A Cognitive Approach to the Study of Grammar: The Glorious Qur'an as a Signpost

Asst. Prof. Dr. Sadiq Mahdi Kadhim Al Shamiri and Dr. Zina Abdul-Hussein Khudhair Ashammari

University of Babylon
College of Education for Human Sciences
Department of English
hum.sadiq.mahdi@uobabylon.edu.iq
hum975.zynh.abdlhussein@uobabylon.edu.iq

Abstract

Langacker develops his theory of cognitive grammar (CG henceforth)by characterizing the linguistic units or constructions that populate a grammar; theories of this kind are called *construction grammars* .

Accordingly, this paper is intended to study some of the construction grammars from a cognitive perspective mentioned by Langcker to answer the following two questions: 1. Is grammar self directed ?, 2. Is there a relationship between the different types of construction grammars? Consequently, this paper attempts to achieve the following aims: 1. Presenting a cognitive way of looking at syntax, 2. Figuring out whether or not there is a kind of intermingle between constructions.

In order to achieve such aims, it is hypothesized that: 1. From a CG perspective, syntax and the lexicon can form a continuum of constructions, 2. Correspondence, profile determinacy, and autonomous vs dependent relation can be interrelated in the way of analyzing a grammatical construction cognitively. To test the validity of such hypotheses, the following procedures are adopted :1. Reviewing the literature about CG in general and construction grammars in particular, 2. Analyzing three Qura'nic verses following a developed model to highlight the relation between construction grammars.

Finally, this paper is hopefully intended to benefit students of linguistics as it introduces a cognitive way of explicating grammar.

A Cognitive Approach to the Study of Grammar: The Glorious Qur'an as a Signpost

Asst. Prof. Dr. Sadiq Mahdi Kadhim Al Shamiri
Dr. Zina Abdul-Hussein Khudhair Ashammari

Keywords: cognitive grammar, Langacker, construction grammar, the Glorious Quran.

1. Introduction

The pioneer to the approach of cognitive grammar (CG henceforth) is Ronal Langacker. He deals with language in a functionalist way. Such a way rejects many of the ultimate views of *generative grammar*. It does not hold that language is determined by autonomous mental structures, but rather that language processing (acquisition, storage, perception and production) follows the same principles as other aspects of human mental behavior(Nathan, 2009: 6).

CG adheres the fundamental issues of language to be emblematic or conventional pairing of a semantic structure with a phonological label. Grammar, then, consists of constraints on how these units can be combined to generate larger phrases which are also a pairing of semantics and phonology. The semantic facets are exhibited as image schemas rather than propositions(Web Resource).

Langacker develops his theory of CG by characterizing the linguistic units or constructions that populate a grammar; theories of this kind are called *construction grammars* .

Accordingly, this paper is intended to study some of the construction grammars from a cognitive perspective mentioned by Langcker to answer the following two questions: 1. Is grammar self directed ?, 2. Is there a relationship between the different types of construction grammars? Consequently, this paper attempts to achieve the following aims: 1. Presenting a cognitive way of looking at syntax, 2. Figuring out whether or not there is a kind of intermingle between constructions.

In order to achieve such aims, it is hypothesized that: 1. From a CG perspective, syntax and the lexicon can form a continuum of constructions, 2. Correspondence, profile determinacy, and autonomous vs dependent relation can be interrelated in the way of analyzing a grammatical construction cognitively. To test the validity of such hypotheses, the following procedures are adopted :1. Reviewing the literature about CG in general and construction grammars in particular, 2. Analyzing three Qura'nic verses following a developed model to highlight the relation between construction grammars.

Finally, this paper is hopefully intended to benefit students of linguistics as it introduces a cognitive way of explicating grammar.

2. Cognitive Grammar: A General Overview

A great number of linguists during the 1970s were interested in the study of the relation between language and mind. They did not follow the prevailing propensity to explain linguistic patterns by means of appeals to the specific internal structures of language which can be divided into different components such as syntax and semantics. Rather, they examined the relation of language structure to things outside language. Also, they emphasized the role of meaning in language; the meaning of lexical items and grammatical items(Sydney, 1971: 126).

