

---

**| RESEARCH ARTICLE**

**A Lexical-Semantic Study of Compositionality in Knowers Monologue of Imam Al-Sajjad (Peace be upon him)**

**Hussain Hameed Mayuuf<sup>1</sup> and Hadi Abdul-Ameer Abbass<sup>2</sup> ✉**

<sup>1</sup>Assistant Professor, University of Babylon, College of Education for Humanities, English Department, Iraq

<sup>2</sup>University of Babylon, College of Education for Humanities, English Department, Iraq

**Corresponding Author:** Hadi Abdul-Ameer Abbass, **E-mail:** [hadymlh690@gmail.com](mailto:hadymlh690@gmail.com)

---

**| ABSTRACT**

Compositionality is the principle that the meaning of a complex expression is governed by the meanings of its constituents and the rules used to combine them. This study seeks to be an attempt to shed light on how the meanings of parts of expression constitute the meaning of the whole expression. The study opines to apply this principle in the Arabic prayer of Knowers Monologue of Al-Imam Al-Sjjad (Peace be upon him). The study adopts Leech and Short's lexical categories (2007) as a model for analysis. The study reveals that Arabic prayer focuses on intransitive verbs and prepositional phrases to constitute the whole intended meaning.

**| KEYWORDS**

Semantics, lexical categories, compositionality, lexical semantics, and formal semantics.

**| ARTICLE INFORMATION**

**ACCEPTED:** 14 December 2022

**PUBLISHED:** 18 December 2022

**DOI:** 10.32996/ijels.2022.4.4.12

---

**1. Introduction**

The study consists of two parts: theoretical and practical. The theoretical part contains the core topics such as semantics, lexical Semantics, formal semantics, the principle of compositionality, and syntactic compositionality. In addition, the theoretical part contains the methodology and the model adopted. The second part involves data analysis, the results, discussions, and conclusions.

**1.1 Problem of the study**

1. How does the meaning of constituents form the complex meaning of the whole expression in Arabic prayer?
2. What are the lexical categories that are employed?

**1.2 Aims of the Study**

1. This study aims at investigating how the meaning of constituents forms the complex meaning of the whole expression in Arabic prayer.
2. Exploring the lexical categories that are employed in constituting the whole meaning.

**2. Theoretical Background**

**2.1 Semantics**

Semantics is a significant area of linguistics concerned with the investigation of linguistic meaning. Although not with the same emphasis or breadth of meaning as in linguistics, the phrase is also employed in philosophy and logic. Philosophical semantics explores the connections between linguistic phrases and the events they relate to in the real world. It also considers the circumstances in which such expressions can be deemed true or false and the variables that influence how language is interpreted when it is utilized (Crystal 2008: 428).

## **2.2 Lexical Semantics.**

Compositional semantics is the study of how the meanings of smaller expressions, such as words, combine to form the meanings of bigger expressions. This project is obviously closely related to lexical semantics, which is the study of the meanings of the fundamental units (the words). And the tools developed so far are quite useful for lexical semantics as well as compositional semantics. Consider, for example, the fact that (1) entails (2) and that this is clearly a fact about the meanings of dance and move:

1\_ Sabrina danced.

2\_ Sabrina moved.

There is a straightforward way to express the relationship between these two verbs if we continue to believe that the extension of any intransitive verb is a group of distinct individuals. Every person in the set that [[dance]] chooses is also in the [[move]] set, which contributes to the meaning of the word. In other words, any world's extension of [[dance]] is a subset of [[move]] (in that world). (Since there is obviously more to dance than simply this, the full lexical item will mention more.) (Jacobson, 2014: 60).

## **2.3 Formal Semantics**

Formal semantics is the study of the meaning of expressions in terms of logical systems of analysis, or calculi, and is thus more akin to formal logic or mathematics than to linguistics (Crystal, 2008: 428).

Gottlob Frege, whose work in the late nineteenth century marked the beginning of both symbolic logic and the formal semantics of the natural language, is largely responsible for the semantic insights we rely on in this book. Lewis, Montague, and Cresswell were the authors of the original versions of Fregean semantics for English linguistic fragments. The things that language is capable of are astounding. It conveys innumerable ideas with just a few syllables, and even when a human grasps a concept for the first time, it gives it a form that allows someone else who is completely unfamiliar with it to understand it.

