Cognitive Grammar with Reference to Passive Construction in Arabic

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Abstract

The purpose of this study is to examine Cognitive Grammar (CG) theory with reference to the active and the passive voice construction in Arabic. It shows how the cognitive approach to linguistics and construction grammar work together to explain motivation beyond the use of this syntactic construction; therefore, formal structures of language are combined with the cognitive dimension. CG characterizations reveal the limitations of the view that grammatical constructions are autonomous categories. They are interrelated with conceptualization in the framework of cognitive grammar. The study also accounts for the verbs which have active form and passive meaning, and the verbs which have passive form and active meaning.

Keywords: Cognitive Grammar, Voice, Arabic, Theme-oriented.

1. Introduction

In his *Aspects of the Theory of Syntax*, Chomsky represented each sentence in a language as having a surface structure and a deep structure. The deep structure represents the semantic component and the surface structure represents the phonological approach. He explained that languages' deep structures share universal properties which surface structures do not reveal. He proposed transformational grammar to map the deep structure (semantic relations of a sentence) on to the surface structure. Individual languages use different grammatical patterns for their particular set of expressed meanings. Chomsky, then, in *Language and Mind*, proposed that language relates to mind. Later, in an interview, he emphasized that language represents a state of mind. On the other hand, the cognitive approach to analyze natural language emerged. This approach is manifested in the works of George Lakoff, Ron Langacker and others. Isac and Reiss (2013), in their book *I-Language*, draw heavily on the Chomskyian perspective of cognitive biolinguistics, which refers to language as a human cognitive entity based on the mind of the speaker. There has been a shift to a cognitive and functional perspective of linguistic knowledge.

Langacker (2008) stresses the importance of the relationship between grammatical constructions and mental constructions. “Conceptual semantic description is thus a major source of insight into our mental world and its construction. Grammatical meanings prove especially revealing in this respect” (2008: 4). He states that “grammar is symbolic in nature” (2008: 5). According to Langacker, “linguistic meaning involves both conceptual content and the construal imposed that content” (2008: 44). This study attempts to add the cognitive dimension to Arabic grammar. It shows how the theory of Cognitive Grammar can be applied in Arabic constructions.

2. Research Problem

The research problem of this study is to provide an account of voice construction in Arabic with reference to cognitive construction grammar. It brings the literature on Cognitive Grammar through a consideration of the following research questions:

1- What are the main features of Cognitive Construction Grammar?
2- How can the theory be used to explain passive construction in Arabic?

Most Arabic verbs satisfy the conditions for the passive voice. However, a major source of discrepancies is that some verbs have active form and passive meaning, and other verbs have passive form and active meaning. Cognitive Grammar is used in the study to account for the phenomenon. It pursues two interrelated goals:

1- To establish a cognitive grammatical analysis of voice construction in Arabic that offers explanations for the phenomenon.
2- To account for the mismatch between morphology and syntax found with some passive verbs in Arabic.

3. Literature Review

Cognitive Grammar has received scant attention in Arabic. The study attempts to contribute to the discussion of this theory and its application in Arabic. Cognitive linguistics has been introduced by Fillmore (1975, 1976), Lakoff (1987, 1992), Langacker (1987, 1991). Cognitive Grammar is associated with Langacker’s work. Cognitive Grammar is the key to conceptual structure in language. Goldberg (2000) discusses causative verbs constructions as having agentive argument and patient argument.

The passive has been discussed by many grammarians. Halliday (1970) explores voice as a grammatical construction. Halliday (1967) refers to transitivity and theme in English. In Arabic literature, Wright (1975) sketches the grammar of Arabic. Moreover, Khalil (1993) examines the Arabic translation of English passive sentences. Rosenhouse (1988) points out the occurrence of the passive in different types of texts in English,

Hebrew and Arabic". Now, before moving to the analysis of our data, it is appropriate to outline the theoretical framework for the analysis of voice construction in Arabic.