The most influential cognitive linguists were Wallace Chafe, Charles Fillmore, George Lakoff, Ronald Langacker, and Leonard Talmy. Each of these linguists began developing their own approach to language description and linguistic theory. One of the important assumptions shared by all of these scholars is that meaning is so central to language that it must be a primary focus of study. Linguistic structures serve the function of expressing meanings and hence the mappings between meaning and form are a primary subject of linguistic analysis. Linguistic forms, in this view, are closely linked to the semantic structures they are designed to express(ibid.) .

CG introduces the clearest definition of a grammar within a cognitive theory of language. Langacker,(1987: 37), defines a CG as "a structured inventory of conventional linguistic units". It means that a linguistic unit is structured as it has two poles: semantic and phonological . A linguistic unit is conventional as it can be shared by a number of individuals. By the term "inventory" Langacker simply means that grammar is not generative, but a collection of conventional symbolic units.

In a word, CG is based on two important guiding assumptions. The first assumption is called *the symbolic thesis* which holds that a unit of grammar should be based on a form- meaning pairing. That is, a unit of a grammar cannot be studied independently of meaning. The study of grammar is the study of the full range of units that make up a language. The second assumption, on the other hand, is *the usage- based thesis* which holds that the "mental grammar;" the speaker's knowledge of his language is formed by the "abstraction of symbolic units from situated instances of language use", the speaker's internalized rules(Lancgker, 2000:471).

3. Characteristics of Cognitive Grammar

Here are four characteristics of CG:

3.1 Grammatical knowledge: a structured inventory of symbolic units

The truism of CG is that knowledge of language (mental grammar) is represented in the mind of the speaker as an inventory of symbolic units; once an expression is sufficiently used, it acquires the status of a *"cognitive routine*" that it becomes a unit. From this perspective, a unit is a symbolic entity that is not inbuilt compositionally by the language system but is stored and accessed as a whole.

Furthermore, the symbolic units represented in the speaker's grammar are *conventional*. The *conventionality* of a linguistic unit relates to the idea that linguistic expressions become part of the grammar of a language by virtue of being shared among members of a speech community. Thus conventionality is a matter of degree: an expression like *cat* is more conventional (shared by more members of the English-speaking community) than an expression like *infarct*, which is shared only by a subset of English speakers with specialist knowledge relating to the domain of medicine (this expression refers to apportion of tissue that has died due to sudden loss of blood supply).

It is worth noting that the contents of this inventory are not stored in a random way. The inventory *is structured*, and this structure lies in the relationships that hold between the units. For example morphemes make up words and words make up phrases which in turn make up sentences(Langacker 1987: 73).

3.2 Features of the closed-class subsystem

According to Talmy(2002), the closed-class subsystem is semantically restricted and has a *structuring function*, while the open-class system is *semantically unrestricted* and has the function of providing conceptual content. To illustrate the restricted nature of the closed-class system, Talmy observes that while many languages have nominal inflections that indicate *number*, no language has nominal inflections that indicate *colour*. For example, many languages have a grammatical affix like plural *-s* in English, but no language has a grammatical affix designating, say, *redness* (Evans and Green, 2006:503).

3.3 Schemas and instances

A *schema* is a symbolic unit that emerges from a process of abstraction over more specific symbolic units called *instances*. In other words, schemas form in the mental grammar when patterns of similarity are abstracted from utterances, giving rise to a more schematic representation or symbolic unit. The relationship between a schema and the instances from which it emerges is the schema-instance relation. This relationship is hierarchical in nature. For example, common nouns like *cats, dogs, books, flowers* and so on, each of these expressions is a highly entrenched symbolic unit(ibid. :504).

3.4 Sanctioning and grammaticality

A CG should give a clear idea about how speakers realize what counts as a *well-formed* or *grammatical* utterance in their language. So, in the cognitive approach, well-formedness is accounted for on the basis of conventionality. It is true that grammar is conceptualized not as an abstract system of rules, but as an inventory of symbolic units. Moreover, these symbolic units are derived from language use. The cognitive model captures generalizations and defines well-formedness on the basis of a categorisation process. For example, if the structure of an utterance produced by a speaker can be categorised as an instance of an existing

schema, it is well-formed. Langacker uses the term *sanction* to refer to this categorisation process. For example, *coding* is the process whereby a speaker searches for a linguistic expression in order to express a concept. If the form the speaker arrives at matches forms existing in his or her inventory, this represents a case of sanction and thus well formedness (ibid.).