This would not be conceivable if we were unable to identify the elements of the thought that correlate to the components of the sentence, allowing the phrase's structure to be considered a reflection of the mind's structure. Thus, if we consider thoughts to be made up of basic pieces and assume that they, in turn, correlate to simple sentence-parts, we can see how a few sentence-parts can be used to create a vast array of phrases, each of which corresponds to a vast array of thoughts. The issue now is how the notion is put together and how the disparate components are connected to create a total that is more than the sum of its parts. "Negation" is examined when a thought appears to be made up of two parts: one that is incomplete or, one could argue, unsaturated and whose linguistic equivalent is the negative particle. The other component is a concept. Without rejecting something, which is a notion, we are unable to engage in negation. Because this thought saturates the unsaturated part or, as one might say, completes what is in need of completion, the whole hangs together. And it is a natural conjecture that the logical combination of parts into a whole is always a matter of saturating something unsaturated. (Heim and Kratzer, 1998:2-3).

## **2.4 Semantic Compositionality**

According to the compositionality school of thought in semantics, the meanings of individual words can be combined to create the meanings of bigger units. In other words, the meaning of the whole depends on the meanings of its constituent components and how they are put together. The idea is crucial, for instance, in Montague grammar (Crystal, 2008:96).

If the meanings of a language's complex statements are entirely determined by the meanings of their constituent parts and the way in which those parts are combined, the language is semantically compositional. Modern semantics has been greatly influenced by the idea that natural languages are composed semantically (Stainton and Viger, 2009: 3). The way words are put together to form phrases, clauses, and sentences affects meaning as well. Compare Both **The dog bit the postman** and **The postman bit the dog** refer to the identical action, yet their phrase meanings are significantly different due to different syntactic arrangements (Dixon, 2005:6).

Since there are an infinite number of sentences in any natural language and the human brain has a finite capacity, linguistic competence must require some finitely describable method of defining an endless class of sentences. This is the fundamental premise of generative grammar. That is one of the syntax's main functions.

Semantics: A speaker of a language knows the meanings of those infinitely many sentences and is able to understand a sentence he/she has never heard before or to express a meaning he/she has never expressed before. So for semantics also, there must be a finite way to specify the meanings of the infinite set of sentences of any natural language.

The compositional relationship between syntax and semantics is a fundamental tenet of formal semantics. The Compositionality Principle: An expression's meaning is determined by the meanings of its constituent components and by the syntactic arrangement of those pieces. The principle of compositionality has as many distinct iterations as there are methods to express each of its essential

concepts, each of which is a "theory-dependent" term. (Content, purpose, elements) (syntax) Some of the several meanings that might fit into a compositional framework include (a) (early Katz and Fodor) Representations in terms of semantic features. Bachelor:

[+HUMAN, +MALE, +ADULT, +NEVER-MARRIED (?!)].

Semantic composition: adding feature sets together. Problems: insufficient structure for the representations of transitive verbs, quantifiers, and many other expressions; unclear status of uninterpreted features.

(b) Representations in a "language of thought" or "conceptual representation" (Jackendoff, Jerry Fodor); if semantics is treated in terms of representations, then semantic composition becomes a matter of compositional translation from a syntactic representation to a semantic representation. (c) The logic tradition: Frege, Tarski, Carnap, Montague. The basic meaning of a sentence is its truth-conditions: to know the meaning of a sentence is to know what the world must be like if the sentence is true. Knowing the meaning of a sentence does not require knowing whether the sentence is, *in fact*, true; it only requires being able to discriminate between situations in which the sentence is true and situations in which the sentence is false. Starting from the idea that the meaning of a sentence consists of its truth-conditions, meanings of other kinds of expressions are analyzed in terms of their contribution to the truth-conditions of the sentences in which they occur (Partee, 2006:1-2).

### 2.5 Syntactic Compositionality

In general, statements can be thought of as being split into two parts: one complete in itself, and the other needing to be supplemented, or "unsaturated," just like equations, inequalities, or expressions in analysis (Kratzer and Heim, 1998:3).

One of the main topics covered in this study is how the syntactic structure of a language and compositional semantics interact, despite the fact that most semanticists agree that, in general, the meaning of a larger expression is built in some systematic way from the meanings of the parts that make it up.

A direct compositionality point of view is one particular viewpoint on the subject. This view was explored perhaps most notably in Montague (1970) and was either generally accepted or at least taken as a serious desideratum in much of the work in linguistic formal semantics throughout the 1970s and 1980s (particularly work in what was then known as the Montague Grammar program). It was also taken as the foundation for semantics in syntactic theories such as Generalized Phrase Structure Grammar (Gazdar, Klein, Pullum, and Sag 1985) and is assumed in a large body within current grammatical theories that go under the rubric of Categorical Grammar, Type-Logical Grammar, and other related theories (Jacobson, 2014:8).

According to Frege and Carnap's theory, the compositionality principle yields two separate sub-principles: (i) the extension of a phrase is a function of the extensions of its parts, and (ii) the intension of a phrase is a function of the intensions of its parts. In addition, functional connectives result in complex sentences that satisfy these two sub-principles (ii). Thus, the truth-value of the two conjuncts and determines, for instance, the truth-value of the example below.