4. Theoretical Framework:

Construction Grammar draws heavily upon Fillmore's work on Case Grammar (1968, 1977) and Frame Semantics (1982, 1985) (Boas 2013: 233). The study utilizes Langacker's (2008) model of Cognitive Grammar as a theoretical framework because it is a concept-oriented approach to grammatical structures. Meanings compose of concepts and are communicated in the form of words and structures. Grammatically speaking, meaning-bearing forms in languages are divided into two different categories; the open-class (lexical) and the closed-class (grammatical). The closed-class includes grammatical patterns, relations and constructions. This theory builds on the initial phase of Edward Sapir and Benjamin Whorf hypothesis that has stretched out for many decades. The theory is a chance to refine and clarify the relation between language and thought, and to reintroduce this relation more effectively, and to make its rationale more evident. Cognitive Grammar has led to better understanding of the conceptual basis of language structure. It offers a coherent view of language structure. It reinforces the fact that grammar is not a formal system but also a meaningful component of language and it is linked to human cognition and interaction. Linking conceptualization with linguistic expressions is familiar in linguistics as the case is in cognitive semantics. Metaphors, for example, are conceptual semantic descriptions. What might be new here is to link conceptualization with grammatical constructions. Analyzing language from this dimension leads to remarkable conclusions about linguistic construction and human cognition.

It has been a standard doctrine that grammatical classes are not semantically definable. In CG, basic categories – notably noun and verb – have conceptual characterizations at both prototype level (for typical examples) and the schema level (valid for all instances). The schemas are independent of any particular conceptual content, residing instead in basic cognitive abilities inherent in the archetypes: for nouns, grouping and reification; in the case of verbs, the ability to apprehend relationships and to track their evolution through time. An expression's grammatical category depends on the nature of its profile (not its overall content). Thus a noun profiles a thing (defined abstractly as any product of grouping and reification), while a verb profiles a process (a relationship tracked through time). Despite being polar opposites conceptually, the two most fundamental grammatical – nouns and verbs – show extensive parallelism. Both divide into major subclasses: count vs. mass for nouns, perfective vs. imperfective

for verbs. Count vs. mass and perfective vs. imperfective are not rigid lexical distinctions, but are malleable owing to alternate construals as well as systematic patterns of extension.

Grammatical constructions are traditionally viewed as abstract entities. They are represented as meaningful in CG. Grammatical meanings prove to be useful in this respect. CG explains the relation between grammar, meaning and cognition. Langacker assures that CG is a theory of grammar and it is not all about semantics. The main claim is that grammar is symbolic in nature, because it combines the dual property of a linguistic sign (semantic structure and phonological structure). Grammar and Lexicon together form complex expressions. The theory focuses on refuting the belief that syntax is autonomous or a separate linguistic component, distinct from both lexicon and semantics. Cognitive and functional linguists argue that "everything in language is **motivated** in such terms (even if very little is strictly **predictable**)" (Langacker 2008: 14).

Ronald Langacker developed Cognitive grammar as a cognitive approach to language. His approach considers the basic units of language as symbolic pairings of a semantic structure and a phonological structure. He extends the notion of symbolic units (also called constructions) to the grammar of languages. The semiological nature of language pertains that meanings are symbolized phonologically. Langacker assures that there are "three kinds of structures: **semantic**, **phonological**, and **symbolic**" that language needs (2008: 15). The main argument of CG is the interrelation between semantics, phonology and syntax. According to Langacker, the "**Semantic structures** are conceptualizations exploited for linguistic purposes" (2008:15, the '**phonological structure'** includes sounds, gestures and orthographic representations, and **grammar** is a kind of **symbolic structure** which incorporates the other two structures. According to him, symbolic structures incorporate both the semantic pole and the phonological pole.