4. Cognitive Grammar: Constructions

4.1 Phrase Structure

As it has been mentioned earlier, in this paper, that units of grammar are symbolic, that symbolic unit is divided into simplex units and complex units. These units are called constructions. The idea of construction in CG can be approached by looking at the way words combined to make phrases and how the relation within phrases can be made. A construction consists of a form and a meaning, or a function, connected with that form. A construction is therefore a form-meaning pairing. A construction, for instance the noun phrase in English, *the ball* that the determiner with (the) form, has a semantic representation as DET(determiner), and that the noun with the form *ball* has a semantic representation as BALL(Evans and Green, 2006:582).

4.1.1 Valance

Within the phrase level constructions grammars, valance refers to the number of participants a verb requires in order to complete its meaning. For example, a verb like *die* only involves a single participant, (for example, *He died*) whereas a verb like *love* involves two (for example, *Lily loves George*). Valance is an alternative for the traditional use of head- dependent relation. In traditional terms, dependents are divided into two main categories*: complements* and *modifiers. Complements* are phrase-level units that complete the head both in semantic and structural terms. For example, a preposition is often incomplete without the noun phrase that follows it, in which case the noun phrase is the complement of the preposition. *Modifiers,* on the other hand, are optional phrase-level units that provide additional information of a more incidental kind. The role of determiners and quantifiers in CG is not important . What is important, here, is the role of the predication.

There are three main factors that determine valance:(1) correspondence; (2) profile determinacy; and (3) conceptual autonomy versus conceptual dependence (Lancgker, 2002: 415).

4.1.2 Correspondence

The term correspondence refers to the fact that the component structures within a composite structure or construction share some common aspects of their structure. For example, the preposition phrase *under the bed* .While the NP *the bed* is a nominal predication, the preposition *under* is a relational predication, which means that it only becomes fully meaningful when it relates two entities which are represented as part of its meaning in terms of a schematic representation of something in space(Evans and Green, 2006: 583).

Asst. Prof. Dr. Sadiq Mahdi Kadhim Al Shamiri
Dr. Zina Abdul-Hussein Khudhair Ashammari

4.1.3. Profile Determinacy

Profile determinacy is a way of symbolizing a grammatical expression that is to say what that construction designates . All linguistic expressions profile something. Such a profiling is not objectively done, rather it is a matter of experience and knowledge of conventional usage .the meaning of a word derives from the specific relationship between its profile and its base. For example, the word "uncle" profiles a man in a specific relationship to other people in the domain of a family(Langacker 1990, 208).

Grammatically speaking, profiling can be explained through the following example, the phrase *under the bed*. This construction contains *under*, which profiles a RELATION, and *the bed*, which profiles a THING, but the phrase as a whole *under the bed* profiles a RELATION rather than a THING in the sense that it describes a property of some entity in terms of its location in space((Evans and Green,1971: 585).

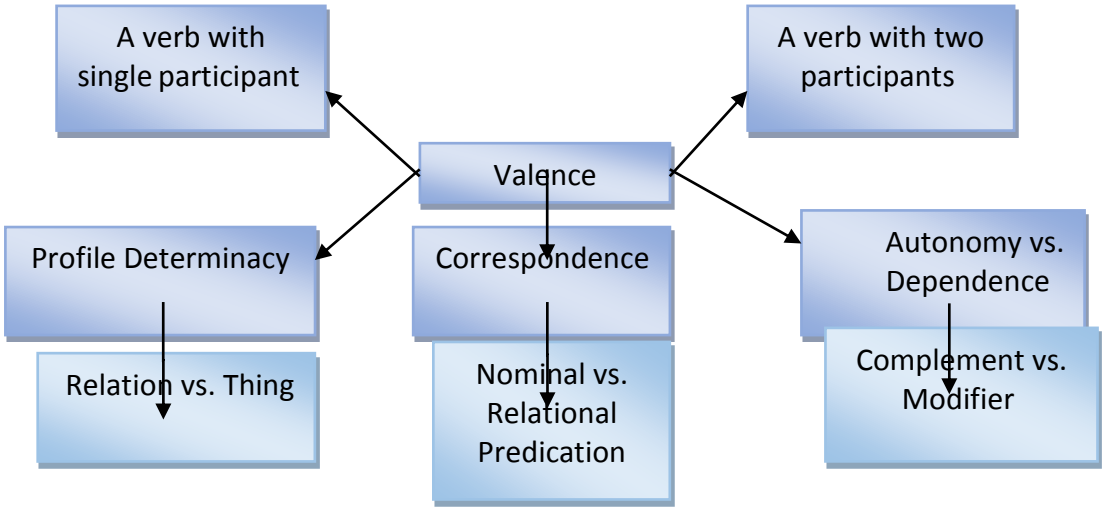
4.1.4 Conceptual Autonomy Versus Conceptual Dependence