--John sings, and Mary dances (Aronoff and Rees-Miller, 2003: 374).

## 3. Methodology

The study adopts Leech and Short (2007) as an analytical model on which the study draws in analyzing lexical categories. The study analyzes ten lines of Knowers prayer.

### 3.1 Leech and Short (2007) Model of Lexical categories

#### a. **General:**

It means dealing with vocabulary, whether they are simple or complex; formal or colloquial; descriptive or evaluative; general or specific.

#### b. **Nouns:**

Dealing with nouns, are they abstract or concrete; what kinds of them: referring to events; perceptions; processes; or qualities?

#### c. **Adjectives:**

Dealing with adjectives, are they physical; visual; referential; social; psychological; emotive; or evaluative?

#### d. **Verbs:**

Dealing with verbs, do the verbs carry an important part of the meaning? Are they stative (referring to states) or dynamic (referring to actions, events, etc.)? Do they 'refer' to movements, physical acts, speech acts, psychological states or activities, perceptions, etc.? Are they transitive, intransitive, linking (intensive), etc.? Are they factive or non-factive.

**e. Adverbs:**

Are adverbs frequent? What semantic functions do they perform (manner, place, direction, time, degree, etc.)? Is there any significant use of sentence adverbs (conjuncts such as *so, therefore, however*; disjuncts such as *certainly, obviously, frankly*)?

**4. Data Analysis**

"إلهي قصرت الألسن عن بلوغ ثنائك"

**Oh, Allah, tongues are remissed reaching your laudation.**

Al-Imam Al-Sajjad (peace be upon him and his progeny) (henceforth, the author) starts his prayer with the name of Allah, which is here as a vocative. The sentence is verbal with active voice form. The verb "remissed" "قصرت" is an intransitive verb. The subject of the sentence is "the tongue" "اللسن". The prepositional phrase "عن بلوغ ثنائك" is an adverb of a preposition. The whole meaning of this sentence which is collected from the meaning of its words within a specific structure is that people unable to perform Allah's right.

كما يليقُ بجلالك،

**As befits with your majesty,**

This sentence is verbal with active voice form. The verb "befits" is intransitive. The subject here is the relative noun "who" "ما". The prepositional phrase "بجلالك" is an adverb of the preposition in the object position. This sentence, with the previous one, forms a high semantic meaning that is no laudation, as you deserve.

وَعَجَزَتِ الْعُقُولُ عَنْ إِدْرَاكِ كُنْهِ جَمَالِكَ،

**Minds failed in comprehending the truth of your beauty,**

The sentence is verbal, and the verb "failed" "عجزت" is a stative intransitive verb. The abstract noun "minds" "العقول" is the subject here. The noun "comprehending" "ادراك" is an abstract that refers to mind processes. The verb phrase and the object of preposition give the whole meaning of this sentence, which is the human mind unable and is limited to comprehend Almighty Allah's qualities.

وَأَنْحَسَرَتِ الْأَبْصَارُ دُونَ النَّظَرِ إِلَى سُبْحَاتِ وَجْهِكَ،

**and the eyes receded without looking at the glorifications of your face,**

The sentence is verbal with active voice. The verb "receded" "انحسرت" is intransitive verb and its subject is "eyes" "الابصار". The rest is adverbs of preposition. The general meaning of this sentence is that the human eyes unable to know the right knowledge.

وَلَمْ تَجْعَلْ لِلْخَلْقِ طَرِيقاً إِلَى مَعْرِفَتِكَ إِلَّا بِالْعَجْزِ عَنْ مَعْرِفَتِكَ

**You did not make a way for creatures to know you except by being incapable of knowing you.**

The sentence is verbal with an active voice. The verb "make" "تجعل" is transitive, and its subject is hidden back to Allah. The object is "way" "طريقاً", and the rest of the sentence is adverbs of a preposition. The whole meaning of the sentence is that humans never have a way to know Almighty Allah.

إلهي فاجعلنا من الذين ترسخت أشجار الشوق إليك في حداثق صدورهم،

**O' Allah, make us among those whose trees of longing for you are rooted in the gardens of their chests.**

It is also a verbal sentence. It has the imperative verb "make" "اجعلنا" and the past intransitive verb "rooted" "ترسخت". The subject of the sentence is "trees" "اشجار". The rest of the sentence is the adverb of a preposition. The whole meaning of the lexical categories is that our creator makes us love you from deep in our hearts.

وَأَخَذَتْ لَوْعَةَ مَحَبَّتِكَ بِمَجَامِعِ قُلُوبِهِمْ،

**And the madness of your love has taken their hearts,**

The sentence is verbal with active form. The verb "has taken" "اخذت" is transitive, and its subject is "madness" "لوعة". The adverb of preposition "hearts" "قلوب" is in the accusative place of the object. The general meaning of the whole category is that make us among those whose hearts are lost with your love.