In his seminal work, *Foundations of Cognitive Grammar*, Langacker assumes that linguistics structures are motivated by general cognitive processes. In formulating his theory, he refers to gestalt psychology and draws an analogy between linguistic structures and aspects of visual perception. Grammar is described as assemblies of symbolic structures (form-meaning pairings). He proposes the concept of construal. An expression's meaning depends not only on the conceptual content it evokes but also on the construal on that content. Broad classes of construal phenomena include specificity, focusing, prominence, and perspective. CG introduced the concept of construal to refer to the aspects focusing. It is "the **selection** of conceptual content for linguistic presentation, as well as its arrangement into what can broadly be described (metaphorically) as

foreground vs. **background**." (2008: 57). Focusing or foregrounding is a kind of prominence, or profiling in terms of Langacker. In CG, the primary focal participant is called the trajectory (tr). The secondary focal participant is called the landmark (lm). Langacker (2008) argues that

> The trajector and landmark of a profiled relationship are the participants accorded primary and secondary focal prominence. These two degrees of focal prominence are offered in CG as schematic characterizations of subject and object. A subject is a nominal expression that specifies the trajector of a profiled relationship. An object (when there is one) specifies the landmark. (2008: 378)

In the passive construction, the trajectory is the patient that is the person about whom the predication is being made. It is the only profiled participant. In all passive cases the formation of focusing on the patient is called thematization. In Langacker's terms, the passive provides a construal of choosing another participant than the doer as a starting-point for the message. While the active and the passive have the same content, their structures differ in either profiling the agent or the patient. Langacker (2008: 370-405) also differentiates between theme orientation and agent orientation. Either orientation can be the default orientation in a language. However, according to Langacker (2008: 373), every language makes at least some use of both alignments".

Cognitive Grammar considers grammatical constructions as cognitively-motivated features of language (Boas 2013: 239). According to Boas (2013: 244), "the existence of any construction in the grammar is thought to be by and large motivated by properties of human interaction and cognition, as many facets of grammatical form emerge from social interaction between speakers". Goldberg (2006: 5) also stresses that constructions are composed of pairings of form and meaning. In other words, "most general syntactic constructions have corresponding general rules of semantic interpretation" (Boas 2013: 234). CG discusses both construction-specific and more general constraints.

5. Voice as a cognitively motivated construction

Voice is a grammatical category which describes the relation between the subject and the action. Voice is defined as a verb form or syntactic construction which indicates the relation of the subject of the verb to the action which the verb expresses (Merriam-Webster, 1993). In passive voice sentences, the grammatical subject of the verb is not the agent but it is rather the patient or the recipient of that action. According to Lyons (1968: 376), the active signifies an 'action' whereas the passive signifies a 'state'.

Certain grammatical constructions are affirmed in one language and denied in another. Languages employ different sets of surface structures to indicate the same deep structures. Arabic, for example, does not favor passive constructions (Rosenhouse 1988: 92-93). Arabic is strongly agent-oriented and uses theme orientation to be a focus of attention and attract focal prominence.

> If either agent or theme orientation predominates in a language, there has to be some provision for those occasions when the speaker wishes not to focus the participant in question. The options made available are traditionally referred to as **voice**. In an agent-oriented system, the default alignment is called **active voice**; the alternative (with focused theme) is called **passive voice**. In a theme-oriented system, an **antipassive** construction provides an alternative to the default alignment (which has no standard term). (Langacker 2008: 382-383)

According to Halliday (1970: 161), the choice of the passive results from the speaker's viewing the grammatical subject as the theme of his sentence, thus giving it more prominence. Languages use different linguistic means to achieve this thematization of the patient. Tomlin and Caldwell-Harris (2015: 31-50) argue that Grammatical structures set up regions with different degrees of salience. They point out that a great deal of research is directed at how slaience corresponds to grammatical structures and roles.

> Agent and theme attract focal prominence because each has a kind of cognitive salience that sets it apart from other semantic roles in its experiential realm. Agents belong to the "active" realm—that of action, change, and force, of mobile creatures acting on the world…. On the other hand, themes belong to the "passive" realm of settings, locations, and stable situations, where objects with particular properties are arranged in certain ways" (Langacker 2008: 370)

Langacker (2008) discusses the use of passive and theme orientation in language. They denote cognitive salience in language use.

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According to Langacker (2008: 384), the function of a passive is "that of **defocusing** an agent…. The agent's identity may be unknown,

irrelevant, or best concealed…." Defocusing means implicit. Yap and Iwasaki (2003: 427) stress that in passive construction "there is lack of volition or willingness on the part of the subject". There are different kinds of passive constructions. Commonly, passives are formed through verbal derivation. The default function served by a passive is that of **defocusing** an agent. Therefore, the passive is a cognitively-motivated construction. Therefore, the passive deserves to be examined as cognitively-motivated.