This factor, traditionally, can be seen in terms of Head and dependent . But for Langacker can be explained in the following way:

One structure, D, is dependent on the other, A, to the extent that A constitutes an elaboration of a salient substructure within D. (Langacker 1987: 300)

This means that the structure that provides the elaboration is conceptually autonomous (for example, *the bed* in *under the bed*), while the structure that is elaborated is dependent, because it requires elaboration in order to become fully meaningful (*under* in *under the bed*). Langacker calls the schematic aspect of a component structure that is elaborated in a valence relation the **elaboration site**. Accordingly, there are two main types of dependent: complements and modifiers. The former is a component that elaborates the Head. For example, in a preposition phrase like *under the bed* the preposition *under* (the profile determinant) is dependent and its complement is the autonomous noun phrase *the bed* which elaborates the head. While the latter is a component that is elaborated by the head. For example, in the NP *that cat under the table*, the profile determinant *cat* is autonomous and *under the table* is dependent. The head *cat* elaborates t *under the table*. This means that *under the table* is a modifier rather than a complement (Langacker, 2000: 202).

A Developed Model for the Analysis of Constructions at the Phrase Level.



5. Data Analysis

This section is devoted to the analysis of three Qur'anic verses.

" يَا أَيُّهَا الَّذِينَ آمَنُواْ كُتِبَ عَلَيْكُمُ الْقِصَاصُ فِي الْقَتْلَى الْحُرُّ بِالْحُرِّ وَالْعَبْدُ بِالْعَبْدِ وَالأُنثَى بِالأُنثَى"[البقره :١٧٨]

The above verse can be analysed according to the above model as follows:

1. Valance

The verb كتب in the above verse can be analyzed according to valence as having more than one participant which means that God (the first participant) should prescribe (يكتب) the laws for people(the second participant).

2. Correspondence

Nominal vs. Relational Predication

The preposition phrase **الْحُرُّ بِالْحُرِّ** can be divided into *the preposition (ب)* which is a relational predication which can only be meaningful when it relates two entities(ال) and **الْحُرُّ** which are represented as part of its meaning .

3. Profile Determinacy

Relation vs. Thing

The phrase **بِالأُنثَى** الانثى the word *الانثى* profiles a relation while the phrase *بالانثى* profiles a thing which is a female in a specific relationship to other people in the domain of a human race .

4. **Conceptual Autonomy Versus Conceptual Dependence**

Complement vs. Modifier

A Cognitive Approach to the Study of Grammar: The Glorious Qur'an as a Signpost

Asst. Prof. Dr. Sadiq Mahdi Kadhim Al Shamiri
Dr. Zina Abdul-Hussein Khudhair Ashammari

In the preposition phrase *بالعبد العبد*(the profile determinant) is dependent and its complement is the autonomous noun phrase *العبد* which elaborates the head. So, it is a complement rather than a modifier.

يَا أَيُّهَا النَّاسُ قَدْ جَاءَتْكُم مَّوْعِظَةٌ مِّن رَّبِّكُمْ وَشِفَاءٌ لِّمَا فِي الصُّدُورِ وَهُدًى وَرَحْمَةٌ لِّلْمُؤْمِنِينَ"(يونس٥٧)

1. Valance

The verb *جاء* in the above verse involves two participants; the first one is God who brings evidence and this evidence should be recognized by people who are the second participants.

2. **Correspondence**

Nominal vs. Relational Predication

Such a prepositional phrase as *في الصدور* can be divided into *في* which is said to be relational. That is, it will be meaningful if and only if it is complemented by the head which is الصدور.

3. **Profile Determinacy**

Relation vs. Thing

وشفاء لما في الصدور. Here, *وشفاء لما في* profiles a relation while the whole phrase *وشفاء لما في الصدور* profiles a thing which is to say that there is a kind of (illness).

