Literature Review

1.1 Semantics

Semantics is the study of meaning with the structure of a language and its meanings in linguistics. It is a branch of linguistics concerned with studying how words in a language's lexicon function, how context affects the meaning of individual words, how grammatical patterns convey meaning, and how meaning is sent from one language to another. (Horsleys, 1980: 10)

Katz (1972: 1) says that semantics "is the study of linguistics meaning. It is concerned with that sentences and other linguistic objects express, not with the arrangement of their syntactic parts or with their pronunciation". If you do not understand semantics, you will not understand linguistics, says Palmer (1976: 5) in his book on the subject. According to him, Ferdinand de Saussure called them "significant" and "signified." These two components are inseparable, and Saussure referred to them as "significant" and "signified." As Changhong (2010: 51) reports, "Trier's semantic field is generally considered paradigmatic. It deals with paradigmatic relations between words such as hyponymy, synonymy, and antonymy".

Morris (1946: 19) The study of language ability to classify and communicate our world experiences is at the heart of semantics, which, according to this definition, also includes the study of human cognitive processes, cognition, and conceptualization. To put it another way, he highlighted the rule of semantics in the context of social structure and our experience of the world conveyed through cognitive processes. As Leech sees it, knowing the language is a beginning point for communication since understanding meaning is the first step.

Tarigan (1985: 2-3) explains that semantics is the study of meaning, separating it from the other three fields: syntax, semiotics, and pragmatics. As a starting point, syntax focuses on the formal relationship between the sign and the object that make

up implementation of the sign. It is all about the relationship between signals and meaning when it comes to pragmatics.

1.2 Semantic Filed Theory

Nordquist (2017: 1) Says that a semantic field is a grouping of similar-sounding words (or lexemes). The terms "semantic field," "lexical field," "meaning field," and "semantic system" all refer to the same thing: a field of meaning. Words with similar semantic characteristics are grouped in a semantic field. For the most Part, disciplines are characterized by their subject matter, such as human body parts, landscapes, or illnesses.

Trier (1931). A lexical field (semantical field) is a group of semantically related words whose meanings define each other. As a result, it is only possible to completely understand a word's meaning by comparing it to other words in the same area. According to a diachronic approach, changing one word's meaning impacts the meaning of other words that are linked to it (Retrieved from English Language and Linguistics Online, 2017-1).

Andersen (1990: 237). A semantic field is a linguistics term used to describe a collection of words that have been arranged in a certain way. Aside from anthropology and computational semiotics, the word is utilized in many other academic fields. It is a set of words that interact, dominate, differentiate, and depend on each other, according to Zhou (2001: 30-35). The combination's semantic range is known as the semantic field's field range. Words that have similar meanings and are dominated by the same notion can be found in a lexical field or domain, which is also termed a semantic field.

Brinton (2000:122) defines "semantic field" or "semantic domain" relates the linguistics concept to hyponymy: "Related to the concept of hyponymy, but more loosely defined, is the nation of a semantic field or domain. A semantic field denotes

a segment of the reality symbolized by a set of related words. The words in a semantic field share a common semantic property”.

In order to understand the concept of semantic fields, we should review semantic field theory. 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”. He also states that semantic field theory is also called lexical field theory. He gives these examples of semantic fields: “...the fields of vehicles, color, and parts of the body” (Crystal ,1992: 346-347).

Pan and Xu (2011: 1587) "The basic assumption behind the idea of semantic fields is that words do not exist in isolation: rather, they create diverse semantic fields, such as a vegetable field which comprises all sorts of words that represent vegetables:" Cauliflower and broccoli are among the vegetables that make up this dish.

Crystal (1992: 347) 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 the hospital last week') and that of buildings (as in 'The hospital needs a new roof)". Changhong (2010:51) states, In the 1930s, the German researcher J. Trier's version of the semantic field theory evolved and is now viewed as a new era in the history of semantics.

Wu (cited in Changhong, 2010:51) describes the semantic field theory of Trier in the following terms: semantically linked vocabulary forms a complete lexical system for language systems. We are dealing with an unstable system that is continually evolving. For this reason, we should not investigate the semantic evolution of individual words in isolation but rather the entire system of a language's vocabulary as a whole. c. We can only discern a word's connotation by evaluating and comparing its semantic relationships with other words. No other semantic field can give any meaning to a word.

Semantic field theory focuses on the interrelationships between lexical species and their genus counterparts. (Mei and etal,1987: 18-28) When words in a language system are connected, it implies that its lexical system is whole and complete. As a result of this method, a group of words might be linked together to form a semantic field. For example, under the idea of stationery, a semantic field may include a pen, eraser, pencil, ruler, etc. Pen, eraser, pencil, and ruler are examples of species in this semantic realm, which is to say that stationery is a genus.