6. The active and the passive in Arabic

Wright (1975) argues that all verbs in Arabic "have two voices, the *active* and the *passive*" (1975: 49). As for the passive structure, Arabic uses apophonic vowel changes derive a passive verb from an active or affixation of certain morphemes (such as the prefix *in-*). Thus, for example, the verb *kasara* 'to break' can be *kusira* or *in-kasara*. Let us consider the following examples of Arabic active and passive verbs:

(1) كسر زيد الباب
kasara zaidun al-baab-a
broke-PERF-ACT Zaid-NOM DEF-door-ACC
"Zaid broke the door"

(2) فتح زيد الباب
fataHa zaidun al-baab-a
opened-PERF-ACT Zaid-NOM DEF-door-ACC
"Zaid opened the door"

(3) كتب زيد الكتاب
kataba zaidun al-kitaab-a
wrote-PERF-ACT Zaid-NOM DEF-book-ACC
"Zaid wrote the book"

(4) كسر الباب
kusira al-baabu
broken-PERF-PASS DEF-door-NOM
"The door was broken"

(5) فتح الباب
futiHa al-baabu
opened-PERF-PASS DEF-door-NOM
"The door was opened"

(6) كتب الكتاب
kutiba al-kitaab-u
written-PERF-PASS DEF-book-NOM
"The book was written"

In the previous examples there are two inherent roles: the affected participant, and the agent of the action, though the latter is not overtly mentioned. Other verbs are active in form but passive in meaning. They

exhibit one overt participant role. They refer to events that took place on something without giving any role to the agent. Such verbs are called pseudo-intransitive verbs. Ryding (2005: 657) refers to them as derivational passive verbs. They have the verb forms V, VII, and VIII. Consider the following examples:

(7) تمزق الورق
tamazzaqa al-waraqu
toren-PERF-ACT DEF-papers-NOM
The papers tore

(8) انكشف السر
?inkašafa al-sirr-u
disclosed-PERF-ACT DEF-secret- NOM
The secret was disclosed

(9) انصب الماء
?inSabba al-maa?u
poured-PERF-ACT DEF-water-NOM
The water was poured

Let us move to the usage of the passive, i.e. when the passive is used in Arabic. Wright (1975: 50) summarizes the situations when the passive is used in Arabic;

1- When God, or some higher being, is the doer of the action;
2- When the doer is not known;
3- When the speaker does not wish to mention the doer
4- When the attention is directed to the patient not the agent

Cognitive Grammar goes beyond the formal properties to justify the occurrence and usage of this construction. Traditionally, the passive is used when the author is unknown. Rhetorically, it is used to thematize the patient. Most Arabic verbs may be inherently bear a feature [+-active] when coming from the lexicon.

This study attempts to reintroduce the usage of the passive in Arabic in terms of cognitive grammar. It argues that there are four profiles of the passive Arabic verbs.

1- Default profile; it is construed as the agent is unknown
2- Theological profile; it is construed as God is the agent
3- Intransitive meaning profile
4- Focused profile; the patient is saliently invoked

The first profile is the agentless passive which means that the speaker does not know who the agent is. Here emerge the concepts of the archetype which is discussed by CG. The archetype pertains to what we apprehend as the default arrangement or the ideal structure. The agent-verb relationship represents the basic conceptual archetype or the “canonical event model”. The passive form is an instance of such canonical models which serve as

their prototype. The agent-patient relationship is archetypical with the patient as the trajectory and the agent is the landmark.

Admittedly, the passive is a structure that profiles the relationship between the agent and the verb. The second profile or the theological profile is related to God. Let us take the passive Arabic verb توفى "tuwufia". What is the meaning of the passive form in the sentence "tuwufia al-rajulu"? How does it contrast with the active verb "tawafa"?