4. Conceptual Autonomy Versus Conceptual Dependence

Complement vs. Modifier

جاءتكم موعظه من ربكم. The vp can be divided into two parts من ربكم and *جاءتكم موعظة*. The first part is said to be dependent while the second part is autonomous. However, the dependent part is an elaboration for the autonomous one , hence it is a modifier.

الْحَمْدُ لِلَّهِ الَّذِي خَلَقَ السَّمَاوَاتِ وَالأَرْضَ وَجَعَلَ الظُّلُمَاتِ وَالنُّورَ ثُمَّ الَّذِينَ كَفَرُواْ بِرَبِّهِم يَعْدِلُونَ(الانعام: ١)

1. Valance

The verbs *خلق* and *جعل* in the above verse, refer to God Who is the only one that participates in the creation of Heavens and earths. While the verb *كفروا* refers to people who don't believe in God . So, there are two participants God and people.

2. **Correspondence**

Nominal vs. Relational Predication

ب بربهم يعدلون is a relational predication which means it only becomes meaningful when it relates the two entities *ربهم* and *يعدلون* which are part of its meaning. While بربهم يعدلون is a nominal predication .

3. **Profile Determinacy**

Relation vs. Thing

Profiles a relation in the sense that it is regarded as the determinate (ب(بربهم يعدلون of the whole phrase.

4. **Conceptual Autonomy Versus Conceptual Dependence**

Complement vs. Modifier

Their Guardian Lord. According to CG, this phrase can be divided into *their* which is a head of the NP *Guardian Lord* which, in turn, is regarded as a complement of *their*.

Conclusions

Theoretically, it is concluded that CG represents a line of demarcation from the prevailing assumption of explaining linguistic patterns with reference to their syntactic or semantic internal structures. Instead, CG attempts to model cognitive processes that motivate the formulation and use of symbolic units. This symbolic nature holds that a unit of grammar should be based on a form- meaning pairing. That is, a unit of a grammar cannot be studied independently of meaning. Accordingly, the first hypothesis which states that: *From a CG perspective, syntax and the lexicon can form a continuum of constructions* can be confirmed.

Practically, it is concluded that there is a kind of intermingle between the three factors of valance at the phrase level. That is in the analysis of components structure within a composite construction, according to the valance's three factors, the head word is dependent and it cannot stand alone unless it is modified, complemented, or the construction can provide a relation which is, in turn, profiled a thing. This conclusion can confirm the second hypothesis : *Correspondence, profile determinacy, and autonomous vs dependent relation can be interrelated in the way of analyzing a grammatical construction cognitively.*

The researchers' elucidation

One might ask the following: *is there a smell of psycholinguistics in this paper*? The answer is that, as far as the word cognition is concerned yes there is. However the researchers do not describe scenes found in the cognition of language users, rather they are making clear the fact that language users have choices over portraying what they have in their minds in linguistic terms.

A Cognitive Approach to the Study of Grammar: The Glorious Qur'an as a Signpost

Asst. Prof. Dr. Sadiq Mahdi Kadhim Al Shamiri
Dr. Zina Abdul-Hussein Khudhair Ashammari

References

Evans, V. and Green, M. (2006) *Cognitive Linguistics*. Edinburgh: Edinburgh University Press Ltd.

Lamb, Sydney. (1971) *Crooked Path of Progress in Cognitive Linguistics*. Georgetown: University Monograph Series on Language and Linguistics. Available *at www.cognitive linguistics/org/en/about cognitive linguistics.*

Leonard, Talmy, (2000) *Toward a Cognitive Semantics* . Cambridge, MA: MIT Press.

Nathan, Geoffrey. (2009). *Where is the Natural Phonology Phoneme in?* Wayne State University.

Langacker, R. (1987) *Foundations of Cognitive Grammar, Volume I*. Stanford, CA: Stanford University Press.

Langacker, R. (2000) '*A dynamic usage-basked model'*, in M. Barlow and S. Kemmer (eds), *Usage-Based Models of Language*. Stanford, CA: CSLI Publications, pp. 1–64.

Langacker, R.(2008). *Cognitive Grammar :A Basic Introduction.*Oxford: Oxford University Press.

Web Resource:

se.iitk.ac.in/users/.../10/langacker_intro-cog-**grammar**-cogSci86