فَهُمْ إِلَى أَوْكَارِ الْأَفْكَارِ يَأْوُونَ،

**So they seek refuge in the dens of thoughts.**

In Arabic, this sentence is nominal because it starts with the subject "they" "هم" which here as "مبتدأ". The author postpones the transitive verb "refuge" at the end of the second clause in order to focus on the adverb of the preposition "in the dens of thought" "الى اوكار الافكار". The whole meaning is that believers are occupied with thinking about the greatness of Almighty Allah.

وَفِي رِيَاضِ الْقُرْبِ وَالْمُكَاشَفَةِ يَرْتَعُونَ.

#### ***And in the paradises of closeness and revelation, they graze***

This sentence is a return to the previous one because the subject is the same "they" "هم", but here it is hidden. The verb "graze" "يرتعون" is an intransitive verb postponed at the end of the sentence in order to focus on the "paradise of closeness". The composition of the meaning is that the believers are preoccupied with the world because they are in the assemblies of closeness to Almighty Allah.

وَمِنْ حِيَاضِ الْمَحَبَّةِ يَكْأَسُ الْمُلَاطَفَةَ يَكْرَعُونَ.

#### ***and from the basins of love they drink with cup of kindness,***

This sentence is also returned back on the previous one, where its subject is ellipted "they" "هم". The transitive verb "swallow" "يكرعون" is postponed at the end of the sentence in order to focus on the adverb of the preposition "from the basins of love" "من حياض المحبة" "بكاس الملاطفة". The entire meaning is that the believers are blessed with the madness of closeness to Almighty Allah.

### **5. Result**

Due to the data analysis section, the study reaches the following statistical table:

<b>Intransitive verb</b>	<b>6</b>
<b>Transitive verb</b>	<b>4</b>
<b>Verbal sentence</b>	<b>6</b>
<b>Nominal sentence</b>	<b>3</b>
<b>Prepositional phrase</b>	<b>9</b>
<b>Active voice</b>	<b>10</b>
<b>Passive voice</b>	<b>0</b>

The table above shows that intransitive verbs are highly focused on than transitive. Verbal sentences are more employed than nominal sentences. The prepositional phrases are almost employed in all lines. Active voice is used in all lines where there is no employment of passive voice.

### **6. Discussions**

Apparently, the results reveal the following discussions:

1. Most of the sentences are composed of intransitive verbs with an adverb of prepositions. By using intransitive verbs, the author tries to exchange the object by the prepositional phrase, making the whole meaning more effective and powerful with the parallel form.
2. Verbal sentences are the most employed than nominal ones, which makes the sentences more dynamic.
3. All the lines are in active form to emphasize the subject.

### **7. Conclusions**

This study sheds light on how the meanings of parts of expression constitute the meaning of the whole expression. The study opines to apply this principle in the Arabic prayer of Knowers Monologue of Al-Imam Al-Sjjad (Peace be upon him). The study adopts Leech and Short's lexical categories (2007) as a model for analysis. The study reveals that Arabic prayer focuses on intransitive verbs and prepositional phrases to constitute the whole intended meaning. Also, the study revealed that choosing appropriate vocabulary is so important in composing a complete intended meaning, sentence structure has a significant role in composing meaning and integrating the appropriate vocabulary with specific syntactic structure yield the target's whole meaning.

**Funding:** This research received no external funding.

**Conflicts of Interest:** The authors declare no conflict of interest.

**Publisher's Note:** All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

**References**

- [1] Aronoff, M., & Rees-Miller, J. (Eds.). (2003). *The handbook of linguistics*. Malden; John Wiley & Sons.
- [2] Aronoff, M., & Rees-Miller, J. (Eds.). (2020). *The handbook of linguistics*. John Wiley & Sons.
- [3] Crystal, D. (2011). *A dictionary of linguistics and phonetics*. Malden: John Wiley & Sons.
- [4] Dixon, R. M. (2005). *A semantic approach to English grammar*. Oxford: Oxford University Press.
- [5] Jacobson, P. I. (2014). *Compositional semantics: An introduction to the syntax/semantics interface*. Oxford Textbooks in Linguistics.
- [6] Kratzer, A., & Heim, I. (1998). *Semantics in generative grammar* (Vol. 1185). Oxford: Blackwell.
- [7] Partee, B. (2006). Introduction to Formal Semantics and Compositionality.
- [8] Stainton, R. J., & Viger, C. (Eds.). (2008). *Compositionality, context and semantic values: essays in honour of Ernie Lepore* (Vol. 85). London: Springer.