(10) توفى الرجل
tuwufia al-rajulu
Died-PERF-PASS DEF-man-NOM
The man died

(11) توفاه الله
tawafa-hu allahu
Died-PERF-ACT him-ACC DEF-God-NOM
The man died

Since there is no difference in the semantic content between (10) and (11), the contrast must be therefore in the construal. Describing this verb as merely either active or passive would be insufficient, for it has to be described as a salient profile. The passive verb is saliently invoking conceived a theological profile. As explained above, linguistic meaning includes conceptual content and the construal which is the interpretation of meaning. The construal is how individuals perceive and comprehend linguistic meaning. It includes specificity, focusing and prominence. Another example of the theological profile can be seen in the verb استشهد 'ustišhida'.

(12) استشهد الرجل
ustišhida al-rajulu
Be martyred-PERF-PASS DEF-man-NOM
The man was martyred

The theological profile can also be seen in the imperfective passive verb يوجد "yujadu". It denotes existential iconicity. An analysis of these verbs shows that they are cognitively-motivated by the fact that God is the agent and the focus is on the patient. Existential constructions refer to sentences that assert or deny the existence of something. English, for example, uses the unstressed, non-deictic 'there'. It indicates that the profiled relationship is related to God. Consider the following sentences:

(13) يوجد رجل فى المزرعة
yujadu rajulun fi al-mazraʔa
exist-IMPERF-PASS INDEF-man-NOM in-PREP DEF-farm-GEN
There is a man in the farm

(14) يوجد الله ما يشاء
yujidu Allahu ma-yašaa?u

exist-IMPERF-ACT God-NOM what-RELATIVE
He wills
God creates what He wills

(15) وجد الكتاب
wujida al-kitabu
found-PERF-PASS DEF-book-NOM
"The book was found"

Sentence (14) presupposes information in (13). Presupposition can be seen as implications which are construed in the background and which are assumed to be already known to language users. Consider to what extent this profiled relationship, i.e. between the agent and the verb is universal and may be applied in other languages. The verb "exist" in English has the same profile but in the active form. It cannot occur in the passive form since it is a transitive verb. It is used as synonymous with the passive "to be created". Arabic categorization schemes are not arbitrary. It is not based on fuzzy logic. The agentless verb "yujadu" which refers to the fact that God is the agent only occurs in the imperfective passive form. If it occurs in the perfective passive form as in (9c), it refers to an anonymous agent.

The third profile, i.e. Intransitive meaning profile can be seen in the deponent Arabic verbs. Deponent verbs are defined as "PASSIVE in most of their FORMS, but ACTIVE in meaning" (Crystal: 2008). A deponent verb is "a verb which exhibit exclusively passive morphology but which functions as an active verb… A label occasionally used to denote any class of verbs in some language whose morphology is at odds with their syntactic behaviour" (Trask 1992: 78). Deponency is a mismatch between form and function. Given that there is a formal morphological opposition between active and passive that is the normal realization of the corresponding functional opposition, deponents are a lexically specified set of verbs whose passive forms function as actives. The normal function is no longer available (Baerman 2007). Consider the following Arabic perfective verbs which occur in the passive:

(16) دهش الرجل
duhiša al-rajulu
Be astonished-PERF-PASS DEF-man-NOM
The man was astonished

(17) عنى راديو القاهرة بالأزمة
ʔuniya radyu al-Qaahirati bil-ʔazmati
Be interested-PERF-PASS radio-NOM Cairo-GEN with DEF-crisis-GEN
Cairo Radio focused on the crisis

(18) هرعت سيارات الإسعاف
huriʔat sayaraat-u al-iʔsʔaaf

hurried-PERF-PASS up ambulances-MOM
Ambulances hurried up

These passive verbs are said to be deponent verbs. There are so few languages with deponency. The fact is that it is strongly related to an independent factor of the syntax of the language, namely the question of whether passive voice is expressed in an analytic or in a synthetic construction. In Latin, a passive verb is (usually) synthetic whereas in all of its derivative languages it is analytic. A passive construction that is formed analytically throughout the whole language is incompatible with the concept of deponent verbs.