2. Data analysis and results

2.0 Introduction

The corpus of this research is taken from a health and nutrition guide published by Harvard University. Only nouns of this corpus are analyzed for data analysis. A manual screening of all the nouns revealed that the corpus contained 4154 nouns. These nouns were subjected to five classification rounds into the major semantic fields: eating, moving, sleeping, and other related fields such as health, research, quantity, time, and people. Each round of classification ruled out the nouns that were irrelevant to the best of our judgment. By the end of the classification rounds, 3082 nouns were attested relevant to the topic of this study.

Nouns formed lexical-semantic fields were selected for inclusion under the three central eating, moving, and sleeping fields. The other fields contained vocabulary, which can be thematically grouped into one of the fields or contextually related to it. It was counted as irrelevant when a noun matches another semantic field but is not used in its original context. For example, in the following sentence, the word "condition" was not counted under the health field: The amount will vary depending on the temperature (more is needed in hot **conditions**) and level of exercise.

Another example is the word **digest**, which was counted as a piece of research or reading, but not related to eating in this context. Some bigrams and trigrams were counted in this study because these multi-unit lexical words help learners put the language into context. The single words were counted separately from multi-unit

words, e.g., **treadmill** and **workout** were counted as separate words, and **treadmill workout** is another independent word. It has to be noted that gerund constructions were not counted. That is because they are verbal, although they carry the function of nouns.

Before classifying the nouns into fields, they were manually lemmatized. For example, “foods” was converted to “food”, veg, vegs to vegetables, etc. After classifying nouns into the fields, two additional verification rounds were applied to make sure that the statistical numbers were as correct as they were in the actual corpus.

According to the Lexical Field Theory, all nouns were classified into lexical-semantic fields as proposed by the German Linguist Jost Trier (1936). The semantic relations which were used in order to decide which semantic field a word belongs to are as follows:

1. **Hyponymy (or Type of)**, e.g., orange is a type of fruit, and tea is a drink.
2. **Meronymy (or Part of)**, e.g., clove is a part of garlic.

A final note is that the semantic classification of nouns in the lexical-semantic field is not conclusive. Indeed, the process is subjective, and many words can be classified under two or more semantic fields. However, the purpose of this classification followed in this research is for English language learning and teaching.

2.1 Major Semantic Fields

A total of 3 major semantic fields and six other related semantic fields were revealed by this research. The frequency distribution of the fields and relative percentage is shown in Table (1) and plotted in Figure (1).

Table 1: Distribution of Major Semantic Fields

S.N.	Fields	Number of words	Percentage
1.	Eat	1183	38.38%
2.	Health	599	19.44%
3.	Move	351	11.39%
4.	Body	319	10.35%
5.	Sleep	172	5.58%
6.	Time and duration	172	5.58%
7.	Research	132	4.28%
8.	People	92	2.99%
9.	Quantity	62	2.01%
	Total	2763	100.00

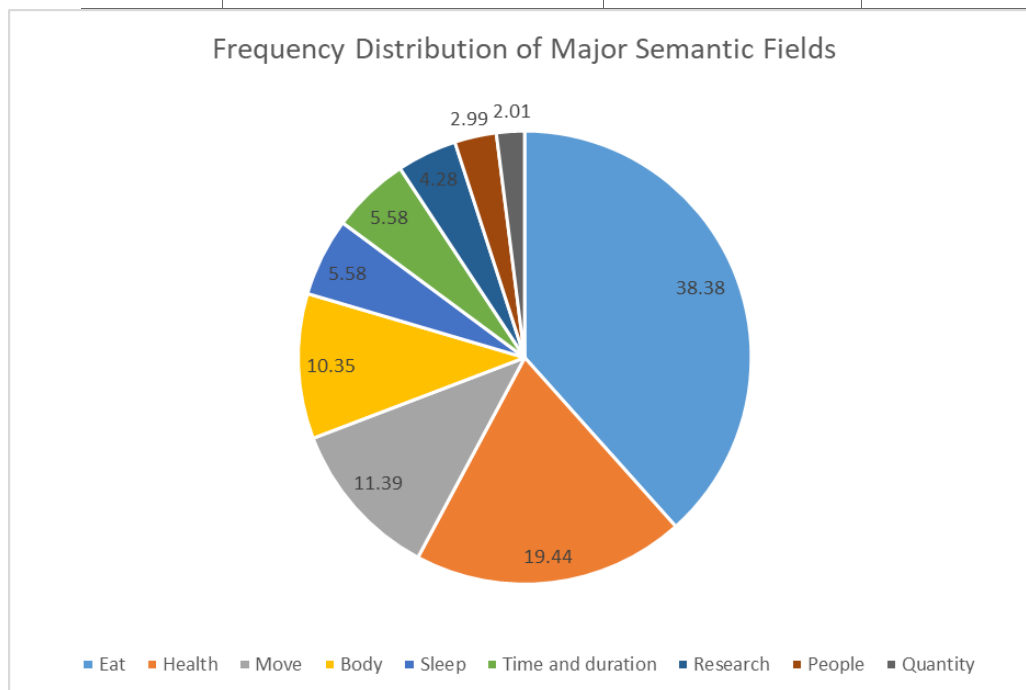


Figure 1: Frequency Distribution of Major Semantic Fields

In the Table above, it is seen that the frequency of eating field is more than those in both moving and sleeping which has the frequency of (39%). Examples of these fields include onion, tennis, nap, flu, guide, slice, night, and adult.

2.2 Subfields

2.2.1 Eating Field

A total of 24 subfields of Eating vocabulary were revealed. They are listed in Table (2) below:

Table 2: Subfields of Eating

S. N.	Eating Sub Fields	Number of Words	Rel. % to Eat	Rel. % to all words
1	Food	177	14.96%	5.74%
2	Eating Act or Attribute	133	11.24%	4.32%
3	Drinks	106	8.96%	3.44%
4	Diet	102	8.62%	3.31%
5	Nutrients and micronutrients	98	8.28%	3.18%
6	Legumes	85	7.19%	2.76%
7	Plants	74	6.26%	2.40%
8	Kitchen and Utensils	56	4.73%	1.82%
9	Oils and Fats	53	4.48%	1.72%
10	Meals	43	3.63%	1.40%
11	Vegetables	39	3.30%	1.27%
12	Hormones	37	3.13%	1.20%
13	Fruits	31	2.62%	1.01%
14	Meats	30	2.54%	0.97%
15	Grains	27	2.28%	0.88%
16	Vitamins	25	2.11%	0.81%

17	Substance	19	1.61%	0.62%
18	Crops	10	0.85%	0.32%
19	Dairies	10	0.85%	0.32%
20	Acids	9	0.76%	0.29%
21	Chemicals	7	0.59%	0.23%
22	Fish	7	0.59%	0.23%
23	Poultry	4	0.34%	0.13%
24	Enzymes	1	0.08%	0.03%
	Total	1183	100.00%	38.38%

It is seen in the above Table that the top 5 subfields are Food, Eating Act or Attribute, Drinks, Diet, Nutrients and Micronutrients. Other frequent subfields are Legumes, Plants, Oils and Fats, Meals, Vegetables, Fruits and Meats where all these subfields scored 30 words and above. A few subfields scored less than 10 words, and these are Acids, Chemicals [which are used in cooking, preparing food or digestion process in the stomach], Fish, Poultry and Enzymes.

Examples of the subfields from the above Table include: carrot, leeks, salad, olive, peanut and etc...

2.2.2 Moving Field

A total of 6 subfields in the Moving field were attested, and they are displayed in Table (3) below:

Table 3: Subfields of Moving

S.N.	Move	Number of Words	Rel. % to Move	Rel. % to all words
1	Act	223	63.53%	7.24%
2	General	49	13.96%	1.59%
3	Tools and Devices	46	13.11%	1.49%
4	Fitness	13	3.70%	0.42%
5	Places	13	3.70%	0.42%
6	Sports and Games	7	1.99%	0.23%
	Total	351	100.00	11.39%

From the above Table, it is revealed that the most frequent subfield of Moving is "Act" which subsume doing an action such as biking and balance training. Other subfields include Tools and Devices used in moving, Fitness, Places where to do exercises such as gyms and walking lanes and Sports and Games such as basketball and soccer.

2.2.3 Sleeping Field

The Sleeping field contained 7 subfields which are shown in Table (4) below:

Table 4: Subfields of Sleeping

S.N.	Sleep	Number of Words	Rel. % to Sleep	Rel. % to all words
1	Sleep	103	59.88%	3.34%
2	General	19	11.05%	0.62%
3	Sleeping disorders	15	8.72%	0.49%
4	Scientific types of	14	8.14%	0.45%

	sleeping			
5	Place	8	4.65%	0.26%
6	Nap	7	4.07%	0.23%
7	Dreams	6	3.49%	0.19%
	Total	172	100.00	5.58

Examples of the subfields of Sleeping are listed below:

Nap, bedtime, rest, rem and etc.....

3. Conclusion

We have ended this research by the following concluding points:

- 1- Each word in the field has a unique meaning that sets it apart from the rest. As a result, it is only possible to completely understand a word's meaning by comparing it to other words in the same area. A change in the meaning of one word influences the meaning of other words to which it is linked, according to a diachronic approach.
- 2- The corpus contained approximately 13000 words. The corpus contained texts about three main topics: eating, sleeping and moving as well as some other related topics such as health and research.
- 3- Nouns are grouped into different fields depending on two semantic relations: hyponymy and meronymy.
- 4- the semantic field of “Eating” is by far the most common one, which has the frequency of (39%). The field of “Moving” is way less than that of “Eating”, and “Sleeping” is almost half the “Moving” field. Health field is the second more frequent field where it scored almost one-fifth of the data.

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