According to Hassan (1975: 108), the morphology of deponent verbs is always identical to the morphology of regular verbs in passive voice. Semantically they are active. However, their morphological structure does not correspond to semantics. The semantics of deponent verbs is exactly the same as with 'normal' transitive verbs in active voice. Deponent verbs have subjects and hence cannot be passivized. Syntactically, deponent verbs behave consistently. With regard to case assignment, agreement, number of possible arguments, etc., they behave like active transitive verbs. All deponent verbs have identical surface structures. An analysis of these verbs would reveal deep-structure differences. The NPs in the subject positions fulfill different semantic roles. It is worth noting that all grammatical subjects are agents whether human or non-human. The grammatical subjects in these verbs are not the semantic patient but rather the agent.

The fourth profile, i.e. the focused profile can be seen in the location of the theme. In English the passive is used as a rigid transformational system to lay focus on the theme. Arabic follows another transformational system as it has flexible word order. Notice the position of the patient in the following word order:

(19) الكتاب وجده زيد
al-kitaabu wajadahu Zaidun
DEF-book-NOM found-PERF-ACT Zaid-NOM
The book, Zaid found it

Here Arabic utilizes word order to defocus the agent. This sentence is different from the default passive. It is viewed as topic-comment structure. Here the patient (al-kitaabu) is saliently invoked. To sum up, the passive voice in Arabic can be reintroduced within Cognitive Grammar. In addition to the conceptual concept, the construal of focusing and prominence can be considered.

7. Conclusion

The conceptual characterizations for passive construction provide a symbolic account of grammar. According to this study, GC is able to exploit the passive to obtain a deeper understanding of cognitive structure of language. Agent-verb relationships are understood in terms of an image schema. In fact, the concept of construal in CG refers to iconicity. Iconicity entails that different grammatical structures mean different construals. For example, agent iconicity indicates agent versus agentless constructions.

CG characterizations reveal the limitations of grammar that views constructions as disjoint categories. For example, the deponent verbs in Arabic have passive form and active meaning, and quasi-intransitive verbs have active form and passive meaning. The CG account of the passive meets the requirement of grammar as symbolic structure. An additional point in favor of CG description is that it lets us make sense of the Arabic passive construction. The passive choice has been taken for long time as unprincipled. It is based on logic and cognitive construals. In sum, the CG characterizations prove significant in revealing motives beyond the use of passive in Arabic. Passive constructions have related epistemic values; they saliently invoke the ground. CG views the process of the passive by assigning relative prominence to its structure. The study concludes that Cognitive Grammar can be utilized to analyze grammatical constructions.

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Abbreviation

PERF **perfect**
IMPERF **imperfect**
ACT **active**
PASS **passive**
NOM **nominative**
ACC **accusative**
GEN **genitive**
DEF **definite**
INDEF **indefinite**

Appendix: Transcription Conventions

In transcribing the examples, the study uses the following symbols:

Consonants

Arabic	symbol
ب	/b/ voiced bilabial stop
ت	/t/ voiceless dental stop
ث	/θ/ voiceless interdental fricative
ج	/j/ voiced alveo-palatal affricate
ح	/H/ voiceless pharyngeal fricative
خ	/x/ voiceless uvular fricative
د	/d/ voiced dental stop
ذ	/ð/ voiced interdental fricative
ر	/r/ alveolar trill
ز	/z/ voiced dento-alveolar fricative
س	/s/ voiceless dento-alveolar fricative
ش	/š/ voiceless alveo-palatal fricative
ص	/S/ voiceless dento-alveolar emphatic fricative

ض	/D/ voiced dento-alveolar emphatic stop
ط	/T/ voiceless dento-alveolar emphatic stop
ظ	/Z/ voiced dental emphatic fricative
ع	/ʕ/ voiced pharyngeal fricative
غ	/ɣ / voiced uvular fricative
ف	/f/ voiceless labio-dental fricative
ق	/q/ voiceless uvular stop
ك	/k/ voiceless velar stop
ل	/l/ voiced alveolar lateral
م	/m/ voiced bilabial nasal
ن	/n/ voiced alveolar nasal
ه	/h/ voiceless glottal fricative
ء	/?/ voiced glottal stop
و	/w/ voiced bilabial approximant
ى	/y/ voiced palatal approximant

Vowels:

/i/ high front. /ii/ its long counterpart
/u/ high back /uu/ its long counterpart
/a/ low central /aa/ its long counterpart